# Workplace Violence against Medical Staff in China: Contextual Factors and Interventions

Yumei He

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Primary Supervisor: Professor Jane Koziol-McLain

Secondary Supervisor: Professor Eleanor Holroyd

Abstract

In recent decades, workplace violence against medical staff in China has been reported to be widespread and has negatively impacted medical service delivery. The present study aimed to contribute to the prevention of workplace violence against medical staff in China. Guided by a socio-ecological model, the present study's objectives included: identifying patterns and risk factors, identifying key risk factors and their interplay for workplace violence against medical staff, and developing a preliminary framework for violence prevention intervention in China.

This sequential mixed-methods study took place over five years, from late 2015 to early 2021, and consisted of three phases. In Phase One, 97 publicly available Chinese healthcare violent incidents were collected and analysed. Content analysis was used to understand patterns and risk factors of violence. In Phase Two, 22 purposively sampled key stakeholders in China were interviewed to examine the violence risk factors and investigate the interplays of risk factors to inform the development of violence prevention framework. In Phase Three, findings from Phases One and Two, as well as literature, were synthesised to suggest that misunderstandings during the medical encounter could result in unpleasant communication between service users and medical staff, causing service users' negative perception and mistrust, and at times, violence. Many of the problems identified among service users and medical staff at the individual level could be linked to problems in hospital management (organisation level) which, in turn, were rooted in community and health policies (community and societal level). Intervention strategies were then derived from triangulating findings from Phases One and Two and the literature review.

The provisional framework provides an approach to highlight and address risks at the individual, organisational, and the external community and national policy levels, systematically and comprehensively, emphasising collaborating and coordinating intervention efforts. Opportunities are identified for hospital management to play a pivotal role in enabling and facilitating positive communication and positive service user experience during the medical encounter by providing the necessary resources focusing on medical staff's wellbeing and empowerment. Hospital senior management was found to have low awareness of such a need, thereby indicating the need for policy and regulatory efforts to further

guide hospitals' senior management to implement strategic health and safety management to take care of medical staff's wellbeing to improve medical staff's performance.

Furthermore, interplays of factors indicate that intervention at the community and policy levels is required to effectively and fundamentally address problems manifested on individual service users and medical staff, so that positive communication between service users and medical staff, and service users' positive experience are made possible. Specifically, promoting health literacy through health education among the public, and continuing health reforms, especially reforms in human resource management of medical professionals, reforms in how medical staff are paid, and improving laws and regulations concerning protection against risks carried in medical services provision to enable trust and effective communication between service users and medical staff, are identified as necessary to address risk factors of workplace violence.

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# Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signature: _____ _____

Yumei He

Date: 19th Nov 2021

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accomplishing this, not because a PhD is the highest academic degree one can get, but because it is a testimony to my willingness to challenge myself, my courage to overcome obstacles, my perseverance and long-term commitment.

# Chapter 1 Introduction

## 1.1 Problem of health workplace violence in China

When people around me first heard or saw the title of my study, they often asked me why. Why workplace violence? Why China? It was in 2012 that violence against medical doctors and nurses in China first came to my attention. I was living in New Zealand, 10,000 kilometres away from China, yet I was reading reports and seeing news headlines frequently about how doctors and nurses were physically attacked by patients and patient families. Two examples are included in Figure 1.

**Incident 1:**

Doctor S from the Infectious Disease Department was stabbed nine times by a patient family with a knife, which caused her to suffer from heart rapture, pericardial tamponade, and shock. After the emergency rescue operation, the victim was still in critical condition. The perpetrator's 4-year-old daughter was an inpatient receiving treatment at the hospital. The perpetrator searched online and obtained some information for his daughter's symptoms and kept demanding doctor S to treat his daughter in the way described online, which was rejected by the doctor. Then the patient family then began to resist the doctor's treatment plan after the refusal (http://cq.qq.com/a/20161123/019819.htm; http://www.webcitation.org/6nNN39iUD)

**Incident 2:**

On 3 November 2015, a six-month-old baby died despite emergency rescue efforts at TK People's Hospital. The family suspected the death was the consequence of doctor's errors, so they assaulted and verbally abused the medical staff involved and even the security guard; they forced the medical staff involved in the rescue to walk while carrying the corpse of the deceased baby in public to humiliate them (http://www.xinhuanet.com/politics/2015-09/29/c_128280738.htm; http://www.webcitation.org/72MjZC0vj).

Figure 1. Reporting of physical attacks in newspapers

With my background in management, focusing on occupational health and safety, the degree of violence, and the resulted disruption of hospital operations were so shocking, that I was pushed to investigate. It turned out that doctors and nurses in China were not alone in becoming victims of violence from patients, patient family or visitors. In fact, workplace violence in the health sector has been a global concern for decades (Arnetz, Hamblin, Essenmacher, Upfal, Ager, & Luborsky, 2014; Cooper & Swanson, 2002; Hills & Joyce, 2013). According to the extant research, patients and their families have been identified as the most common perpetrators of violence experienced by medical staff (Bentley, Catley, Forsyth, & Tappin, 2014; Cooper & Swanson, 2002; Hahn, Muller, Hantikainen, Kok, & Dassen, 2013; Hills & Joyce, 2013). Violence from patients, patient family and visitors against medical staff accounts for 89% (Ayranci, Yenilmez, Balci, & Kaptanoglu, 2006) to 100% of workplace violence experienced by medical staff in emergency departments (Gates, Ross, & McQueen, 2006) and in psychiatry (Salerno, Dimitri, & Talmanca, 2009).

The frequency and severity of violence against health workers in China, however, appeared extreme (Hesketh, Wu, Mao, & Nan, 2012; Huang, Ding, Sun, & Wang, 2011; Y. Pan et al., 2015). The two incidents of workplace violence noted in Figure 1 provide a glimpse of what Chinese medical staff may encounter in their workplace. Incident 1 was just one of many violent cases reported in the media that had serious consequences. Indeed, assaults and murders were not rare in the Chinese context (An, Liu, Wang, & Jiang, 2013; Hesketh et al., 2012; Huang, Ding, Sun, & Wang, 2011; No Author, 2013; Y. Pan et al., 2015). The second incident is an example of yinao. Yinao normally involves severe disruption of a medical institution's operations as people seek to humiliate, or more commonly demand substantial financial compensation from the hospital (Hesketh et al., 2012).

A survey by the China Medical Doctors Association (CMDA) in 2014 showed that violence against medical staff was alarmingly high. Seventy three percent of medical doctors reported experienced violence from patients, patient family and visitors; among these, 60% experienced verbal violence and 13% were physically hurt (CMDA, 2015). It was reported that medical staff were attacked by patients or their relatives at a rate of every two weeks per hospital according to the China Hospital Association (CHA) (Ding Xiang Yuan [DXY], 2012; New York Times, 2013).

According to the World Health Organization (WHO), workplace violence can be described as "the intentional use of power, threatened or actual, against another person or against a group, in work-related circumstances, that either results in or has a high degree of likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation" (Dahlberg & Krug, 2002, p. 6). For this study, violence in the healthcare sector refers specifically to violence from patients, their families, or other visitors against medical staff. Medical staff in this study is used as the English equivalent of the Chinese expression of yihu renyuan (医护人员), including doctors, nurses, and allied health professionals.

## 1.2 Impact of health workplace violence in China

The impact of workplace violence extends beyond individual victims. Widespread violence in the health sector has created serious consequences among medical staff. Several studies from China report high rates of depressive symptoms among doctors, and violence from patients, their families, or other visitors has been explicitly identified as the major cause (CMDA, 2015). Doctors in China, whether they have experienced or witnessed workplace violence, have self-reported low morale, low motivation, and anxiety (CMDA, 2015). Many medical staff go to work concerned about their safety. Following a series of health workplace violent incidents in Shenzhen, the Guangzhou Daily (2006) reported that medical staff were wearing helmets at work.

Concerns about safety have created problems in recruiting and retaining medical staff in China (An et al., 2013). According to the CHA, about 40% of medical staff have thought of, or are considering, leaving the job (DXY, 2012). A survey by the CMDA (2015) for medical staff revealed that over 64% of doctors are strongly against their children entering the medical field. Similarly, a survey on WeChat, the biggest Chinese social media platform, showed that over 95% of respondents (the public) did not want their children to enter the medical profession (China Daily, 2014). In a five-year span, 175 medical staff were reported to have resigned from Shenzhen Children's hospital alone (Shenzhen Wanbao, 2016). In recent years, the shortage of paediatricians has resulted in closure of paediatrics in some hospitals, including in major cities such as Beijing, Guangzhou, and Shenzhen (China Central Television [CCTV], 2016).

The impact of workplace violence is affecting the provision of healthcare to the public. To reduce the chance of being victimised, doctors are more likely to practice defensive medicine. More than 28% of medical doctors would choose protective practice, according to a CHA survey (DXY, 2012). For example, on 25 October 2012, a pregnant woman whose unborn baby had died was refused admission by four hospitals in Yunnan province because doctors were afraid of possible risks of violent attack or being sued for malpractice; providing treatment to such patients has often resulted in medical disputes and treatment provided would not change the outcome of losing their baby (Liu & Zhao, 2013).

A World Medical Association (WMA) statement has summed up the consequences of violence experienced by medical staff: "Violence against health workers, including physicians, not only affects the individuals directly involved, but also impacts the entire healthcare system and its delivery" (WMA, 2012, p.1). This is unfortunately a reality in China's context. The example above of a pregnant woman whose unborn baby died was a good case to show how delivery of healthcare has been affected due to violence in the health sector.

The negative impact of violence against medical staff has been so serious that in the past decade the Chinese government has been trying to tackle the problem; for example, building harmonious doctor-patient relationship has been promoted as a strategy to strengthen hospital security in guidance issued by the central government in 2013 (Tucker, et al., 2015; Tucker, Wong, Nie, & Kleinman, 2016). Despite the Chinese government's efforts, and some improvement, the problem of violence against medical doctors has not been fundamentally resolved. Statistics from CMDA (2015) show that incidents of medical doctors being physically injured have increased every year between 2009 and 2015.

The scale and magnitude of violence in the health sector has raised serious concerns for the safety and wellbeing of the medical staff, as well as concerns for the healthcare delivery to the Chinese population. Thus, violence in the health sector has jeopardised the delivery of health service and is likely to endanger the sustainability of the healthcare system in China if not addressed effectively. Furthermore, China has the largest population in the world, accounting for almost one quarter of the world's total population. Therefore, investigating workplace violence in the health sector in China is not just an issue of occupational health and safety (OHS) for the victim hospitals, but also an indispensable part of tackling violence in the health

sector globally. The prevalence and severity of the violence in the Chinese health sector have created an urgent need to understand the precursors of violence, so that effective interventions can be developed and implemented.

## 1.3 Understanding health workplace violence

While international research has determined that the causes of violence can be complex and intertwined on individual, organisational, and societal levels, as described in the socio-ecological model (Cooper & Swanson, 2002; Dahlberg & Krug, 2002; Di Martino, 2002; Hills & Joyce, 2013; Rosen, 2013; WMA, 2012); so far, few empirical studies on the topic of workplace violence in the health sector reflect such an understanding. A substantial body of literature on violence in the health sectors belongs to epidemiological studies, which typically identify risk factors associated with perpetrators, staff victims, and workplaces (Arnetz et al., 2014; Bentley et al., 2014; Hahn et al., 2013). Such studies may help understand the problem in the specific context; however, they offer limited insights on how to address the problem, particularly in the Chinese context.

Similar to the international literature, studies on violence in the Chinese health sector are predominantly descriptive epidemiological research. Numerous factors have been identified as being possibly responsible for workplace violence in the health sector in China, including insufficient communication between hospital staff and patients, dissatisfaction with the treatment, excessive waiting time, and patient frustration due to high medical expenses (Cai, Deng, Liu, &Yu, 2011; Pan, Liu, & Ali, 2015; Wu, Zhu, Li, Lin, Chai, & Wang, 2012). Studies from other perspectives, including the Chinese legislation, healthcare reforms, health insurance systems, and media, point to problems with the Chinese healthcare system, legislation, and the role media play as possible contributing factors to violence in the Chinese health sector (Cai et al., 2011; Liebman, 2005, 2013; Ma, Lu, & Quan, 2008; van Rooij, 2012; Wu et al., 2012). To date, the identification of factors contributing to violence has provided limited insight on how to address the problem in China. There seems to be no direct corresponding cause and effect that can be easily isolated, which makes it difficult to identify possible actions to address the problem. In addition, there is little synthesis of learning across the layers (individual, organisation, societal), disciplines, and perspectives. Therefore, without a culturally specific conceptual model that takes account of how societal factors work together or

interact with individual and organisational factors to trigger the violence, it is difficult to develop effective intervention measures.

From the literature review, I believe the socio-ecological model, underpinned with a systems perspective, fills the gap as a general framework to guide the analysis and understanding of contextual factors that contribute to violence in the Chinese health sector. The socio-ecological model, based on systems thinking, has been widely used to map the extent of problems in complex settings, which is essential in developing a conceptual model for the basis of health promotion or occupational health intervention (Center for Disease Control and Prevention [CDC], 2016; Dahlberg & Krug, 2002; Stokols, Allen, & Bellingham, 1996). The ecological model is also applied widely in social work, as it helps to gain "a larger perspective, a more unitary and comprehensive unit of attention for a holistic and dynamic understanding of people" and "the socio-cultural-physical milieu" (Siporin, 1980, p. 516). The socio-ecological model will be further explored in Chapter 3.

It is noted that the socio-ecological model underpinned with a systems approach has a concern for the interaction of factors operating at the different layers—individual, organisational, societal—of the system. Both approaches provide a general framework of analysis that enables multi-disciplinary input and integration of various perspectives and insights. Encompassing individual, organisational, and societal factors in the study, and incorporating insights from different disciplines and perspectives, can lead to a better understanding of the role of the various factors involved and how they contribute to the alarming situation in the healthcare sector in China, and hence to effective interventions. In this thesis, I will draw on insights from management, especially human resource management and occupational health and safey, workplace violence research, and public health research (CDC, 2016; Dahlberg & Krug, 2002), to inform the development of comprehensive interventions to address violence in the Chinese health sector.

## 1.4 Aim of thesis

This study aimed to contribute to violence prevention intervention in the Chinese health sector. Specifically, the research hoped to answer the following research questions:

- What are the different patterns and risk factors of violent incidents against medical staff reported in the Chinese healthcare sector?

- What are the key risk factors and their interplay that contribute to violence against medical staff in the Chinese healthcare sector?
- Propose a preliminary violence intervention prevention framework for medical staff in the Chinese healthcare sector?

## 1.5 Structure of this thesis

In this introductory chapter, I have briefly introduced the background and rationale for the present study. In Chapter 2, I offer a critical examination of the Chinese healthcare sector and the context for this thesis. The chapter offers a glimpse of the Chinese healthcare reforms and how they have shaped people's emotions, responses, and expectations towards medical services.

In Chapter 3, I critically review the literature to include definitions, relevant theories, and empirical studies on violence and aggression in the workplace. Both international and Chinese literature will be critiqued and synthesised. This synthesis will identify the current gaps in understandings of health workplace violence in China, and the research questions that this thesis sought to answer.

Chapter 4 is the methodology chapter, in which I address the philosophical stance, ontology, epistemology, and axiology that informed this thesis research. I then introduce the sequential mixed-methods study design.

This thesis follows the general format of introducing the design, methods, and analysis plan followed by findings for both Phases 1 (Chapters 5 & 6) and 2 (Chapters 7 & 8). Chapter 9 is the discussion chapter, in which I introduce the preliminary evidence-based intervention framework and explicate key prevention interventions. I then highlight key findings that are unique to the Chinese context and the present research. Chapter 10 presents conclusions and implications, in which I present answers to the research questions that the current research set out to answer, reflect on the study against its aim and objectives, and reflect on its strengths, contributions, and limitations. I also identify areas for possible future research.

# Chapter 2 The Chinese Healthcare Context

In this chapter, I offer a brief introduction to the Chinese context including a description of the health system, healthcare reforms and the major policies, social economic changes, and the challenges the healthcare sector has faced. The chapter ends with the contemporary reform policies and the problems that these policies aim to address.

People's Republic of China (P.R.C.) is in the eastern part of Asia (Figure 2). The violet bold line marks its border (P.R.C State Council, 2017). China has a total territory over 9.6 million square metres. It has the largest population in the world, with over 1.3 billion people (based on the 2000 census), approximately 22% of the world's total population. China is a multi-ethnic nation consisting of 56 ethnic groups. The Han people account for over 90% of China's population; thus, the other 55 groups are generally referred to as "ethnic minorities" (P.R.C. State Council, 2017). People's Republic of China has about 72 years (1949-2021) of history; however, ancient China's history can be dated back over 5000 years with different dynasties and emperors.

China's administration currently includes 23 provinces, 5 autonomous regions, 4 municipalities, plus 2 special administrative regions. The Chinese Communist party is the monopolistic ruling party of the nation; the National People's Congress (NPC) is the highest legislative entity to make laws. The State Council is the highest authority that formulates administrative regulations in accordance with the Constitution and other laws. China's economy is termed "Socialist Market Economy"; it encompasses features of a typical market economy and some basic features of a socialist economy, as the market operates within the socialist country.

After several decades of reform and decentralisation, local governments are gaining increasing autonomy; yet, centrally, strategic planning continues to play a key role in the nation's management and development. Every five years, an important job for the State Council is to draw up a Five-Year Plan, which will be reported during the National People's Congress for approval. The specific ministries and provincial government involved will work out detailed guidelines and directions for implementing the specific parts of the strategic plan. The Five-Year-Plan is important in that it establishes the objectives and direction for Chinese national

economic and social development. The first Five-Year-Plan was implemented in 1953 and the most recent in 2021.


Figure 2. Map of People's Republic of China

Source: People's Republic of China State Council - www.gov.cn

The earliest Five-Year-Plans were named "National Economic Development Five-Year Plan", which reflect a primary focus on economic development. From the 11th Five Year Plan, it was renamed as "Five Years Planning" to include both

economic and social development. Under the guidance of "Scientific Outlook on Development", put forward since 2000, the Chinese government has paid increasing attention to comprehensive, coordinated, and sustainable development. The above information was drawn from the official website of the central government of P.R.C. (http://www.gov.cn/guowuyuan/zuzhi.htm).

## 2.1 Chinese healthcare system

The National Health Commission (previously named Ministry of Health and Family Planning and Health Commission) is the authority for designing national health laws, planning, budgeting, resource allocation, supervising, and regulating medical practices. However, administration and management of health services is fragmented, with healthcare providers also under a bureaucratic administration system at provincial and local levels, which encompasses personnel hiring, employee compensation, and healthcare services pricing. At every level of administrative authority there is a corresponding authority from a specific Ministry to which the specific health institute should report. For example, since marketisation of healthcare services, the local Pricing Bureau has the final say when it comes to pricing of health services—even though they may know little about the services. Similarly, it is the local authority that oversees all public sector employees, determines the base salary of a medical doctor working in a public hospital, and how many employees a public hospital can employ. With the decentralised fiscal system in the mid-1980s, it is the local government authority that makes decisions based on the local government's plan and its fiscal situation (Hu, Shen, & Zou, 2011).

Public hospitals are the backbone of healthcare services in China (J. Pan et al., 2015b; Yip et al., 2012). According to Statistical Bulletin of China's Health and Family Planning Commission in 2010, public hospitals account for over 66% of all hospitals, and over 95% of all hospital beds belong to public hospitals; over 91% of hospital visits were visits to public hospitals (J. Pan et al., 2015b). With the introduction of private investment to the health sector, statistics showed that private hospitals (n=14518) have outnumbered public hospitals (n=13069) since 2015, however, beds of public hospital still account for over 80% of all beds in hospitals; over 85% hospital staff work in public hospitals and about 88% of hospital visits were to public hospitals (National Health and Family Planning Commission, 2016).

## 2.2 Development of the Chinese healthcare system

As shown in Table 1 (on the following page) Chinese health development and reform can be roughly classified into three stages: pre-economy reform era, post-economy reform era, and new round of comprehensive health reform (Hu et al., 2011; Ma, Lu, Quan, 2008; G. Liu, Vortherms, & Hong, 2017). Due to the latent effect of policies, however, the cut-off points are somewhat arbitrary. That said, since the 1980s, the economy reform has brought dramatic changes to the Chinese society in almost every aspect, which has created problems and challenges for the healthcare system. Efforts to cope with changes in the wider society and to meet the new challenges in the health sector have never stopped, with policy implementation targeting different areas over time.

Table 1. Overview of China's healthcare development history

| Stage | Period | Context | Focus/Themes | Objectives | Key features |
|---|---|---|---|---|---|
| **Pre-economy reform era** | | | | | |
| | 1949-1978 | centrally controlled and planned economy; limited financial resources; limited human resource in healthcare | improve accessibility of health services for all; emphasis on preventive medicine | equal access to health care for all; improving whole population's health status | planned economy; healthcare facilities owned and funded by either the government or collective economy; universal healthcare insurance; welfare healthcare services; government regulated pricing; rural health care a national priority; two distinct health systems serving urban and rural residents separately |
| | 1979-1984 | preliminary stage of market-oriented economy reform; rising healthcare expenditure with over utilisation and abuse of healthcare service widespread | reforming financing of healthcare services; economy efficiency, economy benefits | releasing fiscal burden of central government; optimising economy benefits; maintaining healthcare services while cutting cost | central government reduced role in financing provision of healthcare service; local government, healthcare institutions and individuals taking increased responsibility in financing healthcare services; tiered service delivery system broken; medical staff gained autonomy in earning profits and managing surplus |
| **Post-economy era** | | | | | |
| marketisation of healthcare | 1984 - 1992 | market- oriented economy reform in urban areas; escalation of health expenditure; collapse of Cooperative Medical Scheme (CMS) and Labour Insurance Scheme (LIS) | marketisation of healthcare; reforming financing of healthcare services; economy efficiency, economy benefits | release fiscal burden of central government; optimise economy benefits; maintaining healthcare services while cutting cost maintaining healthcare services while cutting costs | market-oriented financing mechanisms introduced to fund curative and preventive care; central government reduced role in financing provision of healthcare service; government funding dropped to minimum; low coverage of health insurance, worsening accessibility, and affordability of medical services |

| Stage | Period | Context | Focus/Themes | Objectives | Key features |
|---|---|---|---|---|---|
| | 1992-2002 | deepening market-oriented reform | full marketisation of healthcare with introduction of market mechanisms in hospital management | economy efficiency, economy benefits | pricing of medical services remained controlled by government and set below labour cost; hospitals encouraged to be fiscally independent by generating revenues to cope with insufficient funding and maintain healthcare provision (yiyao yangyi); introduction of market mechanisms in hospital management; hospitals become money-making businesses; escalation of health expenditure continued; vulnerable people's access to public health services being compromised; inequality in healthcare prominent |
| exploration and experiment stage | 2003-2009 | | health insurance reform; financing of | expanding health insurance coverage and striving for equity in access to healthcare | New Rural Cooperative Medical Scheme (NICMS); Urban Resident Basic Medical Insurance (URBMI) scheme were introduced |
| strategic planning stage | 2009-2012 | rising healthcare expenses | health insurance reform | universal health insurance coverage; improving degree of insurance coverage | government strengthening its role in financing and regulated healthcare services; increasing government subsidy of premium to expand health insurance coverage; strengthening Essential Drug List established; strengthening primary health care services; improved affordability |

| Stage | Period | Context | Focus/Themes | Objectives | Key features |
|---|---|---|---|---|---|
| **New round of healthcare reforms** | | | | | |
| | 2009 - 2015 | tense doctor-patient relationship | financing; service delivery, essential medicines, | equal access to public health services for all | optimising medical resource allocation, rebuilding tiered service delivery system; strengthening welfare positioning for medical services |
| | 2015- to present | medical insurance fund under tremendous pressure | public hospital reform; service provider payment reform; strengthening primary healthcare; rebuild tiered service delivery system; human resource management reform in medical profession | | substantially reduced individual health expenditure in total health cost |

(Blumenthal & Hsiao, 2015; Eggleston, Li, Meng, Lindelow & Wagstaff, 2008a; Eggleston, Wang, & Rao, 2008b; He & Meng, 2015; Hu, et al., 2011; Liu & Yi, 2004; Ma et al., 2008; Meng et al., 2012: Meng & Tang, 2013; Pan, Qin, Li, Messina, & Delamater , 2015; Tang, et al., 2008; Wang, Wang, Ma, Fang, & Yang, 2019; Yip & Hsiao, 2008; M. Zhou, Zhao, Campy, & Wang, 2017)

### 2.2.1 Pre-economy reform era

Pre-economy reform era generally refers to the period since the founding of P.R.C. in 1949 to late 1978, and several years after the reform until 1984. Key features during that period include: central planning, full government subsidies of healthcare services, almost universal health insurance coverage, minimal personal out-of-pocket payment for individual service users, and well-established service delivery networks with tiered medical service provision (Hsiao & Liu, 1996; Ma et al., 2008). Furthermore, preventive services was an emphasis in public health service, and equity and affordability in access to health services became a priority for both the health system and for the government; public health planning and cost were fully covered by the government (Eggleston et al., 2008a; Meng & Tang, 2013; Meng et al., 2012).

This period saw rapid improvement of key health indicators for China's population despite its low-income level per capita and scarce resources (e.g., medical human and financial) (Eggleston et al., 2008a; Hsiao & Liu, 1996; Hu et al., 2011; Liu & Yi, 2004; Ma et al., 2008; Meng, Shi, Yang, Gozalez-Block, & Blas, 2004). For example, life expectancy of the population increased significantly from 35 years in 1949 to 67.9 years in 1981; infant mortality rate dropped from 200 per 1000 in 1949 to 48 per 1000 in 1975 (Eggleston et al., 2008a ).

The efficiency of the health system was attributed to its policies of universal healthcare insurance coverage, tiered service delivery system, along with promotion of medical professionalism and self-sacrifice (Blumenthal & Hsiao, 2015; Eggleston et al., 2008a; Hsiao, 2008; M. Zhou et al., 2017). Accompanying medical staff's professionalism and dedication was the harmonious doctor-patient relationship, with medical staff being well respected and termed as 'white angels' (Hsiao, 2008; M. Zhou et al., 2017). Researchers explain the great success of the health system with priority given to disease prevention and control of infectious disease (L. Wang, Wang, Ma, Fang, & Yang, 2019). While the pre-economy reform era had minimal resources, in term of facilities and medical human resources, service users who were too poor to have access to healthcare services before the founding of the P.R.C., embraced the virtually free health care service, and doctor-patient relationship, ensuring a time of harmony (M. Zhou et al., 2017).

### 2.2.2 Post-economy reform era

The post-economy reform era is marked by three key policy themes: marketisation of healthcare, health insurance reform, and reform of pharmaceuticals. Among them, health insurance reform and pharmaceutical reform extend from post-economy reform era into the new round of health reform period.

#### 2.2.2.1 Marketisation of healthcare

Following severe fiscal difficulty several years after the founding of P.R.C., market-oriented reform started to release the central government of the growing fiscal burden. Pursuit of efficiency and economic benefits naturally became the priority of the time, and the healthcare sector was no exception. Although marketisation of the health sector successfully reduced the central government's fiscal burden, it also led to unexpected consequences (Yip et al., 2012).

One key reform policy during this time was reducing government funding for public hospitals and health institutions, which used to be fully funded. Reducing funding directly resulted in survival pressure for health institutions. Meanwhile, prices for basic health services, even after economy reform, continued to be regulated by the government and made below labour cost to ensure affordability of basic healthcare services (Blumenthal & Hsiao, 2015; Eggleston et al., 2008b; Ma et al., 2008). To survive, public hospitals had to rely on drug sales, a move that was formally endorsed by the government and termed as "yi yiao yang yi", meaning "supporting healthcare provision with pharmaceutics sales". In addition, pricing for high-tech medical procedures was set to enable hospitals to make generous profits (Blumenthal & Hsiao, 2015; Hsiao, 2008; Ma et al., 2008).

With the absence of reliable quality evaluation systems, visible indexes became equivalent to quality assurance: hospitals with more beds were generally classified at a higher level—secondary and tertiary level hospitals (J. Pan et al., 2015b). Secondary and tertiary hospitals engage in medical education and research, in addition to providing comprehensive health services. Therefore, people believe that they can provide better quality services, which resulted in the popular health seeking culture that favours tertiary hospitals and mistrust of the primary service providing health facilities in rural areas and townships (Brown & Theoharides, 2009; Ma et al., 2008; J. Pan et al., 2015b). To compete in the market, hospitals engaged in fierce competition: more modern buildings, beds, and expensive high-tech diagnostic

equipment; and hiring more medical doctors with high-ranking professional titles (J. Pan et al., 2015; Sun & Luo, 2017).

Under survival pressure hospitals were managed like businesses; medical doctors were pushed to generate revenues and their ability to generate revenue was assessed along with the volume of services being a key performance indicator and tied to their income. Such performance criteria created strong incentives for healthcare providers to favour profitable high-tech diagnostics over low-priced basic health services, lured medical staff to prescribe expensive drugs and high-tech examinations, more than necessary to generate profits (C. Chen et al., 2014; Hsiao, 2008). It is safe to say that reduced funding for public hospitals resulted in the subsequent profit-seeking hospitals, with performance management criteria that lured medical doctors' over-prescription.

Research and official data have shown that during this period, over 80% of hospital revenue was from sales of services and medicines (Yip et al., 2008, 2012). Accordingly, use of drugs and high-end technical services increased dramatically, resulting in escalation of healthcare cost, and hindering vulnerable people's access to healthcare services (Blumenthal & Hsiao; 2015; Eggleston, Li, Meng, Lindelow & Wagstaff, 2008a; Ma et al., 2008; Meng et al., 2012; Yip & Hsiao, 2008; Yip et al., 2012). The change from enjoying almost free health services to compromised or denied access to medical services, due to poor affordability, was, in general, too dramatic for service users to cope with. With kangbing nan (Chinese term meaning difficult to seek medical services) and kanbing gui (Chinese term meaning expensive to seek medical services) increasingly a concern, doctor-patient relationships deteriorated and public anger and distrust towards healthcare providing facilities and medical staff became prominent (Blumenthal & Hsiao, 2015; M. Zhou et al., 2017).

Reduced government financing also affected public health institutions, which had to rely on user fees to maintain operation (J. Pan et al., 2015). Under survival pressure, public health institutions tended to favour the more lucrative curative services over preventive services (Ma et al., 2008; M. Zhou et al., 2017). About 50% of the operation cost for public health services was covered by user fees, which denied vulnerable people's access to public health services; almost 82% of total health expenditure was spent on curative services while less than 11% of the expenditure was on public health programmes (Deng, Lv, Wang, Gao, & Zhou, 2017; L. Wang et al., 2019).

Public health services were seriously compromised as village doctors and township health centres lacked the necessary financial support and motives to administrate public health programmes and provide preventive services under survival pressure (Deng et al., 2017; Hu et al., 2011; Ma et al., 2008; L. Wang et al., 2019). Market-oriented financing mechanisms also unexpectedly led to the collapse of three-tiered healthcare provision system and public health service provision. As market reform progressed, collective economy in rural areas collapsed. Village clinics and township health centres lost their financial support and continued to shrink or closure. Yet, high-level health institutions continued to expand as they enjoyed more advantages in attracting medical human resources, and more patients, could afford more high-tech equipment and better infrastructure. As a result, the traditional imbalanced distribution of medical resources was further intensified (Hu et al., 2011; Ma et al., 2008; J. Pan et al., 2015b; M. Zhou et al., 2017).

#### 2.2.2.2 Health insurance reform

Health insurance reform was started in response to the collapse of the previous health insurance system that had existed prior to economy reform. For example, by 1979, over 90% of the rural population was covered by Cooperative Medical Scheme (CMS); yet, after the rural economy reform, coverage quickly dropped to less than 5% (Liu & Yi, 2004). By the end of the 1990s, barely 5% of the Chinese population were covered by the Government Insurance Scheme, about 6% by the Labour Insurance Scheme, and less than 8% of the rural population were covered by the CMS (Meng & Tang, 2013; Meng et al., 2012). People without health insurance had to pay the full cost of their medical expenses. Low or absence of healthcare insurance coverage meant deteriorating affordability and accessibility of healthcare. In 2003, a new Cooperative Health Care system (CHCS) was introduced to cover rural residents' risks.

While efforts continued to restore health insurance coverage among the population, the health insurance reform also tried to address the rapid increase in health expenditure by shifting responsibility of financing health services to individuals with the introduction of co-payment of services. With reduced government input, percentage of personal health expenditure in the total health expenditure kept rising, from 20.4% in 1978 to 53.6% in 2004 (Hu et al., 2011). The national services survey (Center for Health Statistics and Information, Ministry of

Health, P.R.C, 2008) found that even among patients covered by health insurance, 24% chose self-management when they should be hospitalised according to medical instruction; 79% of which made the decision out of financial difficulty, a dramatic increase from 30% in the year 2003. Concerns among the population about the issues of kanbing nan a, a kanbing gui continued to grow (Meng & Tang, 2013; S. Tang et al., 2008).

Since 2008, government input has increased steadily to expand health insurance coverage and reduce out-of-pocket payment to improve accessibility and affordability of basic healthcare services (Blumenthal & Hsiao, 2015; Meng & Tang, 2013; M. Zhou et al., 2017). By 2011, China had basically achieved universal health insurance coverage reaching over 95% of the population (Blumenthal & Hsiao, 2015; Meng & Tang, 2013; Meng et al., 2012).

#### 2.2.2.3 Health reforms in pharmaceutics production and distribution

Prior to economy reform, pharmaceutical production and distribution were strictly under a planned and controlled mode, and prices were strictly regulated. Since market-oriented reform, pharmaceutical enterprises had the autonomy to set their prices; consequently, prices kept rising (Li et al., 2018). Consistent efforts have been made by central government to control the escalation of drug prices since 1996 (Li et al., 2018). Collective purchasing systems with open bidding was introduced in 1999 to avoid possible corruption in drug distribution and sales. The national drug list system was established in 2000 to classify drugs into prescription and non-prescription drugs and manage them accordingly (Li et al., 2018). The National Essential Drug List programme was another effort to control rising prices. While some research reported positive impact of the policy (Y. Gong, et al., 2015; Li et al., 2018), other research noted unexpected negative outcomes (Liu & Mills, 2002; Liu & Yi, 2004; Meng, Mills, Wang, & Han, 2019). For example, the well-intended policies resulted in the disappearance of some low-price drugs and eventually intensified the escalation of health cost (Li et al., 2018; C. Chen et al., 2014).

Similarly, the National Drug List System had originally been intended to regulate and control cost of health expenditure in primary and secondary healthcare facilities in rural areas such as village clinics and township hospitals. However, application of those essential drug lists resulted in limiting the choices of drugs available in primary and secondary healthcare facilities. As a result, township health

centres and village clinics were unable to provide quality healthcare service to locals due to the lack of effective drugs available, and patients from rural areas crowded into tertiary hospitals, making it more difficult for healthcare facilities in both townships and villages to survive. Consequently, this period saw tertiary hospitals growing bigger, with more beds and township hospital shrinking, which further intensified the uneven distribution of medical resources between urban and rural areas (Hu et al., 2011; Meng et al., 2019; J. Pan et al., 2015).

In 2000, a WHO report ranked China 144 among 191 member countries in terms of overall health system performance, and 188 in terms of fairness of financial contribution (WHO, 2000). Table 2 summarises the contrast between healthcare systems in the post economy reform era and the pre-economy reform era. The sharp contrast marked the marketisation of healthcare as a failure and could possibly explain the WHO's ranking.

Pursuit of profit resulted in the escalation of healthcare expenditure which, coupled with absence of health insurance coverage, reduced or even prevented access to health care and public health services for vulnerable populations mostly in rural areas (Meng et al., 2012; Tang et al., 2008). Underuse of medical resources in primary healthcare facilities alongside over-crowded tertiary hospitals and over-treatment, contributed to the overall low efficiency of healthcare system, further reinforcing kanbing nan and kanbing gui in both urban and rural areas (Meng & Tang, 2013; Tang et al., 2008).

Table 2. Contrast in some key areas between pre-marketisation and post-marketisation era

| **Key areas** | **Pre-economy reform and marketisation era** | **Post-marketisation era** |
|---|---|---|
| Health insurance | universal health insurance | absence/low coverage of health insurance |
| Cost | almost free health services with service users paying nominal fees for services and the rest covered by health insurance funded by government, employers/commune | almost unaffordable for vulnerable people without any health insurance paying almost full cost of healthcare prices and health cost escalating |

| Key areas | Pre-economy reform and marketisation era | Post-marketisation era |
|---|---|---|
| Access to services | free access to public health services; easy access with well-established tiered service delivery network that covered almost every village | reduced or compromised access to public health services with public health service institutes relying on user service fees to service tiered service delivery network broken down due to closure of village clinics or being privatised |
| Efficiency of health system | highly efficient with very limited medical resources | Low efficiency with underuse of medical resources in lower levels of hospitals and overuse of medical resources in tertiary hospitals; wide-spread waste of medical resources induced by service provider side under health insurance schemes |
| Equity in access to medical services | urban and rural residents served by two different health service delivery systems, equity in access to medical services was not perceived to be a problem as people seldom migrated between urban and rural areas | inequity in access to quality medical resources became prominent between rural and urban areas, and between areas with disparity in social and economic development |
| Medical staff perceived in public | medical staff being angels in white, who served with unselfishness and dedication | hospitals and medical staff being money-making machines, prescribing unnecessary and expensive diagnosis procedures and medicine |
| Doctor-patient relationship | harmonious, trusting relationship | tense, mistrust |

(Chen et al., 2014; Eggleston et al., 2008; Hesketh & Wei, 1997; Li & Wei, 2010; Ma et al., 2008; Papagianni, & Tziomalos, 2018; Tang et al., 2008; WHO 2000; M. Zhou et al., 2017)

Inequity in access to medical services became increasingly prominent as more rural residents migrated to urban areas to work and live. With medical resources increasingly concentrated in tertiary hospitals in big cities, it was more difficult for rural residents to seek medical services. With the absence of health

insurance in rural areas, and even later with health insurance coverage, escalation of healthcare cost devastated families and dragged them back into poverty (Meng et al., 2012; Tang et al., 2008).

Despite impressive achievement of the health insurance reform, statistics shows that healthcare cost remains a key reason for patients' self-discharge from hospitals. Households facing catastrophic cost remain as high as about 13% in 2011, indicating a need to increase financial protection (Meng et al., 2012). The health insurance reform was not able to significantly improve affordability of medical services as expected (Long et al., 2013; Meng et al., 2012). Specifically, two key indicators—inpatient self-discharge rate and proportion of health spending in the total household expenditures—continued to rise, especially after 2008 (Meng et al., 2012).

With rapid social economic development, vulnerable populations began finding it more difficult to access medical services, in some cases even being denied access (Long et al., 2013; Tang et al., 2008). This was a sharp contrast to healthcare during the pre-marketisation era, when people had almost free access to health care. Hence, illness has emerged as a leading cause of poverty in rural China (Tang et al., 2008) and it is not hard to feel the agony of vulnerable populations.

Health insurance reforms, even with expanding of health insurance coverage and improving reimbursement rate, were unable to address equity and affordability of medical services immediately (He & Meng, 2015). Instead, unexpected consequences resulted in waste of medical resources and reduce efficiency, and the most vulnerable people benefitting the least from the increased funding (Brown & Theoharides, 2009; Meng et al., 2012; Tang et al., 2008). Inequity of access to health services has resulted in inequity in the population's health indexes (Astell-Burt et al., 2015; Meng et al., 2012). When access to health care services was denied due to economic status along with the expanding inequity in access to healthcare, they have become prominent social issues that need to be addressed (Meng et al., 2012; Yi, Maynard, Liu, Xiong, Lin, 2005).

### 2.2.3 New round of health reforms since 2009

A universal affordable, accessible basic healthcare service was viewed as critical in building a "harmonious and comprehensive xiaokang (prosperous) society" and the direction for the new round of healthcare reform (Communist Party of China

Central Committee, 2009; Communist Party of China Central Committee State Council, 2009). It marked a shift from marketisation of healthcare to healthcare's welfare nature with government resuming its role in funding public health services (G. Liu et al., 2017; Meng & Tang, 2013; Meng et al., 2012). The new round of health reform aims to address health insurance coverage, essential drug system, primary health service provision, equitable public health services, and public hospital improvements (G. Liu et al., 2017; Meng & Tang, 2013; Meng et al., 2012; J. Pan et al., 2015b).

Since 2015, there have been reforms across the healthcare sector including in public hospitals, healthcare service pricing and human resources. At the same time, different health insurance reforms were also experimented with and implemented in different parts of the country to reduce provider-induced needs and control escalation of health expenditure. There have also been consistent efforts to strengthen healthcare providing facilities in the community and rural areas to re-establish tiered healthcare provision networks. All these initiatives aim to address problems that emerged following the previous rounds of health reform and accumulated over the years due to economic and social development (G. Liu et al., 2017).

With increased government funding into healthcare reforms, reimbursements for outpatients and inpatients covered by the New Rural Cooperative Medical Scheme (NRCMS) and the Urban Resident Basic Medical Insurance (URBMI) were introduced in 2009, and significantly reduced individual out-of-pocket payment. Reimbursement for URBMI has steadily increased, reaching 70% for inpatients and 50% for outpatients in 2014.

However, empirical research has revealed that the increased government funding did not necessarily improve efficiency of the health system as expected (Audibert, Mathonnat, Pelissier, Huang, & Ma 2013; Wu, Wang & Zhang, 2015). Inappropriate payment method was believed to be the reason. The increased funding was mainly for health insurance subsidy, which unexpectedly resulted in escalation of health expenditure and waste of medical resources with provider induced needs (Hsiao, 2008; Tang et al., 2008; Wu et al., 2015; Yip & Hsiao, 2008). On the one hand, people with higher reimbursement rate (mostly employed, urban residents) were tempted to use medical services more than necessary, which resulted in waste of medical resources; on the other hand, vulnerable people, mostly in rural areas with

or without health insurance, could be struggling to access medical services (Tang et al., 2008).

The zero mark-up drugs policy was implemented to break the interest connection between healthcare and pharmaceuticals. However, empirical evidence suggests that although share of gross revenue from drug sales declined by 43% at township level healthcare centres, the number of inpatients treated at township health centres rose dramatically by 127%, a change that was believed to be driven by supply side to offset the cut in revenue from drug sales as no change was identified during the same period with county level hospitals (Yi, Miller, Zhang, Li, & Rozelle, 2015). The research results showed that public hospitals had ways to offset the reform policy efforts, and reform policy may have unintended outcomes.

## 2.3 Summary

This brief review of several decades of health system development and health reforms in China is far from complete. However, review of some key reform policies and their impact reveals that despite the good intention, there can be unexpected consequences that create new challenges and problems (Blumenthal & Hsiao, 2015; Eggleston et al., 2008a; Hsiao, 2008; Yi et al., 2015). Most prominently was the impact of health policies reform on hospital management, medical staff, and service users; health policies shape people's expectations and behaviours, modify their interaction, and affect people's health outcomes. The present research is situated within this historical and contemporary health reform context.

# Chapter 3 Literature Review

In this chapter I review the literature on interpersonal violence, workplace violence, and violence in the health sector. Where available, I include research from the Chinese context. I also review literature on systems theory and the socio-ecological model, which supports using the socio-ecological model underpinned with a system approach as a theoretical framework to guide the data collection and analysis of the present study. At the end of the chapter, I identify the research gap that this thesis addressed. Key findings from the literature review suggest the importance of including contexts in understanding violence.

The literature research was conducted using a combination of methods. Initially, Scopus and Google scholar were accessed for research on violence using search terms such as "workplace violence * health sector", "violence in the health sector", and "violence in health sector in China". I included patient and visitor violence, excluding co-worker violence. Not many studies were identified when using the search term "violence in health sector in China". Selected references from the found relevant studies were followed, which led to identification of other relevant studies. For example, a series of research was identified from the WHO on violence in the health sector, and a cross reference of included references from the selected studies led to identification of more relevant literature covered in this chapter.

After the initial literature research, I subscribed to Scopus alert to obtain updates of studies on violence in the health sector. This process proved helpful and efficient as Scopus automatically sent me author and research alerts on the relevant topic. Periodically, I followed up the data references to keep track of the latest developments in the field. Cross references of literature on workplace violence led me to further research the socio-ecological model and system approach. For theoretical literature, I used the search term: "socio-ecological theory", "ecological theory", "systems theory", and "system approach".

Most of the literature included in this chapter was collected prior to Phase 2 data collection from 2015 to the end of 2017. Literature available after that date is included in the discussion Chapter 9, Section 9.4.

## 3.1 Defining workplace violence

Providing a universal definition of workplace violence is problematic as violence is a term associated with diverse perceptions, forms, and nature, which depends on the social, culture, and even political realities of the act (Brownstein, 2000; Cooper & Swanson, 2002; International Labour Office [ILO], International Council of Nurses, World Health Organization, & Public Services International, 2002). As stated by Brownstein (2000), "violence is not just one thing but many things", which "make it easier to give examples than to define it" (p. 6). Violence can be narrowly interpreted as interpersonal physical violence that involves use of physical force by persons against others (Brownstein, 2000). It can also be broadly defined to include all forms of aggressive acts, ranging from minor aggressive acts like negative gestures to serious violent crimes like homicide (Hills & Joyce, 2013). Workplace can be either narrowly defined as "at work" or "worksite", or broadly defined as "work-related circumstances" (ILO et al., 2002).

Aggression and violence are terms that can be used interchangeably, with violence being more common in criminology and criminal justice, and aggression a more general word (Chappell & Di Martino, 1998). Some researchers, however, consider it important to distinguish between them and note violence as an extreme form of aggression (Dollard, Doob, Miller, Mowrer, Ho, & Sears., 1939; Tobin, 2001). Some researchers employ a broad definition that can encompass different forms of violence to be able to compare studies and situations in different countries (Chappell & Di Martino, 1998). Other authors contend that a broad definition can erase the difference in the scale and intensity of violence and hinder proper assessment of the real situation (Hills & Joyce, 2013).

In Chinese, shangyi (伤医), shangyi shijian (伤医事件), and yiliao baoli (医疗暴力), are all terms that frequently refer to violence, especially physical violence against medical staff. Yi (医) is a Chinese term that can mean either medical doctors alone or medical staff, including medical doctors and nurses, and allied health care providers. Yinao (医闹) is also a Chinese term and refers to a unique form of violence in China, which features severe disruption of hospital operations, in combination with both physical and verbal abuse, that aims to gain substantial amount of financial compensation from the victim hospitals (Helsketh, et al., 2012).

As the researcher, I agree that while it is necessary to accommodate different forms and nature of violence to enable comparison across contexts, it is also important to gain a clear understanding of the specific situation of violence in any given context. After all, accurate understanding and assessment of the situation is the key to addressing violence in the specific context, although comparison across contexts can help to find the general patterns and rules or common roots of violence.

Although both physical and non-physical violence can be harmful to victims' health, this study will focus on yinao and physical violence against medical staff in China, in which mainly doctors, and nurses and sometimes allied health professionals were victims of violence. Such a focus is merely out of a consideration of the availability of data and representativeness of the reality in the Chinese context. There are not readily available official data of violence in the health sector in China. Violent incidents used for analysis in the current study are from both the mainstream media and social media, which predominantly cover yinao and severe physical violent incidents that cause injuries or even medical professionals' deaths. Yinao can also refer to people who are involved in yinao violence; those people can also be termed as zhiye yinao (professional yinao people). Nao (闹) is another related Chinese term, which means making noise and disturbance to attract outside attention to force the other party to find ways to settle the dispute.

## 3.2 Theorising violence and aggression

This section gives a brief review of theories and studies on violence, aggression, and workplace violence. Violence was declared as a public health issue in 1996 (Dahlberg & Krug, 2002; WHO, 1996). A public health approach to violence prevention begins with defining the problem and identifying risk and protective factors (CDC, 2016; Dahlberg & Krug, 2002).

Violence research at the early stage focused mainly on perpetrators and victims' individual factors associated with higher risk of perpetrating violence, including hostile personality/hostile attribution (Homant & Kennedy, 2003), developmental problems, mental illness, individual history of violence and criminal history, or substance abuse (drug or alcohol) (Chappell & Di Martino, 1998). Characteristics of staff, including age, appearance, health, skills, personality, gender, attitudes, and expectation are all found relevant to the occurrence of violence (Chappell & Di Martino, 1998; Poyner & Warne, 1988). The frustration-aggression

hypothesis is a classic theory that speculates aggression is a possible outcome of frustration, which can progress to violence if no proper action is taken (Dollard et al., 1939), and has been supported by studies (Berkowitz, 1989). Leary, Twenge, and Quinlivan (2006) reviewed how interpersonal rejection can be a determinant of anger and aggression.

Several physiological and psychological conditions are used to explain why certain situations can contribute to violence. For example, an unpleasant physical environment can raise physiological arousal and interfere with concentration and cognitive processing, which can result in irritability and increased stress (Diamond, Campbell, Park, Halonen, & Zoladz, 2007; Privitera, Bowie, & Bown, 2015; Tedeschi & Felson, 1994). There is also the concept of cognitive overload, a condition of receiving too much information from the environment that may affect functional competence and strain-coping skills (Bloom & Farragher, 2011). The Yerkes-Dodson Law describes functional impairment from multi-tasking and changing cognitive sets during situations of increased arousal (Diamond et al., 2007; Tedeschi & Felson, 1994). The Karasek model explains the dynamics among job demand, job-related stress, and staff performance (Di Martino, 2003; Karasek & Theorell, 1990). Multitasking and multiple cognitive set changes are found to lead to mistakes, less competence and patience, and increased risk for workplace violence (Bloom & Farragher, 2011). A caring job is regarded as an emotional-demanding job, and emotional exhaustion can impact on staff's job performance (Dill, Erickson, & Diefendorff, 2016). This line of research is useful in explaining how external factors can impact on a person's physiological and psychological conditions and alter individuals' interactions with others. It is particularly useful in explaining the dynamics of risk factors in the health sector (Larson & Yao, 2005).

Workplace violence has been studied in relation to organisational characteristics. For example, Morgan (1986, 1998) examined the underlying images/assumptions of organisations that underpinned different management theories, practices, and the inherent limitations. Morgan believed that conflict is possibly built into organisational structure, roles, and stereotypes. Similarly, Hall (1996) argued that the very nature of organisations contributes to conflict in the workplace. Tobin (2001) used Person-Environment Fit as a framework to study the organisational determinants of internally generated workplace violence and argued that structural characteristics of organisations can lead to aggression and violence

when there is an incongruence of needs/expectations and environment between the individual and organisation. In their model of workplace violence, Howard and Wech (2012) included factors such as individual position, formalisation of the organisation, the specific business sector, and the environment in which the organisation operates, as relevant to violence generated in the organisation both internally and externally. In a study of 20 British employers, Hoad (1993) reported violence as a response to stress and uncertainty caused by poor management, work overload, and constant changes. Bentley et al. (2014) reported interpersonal communication, prejudice/harassment, perceived injustice, and being in contact with public, as factors perceived with most high risk of violence in the workplace.

According to the social interactionist view, violence and aggression is a possible outcome of negative interpersonal interactions, and the individual characteristics of the interacting parties are just parts of the factors contributing to the generation of violent incidents (Tedeschi & Felson, 1994). Any factor that might influence the nature and the dynamics between the interacting parties can also be contributory to the occurrence of violence, which can include motives of interaction, physical environmental factors, the organisational and broader socio-cultural context, in which the interaction takes place (Curbow, 2002). A translational model by Previtera et al. (2015) explains violence in the health sector as the result of interplays of three main elements—person, stimulus, environment—each as a variable of continuum from high risk to low risk.

Empirical studies have established the relationship between working environment and the occurrence of workplace violence. Some factors of the working environment, including physical design, organisational structure, and managerial style and culture have been identified as either contributing to violence or mediating it (Bowie, 2011; Homel, Tomsen, & Thommeny, 1992; Homel & Clark, 1994). Unpleasant environmental factors such as overcrowded, poorly ventilated, dirty, noisy, poorly designed physical environment, can increase risk of violence (Bowen, Privitera, & Bowie, 2011; Chappell & Di Martino, 1998; Howard & Wech, 2012; ILO et al., 2002). Some organisational factors like poor organisation, excessive workload, unjustified delay or queuing, unhealthy interpersonal relationships, and negative staff attitudes can induce aggressive behaviours (Chappell & Di Martino, 1998; ILO et al., 2002). Bentley et al. (2014) also reported that work-related stress

from workload and time pressures are perceived as factors that increase risk of violence in the workplace.

Some situations are identified as carrying higher risk of violence, including working with people in distress, situations with inadequacies in environments, and staff with insufficient training (Di Martino, 2003; ILO et al., 2002). Being in situations that require close physical contact with patients or telling patients bad news can also be dangerous (Peompeii et al., 2013). The connection between violence and stress in the workplace has been established with which any violence, however minor, can lead to stress; and a climate of stress and insecurity can contribute substantially to the level of violence occurrence (Chappell & Di Martino, 1998; Di Martino, 2003). A combination of stress and violence can lead to a vicious cycle between stress and violence that is difficult to break once created (Di Martino, 2003). Bowen et al. (2011) classified workplace environments into healthy and unhealthy, and believed that unhealthy environments can contribute to workplace violence whereas healthy workplace environments can reduce it.

## 3.3 Systems approaches and the socio-ecological model

A theoretical framework guides the research project, steers design, data collection and data analysis, thereby ensuring coherency of the research and focus on achieving the research aims (Green, 2014; Ravitch & Riggan, 2012). This section briefly reviews the application of the ecological model and a systems approach, alongside studies that support the use of the socio-ecological model as a theoretical framework to guide the investigation and analysis of the present research.

A conceptual framework is "a network, or a plane of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena" (Jabareen, 2009, p.51). Jabareen (2009) proposes a conceptual framework be based on concepts alone. It provides not knowledge of hard facts, but "soft interpretation of intentions" (Jabareen, 2009, p 51; Levering, 2002, p.38). Similarly, according to Fain (2004), a framework that is based on concepts can be termed as a conceptual framework, while a framework that is based on theories should be termed a theoretical framework. That is how these two terms are used in the present thesis: the socio-ecological model is used as a theoretical framework, and the intervention framework developed as the outcome of the present research is termed a "conceptual framework". Some researchers may use these two terms alternatively (Green, 2014).

Systems approaches are widely applied in social sciences (Montuori, 2011; Pickel, 2007), including ecology, human development, management, sociology, and education (Gute, 2020). Several system approaches draw on different aspects of multiple theories, including general system theory and complexity theories. As an alternative way of thinking to reductionism, general system theory was envisioned by Ludwig von Bertalanffy in the 1940s to address increasingly complex problems. General system theory emphasises the role of environment and context (Montuori, 2011). Things in the world, according to general system theory, are "open systems", which constantly interact with their environments, rather than "closed systems" that are not interconnected. A system is defined as a group of "interrelated and interacting elements" that form a complex whole (Montuori, 2011). General system theory, with its open systems, brings a change in the way of thinking: everything that exists does not exist in isolation and every system is part of a larger system. Understanding of the subject is not possible without understanding its context, in which the subject is part of the larger system. Individuals can be understood as an open system, interacting with other systems (Montuori, 2011). With contribution from chaos and complexity theories, systems approaches have shifted from an emphasis on systems in equilibrium to emphasising the role of "complexity", acknowledging the "interconnectedness, interdependence and unpredictability", the dynamic features of the system (Montuori, 2011).

A systems approach has been widely used in ergonomics and OHS with wherein the "interactions between individual, task, environment, and organisational work system elements" (Bentley et al., 2014, p. 839) are all considered relevant to the understanding of risk factors in the workplace. Specifically, a system perspective is viewed valuable in understanding workplace violence (Bentley et al., 2014). Ergonomics (or human factors) is the scientific discipline concerned with "the understanding of interactions among humans and other elements of a system and the profession that applies theory, principles, data, and methods to design in order to optimize human well-being and overall system performance" (International Ergonomics Association). Systems approach has underpinned ergonomics. It promotes a holistic, human-centred approach to work systems design that considers physical, cognitive, social, organisational, environmental, and other relevant factors (Karwowski, 2012).

The socio-ecological model is indebted to the ecological theory. Originally put forward by Urie Bronfenbrenner to describe different kinds of contexts that influence the development of individual children, it was later developed to include time/timing as an important dimension of the environment (Bronfenbrenner, 1976, 1979, 1993, 1994, 1999). The interlinking systems include: (a) microsystem (the immediate setting surrounding the individual); (b) the mesosystem (various connections among the major settings for the individual involved, or "a system of two or more microsystems" (Bronfenbrenner, 1999, p. 17); (c) the exo-system being "the linkages and processes take place between two or more settings" (Bronfenbrenner, 1993, p. 645), at least one of which the focal individual is not actually situated (e.g., the interface local community, the world of work, the neighbourhood, mass media, agencies of government, informal social networks); (d) the macro-system (e.g., the culture or subculture surrounding the individual, including social, educational, legal, and political systems); and (e) the chronosystem (time dimension) (Bronfenbrenner, 1976).

Worth noting is the interaction between different aspects of a person's 'ecology' and their ability to change the course of development for that person; and the significance of the dimension of time in a "process-person-context-time" model (Bronfenbrenner, 1999; Tudge, Mokrova, Hatfield, & Karnik, 2009). The reciprocal influence/dynamics between individual and social contexts means that the individual development is not unidirectional (Darling, 2007; Rosa & Tudge, 2013). Further, the influences of various social contexts can be both proximal (direct) and remote (indirect), which means every factor at different layers of the ecosystem has the potential to mediate and moderate the outcome (Bronfenbrenner, 1999; Rosa & Tudge, 2013). The social contextual factors are organised in a systemic way and no single social context can be understood in isolation from others with the ecological approach, which makes the ecological model fundamentally a systems approach (Bronfenbrenner, 1999; Rosa & Tudge, 2013). One important implication of the ecological model is that individuals can be influenced by multi-faceted factors from multi-layers (Bronfenbrenner, 1999; Darling, 2007; Rosa & Tudge, 2013; Tudge et al., 2009). The ecological theory undoubtedly benefited from the general systems theory and a systems approach.

Both the systems approach and the socio-ecological model find applications in many disciplines and different areas. The socio-ecological model also finds

application in social epidemiology, which tries to explain the social determinants of health and inequalities in health (Krieger, 2008; Krieger et al., 2010). The socio-ecological model has been widely used in social work and has been explicitly termed the "ecological systems model" (Siporin, 1980, p. 508). The model has been applied for family and adolescent studies and intervention, although misuses of the theory have been noted by some authors (Tudge et al., 2009). Likewise, Bronfenbrenner (1999) talked about the bioecological model as "an interactive system" (p. 10).

A systems approach has underpinned different models put forward to understand and explain violence at work; for example, Chappell and Di Martino's (1998) interactive model of violence at work (Figure 3). This model takes into consideration both perpetrator(s) and victim(s)' individual factors, workplace risk factors, and even the outcome of the violence, which can also be the risk factor for new workplace violence. However, as can be seen from the model, identifying risk factors at the organisational and individual levels remains the focus of attention. Similarly, Arnetz et al.'s (2014) work model (Figure 4), although underpinned by the ecological approach to understand patient visitor violence, also focuses on factors within organisations. This can largely be explained by the fact that workplace violence has originally been studied as an issue of management either out of Occupational Health and Safety consideration or pure managerial concerns. It may also reflect the reality of workplace violence that in most cases organisational and individual factors have more prominent or noticeable impact than factors in wider society.

The socio-ecological model has been employed widely in studies on violence and workplace violence in the health sector although variations exist across different studies (Arnetz et al., 2014; Curbow, 2002; Dahlberg & Krug, 2002). For example, in *Violence as a Health Issue*, a socio-ecological model (Figure 5) is used to examine the roots of violence and explain violence via multi-facet contributions by exploring the relationship between individual and contextual factors (Dahlberg & Krug, 2002). A socio-ecological model (Figure 6), underpinned by a systems approach, has also been used in the report *Violence in the Health Sector, State of Arts* (Cooper & Swanson, 2002) and a series of WHO country case studies to guide the identification of factors contributing to violence in the health sector systematically (Di Martino, 2002).

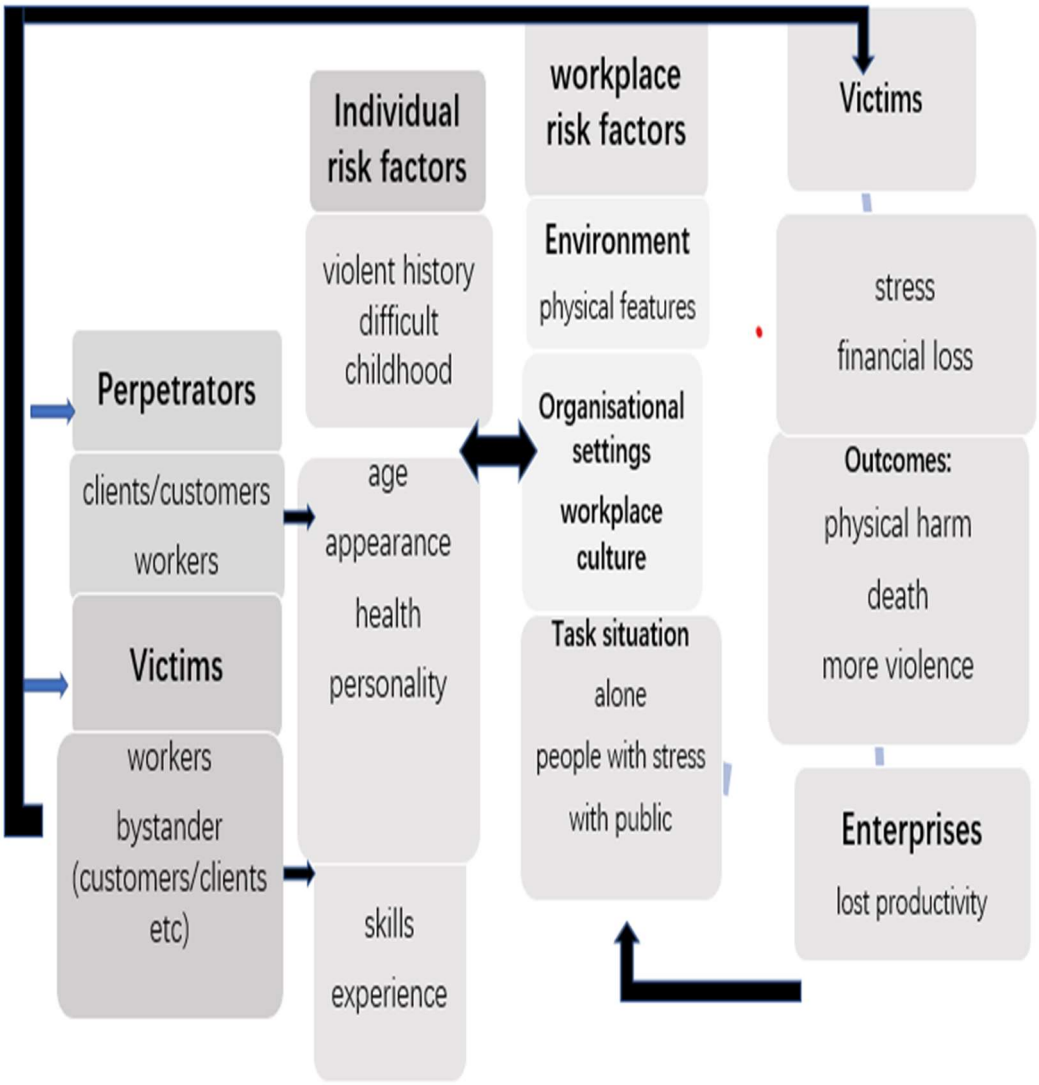


Figure 3. Chappell and Di Martino's (1998, p. 7) interactive model of workplace violence (modified by author)

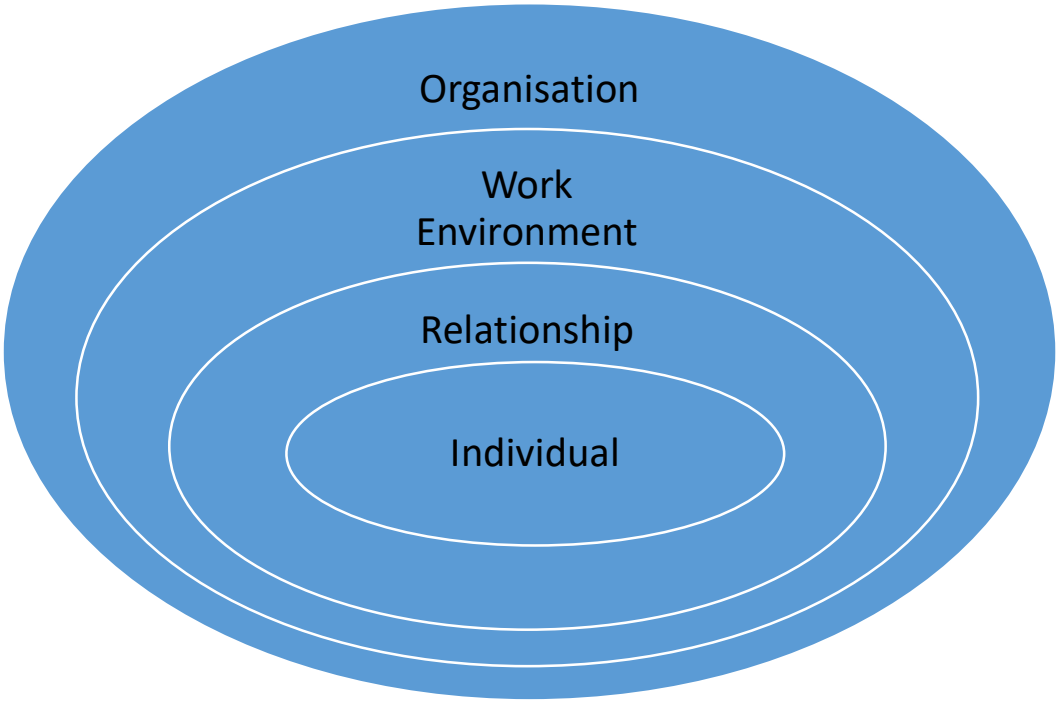


Figure 4. A work model by Arnetz et al. (2014, p. 8) to understand patient to worker violence (modified by author)

Results of surveys from several countries including Brazil, Bulgaria, South Africa, and Thailand, strongly hint at direct "inroads of societal problems into the workplace with violence as one of the major issues" (Di Martino, 2002). In Bulgaria, societal factors such as socio-economic situation, health care reform, public tolerance of violence, high level of stress and social tension, and serious changes in the health institutions and facilities that resulted from its radical social and health care system changes are all explicitly singled out as contributory factors of violence (Di Martino, 2002; Tomev, Daskalova, & Iwanova, 2002). The WHO series of country case studies shed light on the possibility of tracing the underlying root of violence from the broader societal factors (Cooper & Swanson, 2002; Di Martino, 2002). However, these studies do not investigate how the inroad of external contextual factors is made to the organisation and individuals concerned.

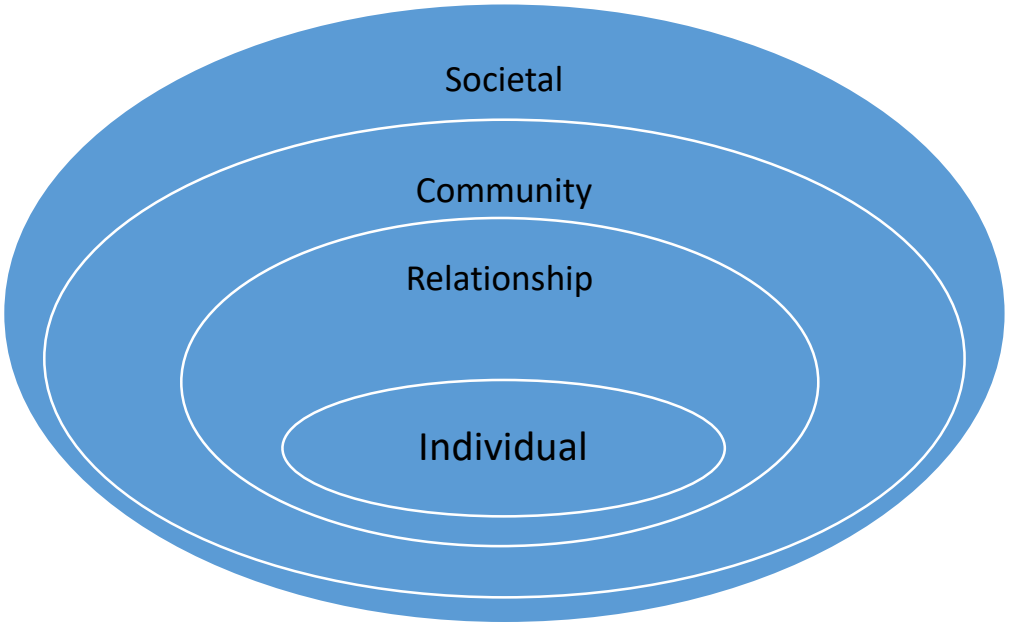


Figure 5. The ecological model used by Dahlberg and Krug (2002, p. 12) for understanding violence (modified by author)

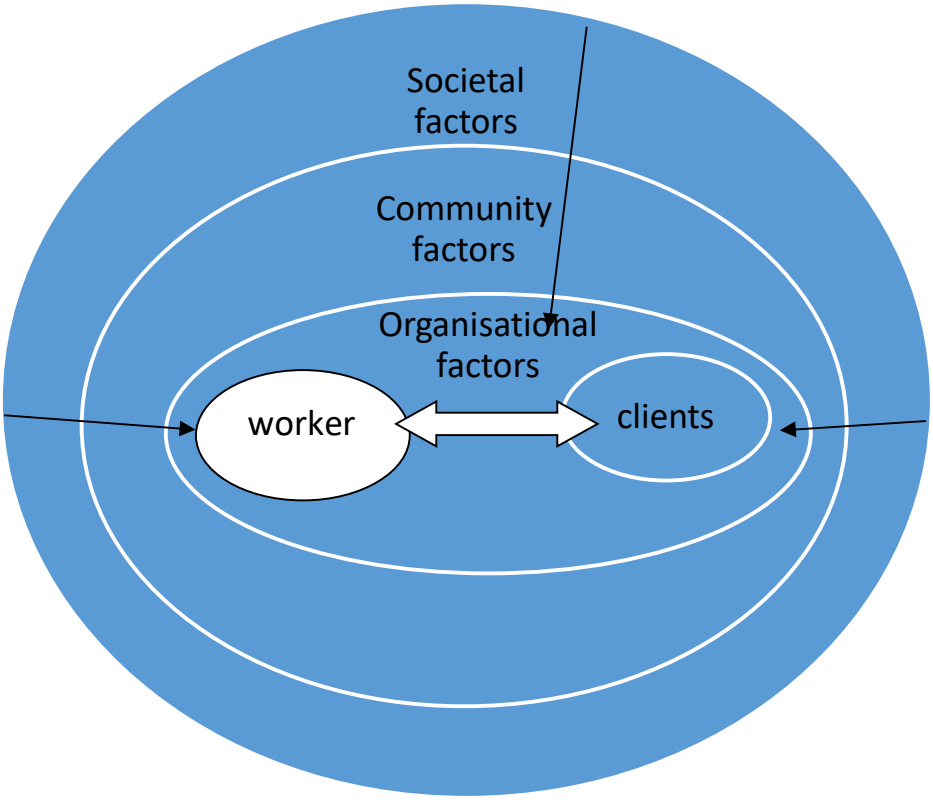


Figure 6. The ecological model for understanding violence in the health sector by Curbow (2002, p. 42) (modified by author)

Despite the many advantages that the socio-ecological model can bring, there are limitations of applying the model. The first is the possible misuse of the model, including using it in a static way instead of taking account of the dynamics between person and environment (Tudge et al., 2009), and the multilayer and multifaceted interactions between factors of the ecology surrounding the individual (Dahlberg & Krug, 2002). Second, the socio-ecological model is only a very general framework to guide analysis, and there is possible danger that some identified risk factors are only superficial manifestations of some other inception, which can result in an intervention framework that is not effective, as the key risk factors are not properly identified. Third, it was noted that many studies adopting a socio-ecological model did not use the terminologies exclusively from the ecological theory (Cooper & Swanson; 2002; Dahlberg & Krug, 2002; Hahn, Muller, Hantikainen, Kok, & Dassen, 2013; ILO et al., 2002), which could lead to confusion. However, as Urie Bronfenbrenner's ecological model was originally used to describe different kinds of contexts that influence the development of individual children, rather than to explain workplace violence, therefore the original Bronfenbrenner's terminologies and the ecological model may not meet the need to describe workplace violence. Modification of terminologies and the ecological model seem reasonable.

## 3.4 Summary of findings from international literature excluding literature from China

Several observations can be made based on international empirical studies; although most of the studies are from high resource countries such as the United States, United Kingdom, and Germany. More empirical studies are needed to understand workplace violence against healthcare workers in low resource countries (Leather, 2002):

- Patients and visitors are the biggest perpetrators of violence in the health sector (Cooper & Swanson, 2002; Peompeii et al., 2013)
- Different professions in the health sector are targets, with nurses are the most at risk (Leather, 2002)
- Verbal violence is more common than physical violence, and physical violence is generally not fatal (Hahn et al., 2010; Hahn et al., 2008; Leather, 2002)
- Emergency and psychiatry are the most dangerous workplaces of all health

care settings (Leather, 2002; Pompei et al., 2013)

- Drug and alcohol-related violence accounts for a majority of patient visitor violence (45-94% alcohol-related; 57-94% drug-related) (Pompeii et al., 2013)

According to a series of WHO reports on violence in the health sector, workplace violence seems to be closely related with individual and situational factors where alcohol/drug, or mental instability, or close physical contact with patients is involved; as supported by empirical evidence from developed countries where the rule of law seems more established (Cooper & Swanson, 2002; ILO et al., 2002). In developing countries (i.e., Bulgaria, South Africa), or countries that are experiencing or have experienced dramatic social political and economic changes or dramatic reform of the health system, where there is a climate of insecurity, stress and tension, societal factors can have more prominent impact on the outcome of workplace violence than situational or organisational factors (Di Martino, 2002; Steinman, 2002; Tomev et al., 2002).

Both empirical evidence and theoretical insights indicate that the very nature of the job performed in the health care sector makes it open to external influence and more vulnerable to workplace violence (Di Martino, 2003), hence, the need to include factors outside the healthcare workplace to better understand violence in the health sector in China.

Although there are many shared factors contributing to violence across different cultural contexts, the exact form, nature, and cause of violence in the health sector can be different. Hence, characteristics of workplace violence in the health sector can be context-specific, as demonstrated by the review of the international studies (Curbow, 2002; Hills & Joyce, 2013; Leather, 2002).

Table 3 on the following page summarises factors in international literature that are identified as either contributing or moderating violence in the health sector. Factors are presented in a way that resembles the socio-ecological model.

Table 3. Summary of risk factors for violence in the health sector in the international literature under the socio-ecological model

| |
|---|
| **Individual level:** |
| 1a Perpetrator characteristics: personality disorder, under the influence of alcohol/drug and mental instability (Chappell & Di Martino, 1998); cognitive deficits (Curbow, 2002; Hahn et al., 2008) |
| 1b Victim characteristics: anxiety, stress (Di Martino, 2003); display of unpleasant or irritating attitude (ILO et al., 2002) |
| **Mediating factors of staff**: Appearance, experience, attitudes, health, expectation, age, gender (ILO et al., 2002; Poyner & Warne, 1988) |
| **Situational factors**: |
| Involving close physical contact, feeling aggressive, being forced to wait, having to follow some administration rules; telling bad news (Arnetz et al., 2014) |
| **Organisational level:** |
| 2a General climate of the organisation: under the strain of reform, working in place open to violence, unhealthy relationships in the workplace (ILO et al., 2002) |
| 2b Job organisation: understaffing, night shift, working alone, working with people in distress, working in contact with the public, excessive workload, bureaucratic procedures, bad working condition (ILO et al., 2002) |
| Work-related stress from workloads and time pressure (Bentley et al., 2014); violence-related stress (Chappell & Di Martino, 1998; Di Martino, 2003) |
| Lack of security measures and control (Di Martino, 2002; Tomev et al., 2002) |
| **Mediating factors**: Management style, job design, physical and organisational environment (Chappell & Di Martino, 1998; Homel et al., 1992; Homel & Clark, 1994), cost and quality of health care (Hahn et al., 2013) |
| **Community and societal level:** |
| Low levels of community resources, tolerance of violence of the public (Cooper & Swanson, 2002), high level of stress and social tension, absence of protective-punitive mechanisms and strategies to fight against violence, serious changes in the health institutions and facilities (Di Martino, 2002; Tomev et al., 2002), cultural attitudes and norms that accept violence as a way for problem solving (Curbow, 2002; Di Martino, 2002; Hill & Joyce, 2013), poor law and policing (Di Martino, 2002; Steinman, 2002) |
| **Mediating factors**: Cultural and societal factors, socio-economic situation, health care system/reforms, social context or cultural background of the health care system (Hahn et al., 2013) |

## 3.5 Importance of contextual factors and the inherent dynamics

Studies on workplace violence (Howard & Wech 2012;) and workplace violence in the health sector (Bowie, 2011; Curbow, 2002; Di Martino, 2002, 2003) specifically point to the importance of contextual factors in understanding violence, although the spectrum of examination can be different, and the studies may not necessarily be underpinned by the socio-ecological theory. The focal concern has also been expanded to include factors that can influence the outcome of encounters: from merely focusing on individual factors, to focusing on both individual factors and the physical environment, to including organisational aspects of the environment, and even factors in the wider community and society.

Several reports from the WHO (Cooper & Swanson, 2002; Di Martino, 2002) have established that "workplace violence is not an isolated, individual problem but a structural, strategic problem rooted in social, economic, organizational and cultural factors" (ILO et al., 2002, p. 9). Violence at work is, therefore, often considered to be just "a reflection of the more general and increasing phenomenon of violence in many areas of social life which has to be dealt with at the level of the whole society" (Cooper & Swanson, 2002, p. 1). Such an understanding makes a strong case for investigating the contextual factors and the dynamics between those factors, especially the inroad of external factors, as effective intervention needs be "developed from its inception" (ILO et al., 2002, p. 9). However, intervention studies of workplace violence seldom reflect such a view with a narrow focus on individual and organisational factors possibly due to the difficulty of including such variables in the study (Curbow, 2002; Privetera et al., 2015).

In New Zealand, Tappin, Bentley, & Vitalis's study (2008) of the role of contextual factors for musculoskeletal disorder is a good case of applying a broader systems approach to understand risk factors that go beyond organisational and individual controls from the field of ergonomics. Specifically, it highlights the value of understanding the contextual factors in identifying risk factors for intervention development. Contextual factors refer to the broad "social, economic, cultural, political and organizational factors that are seen as creating the conditions under which physical and psychosocial risk factors can occur" (Tappin et al., 2008, p.1577).

Tappin et al. (2008) distinguished two types of contextual factors: internal and external. Tappin et al.'s model (Figure 7) emphasises the impact of external forces on internal factors (e.g., job design, job organisation), and thus alter the biomechanical and psychological risk factor for workers working in the meat processing industry. Of the contextual factors, cultural influences, political and economics, human resources issues, job demands are all considered relevant.

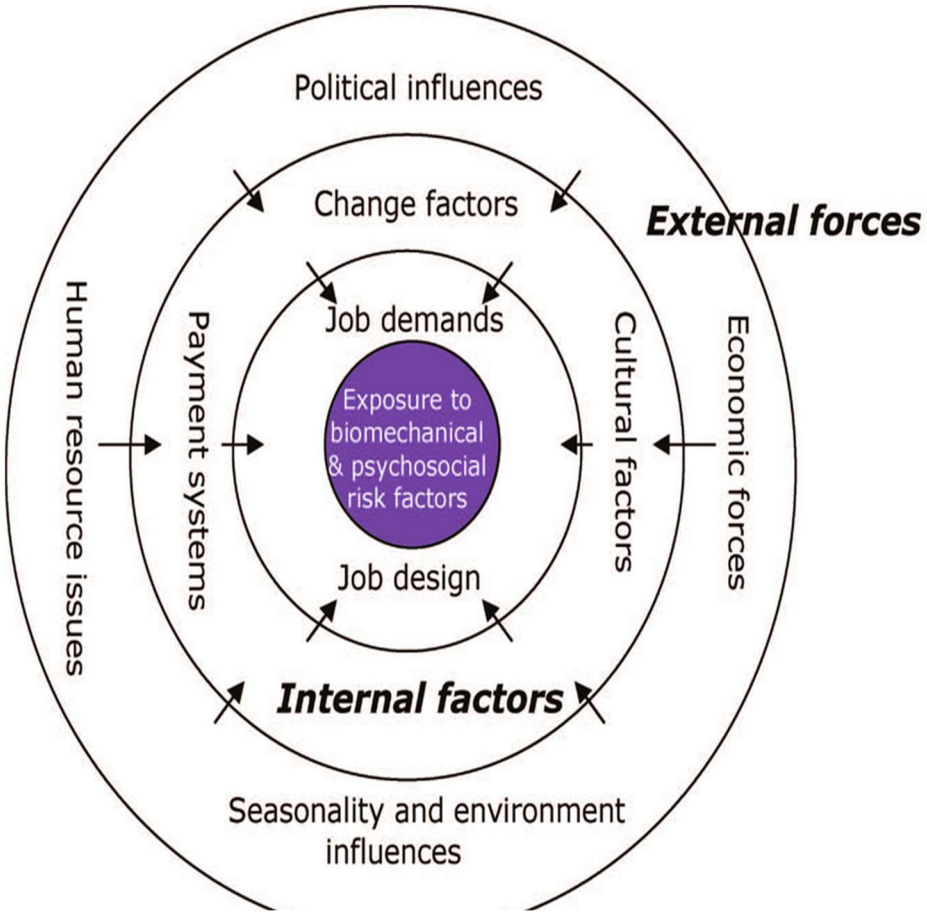


Figure 7. Tappin et al.'s (2008, p. 1581) conceptual model for understanding the role of contextual factors in meat processing musculoskeletal disorders (modified by author)

What makes Tappin et al.'s study distinct from other studies that either adopt the socio-ecological model or a systems approach is that, in addition to looking beyond the individual and organisational factors, it investigates the dynamics between the external and internal contextual factors, and the inroad of external contextual factors into the organisational factors and further to the individual and interactional factors**.** While acknowledging the interaction of individuals with the

systems surrounding them, investigating the inroad of external factors on individuals via organisational factors reflects the fact that influence of the micro system can be more proximal and immediate, and influence of the macro system or mesosystem can be more fundamental and long lasting.

## 3.6 Literature on violence in the Chinese healthcare sector and the Chinese healthcare context

Studies on workplace violence in the Chinese health sector are predominantly descriptive epidemiological. Table 4 overviews the literature on violence in the Chinese health sector available in English. With some overlapping and slight differences, studies have identified basically the same risk factors as the major causes of violence: miscommunication, dissatisfaction with treatment, excessive waiting, and high medical expenses (Cai et al., 2011; Jiao et al., 2015; J. Pan et al., 2015a; Y. Pan et al., 2015; Wu et al., 2012; Xing, et al., 2015). At the organisational level, heavy workload and stressful situations are also considered risk factors (Cai et al., 2011; J. Pan et al., 2015a), consistent with international literature (Bentley et al., 2014; Cooper & Swanson, 2002; ILO et al., 2002).

Societal and community level factors identified as contributing to violence include a general climate of lack of trust between doctor and patient, gaps between supply and demand of medical resources, negative media publicity, and issues with the social health insurance system (CMDA, 2015; Liu, Zhao, Jiao, Wang, & Wu, 2015). A survey of medical doctors by CMDA reported that 83% of respondents believed the tension between doctors and patients is caused by “Tizhi” (a Chinese term for “system” in general) and that doctors are merely the scapegoat of the system’s problems (CDMA, 2015). However, these studies do not investigate how problems of the wider system make their inroad to the internal contextual factors and trigger violence. What is more, there is possible bias in using only medical staff as respondents.

Table 4. Evidence of risk factors associated with violence towards medical staff in Chinese health sector

| Citation | Method(s) | Sample | Findings |
|---|---|---|---|
| Cai, W., Deng, L., Liu, M., &Yu, M. (2011). Antecedents of medical workplace violence in South China. | Face-to-face, in-depth, semi-structured interviews | n=30 hospital staff randomly selected | Major antecedents of workplace violence: insufficient communication (93%); inadequate medical service quality (56.7%); unsatisfactory treatment outcome (60%); heavy workload accounted (43.3%); frustration due to high medical expenses (40%) |
| Jiao, M. L., Ning, N., Li, Y., Gao, L., Cui, Y., Sun, H., ...& Hao, Y. H. (2015). Workplace violence against nurses in Chinese hospitals: A cross-sectional survey. | A cross-sectional survey (n=588) in combination with in-depth interviews (n=25) | Survey participants: Nurses (n=588); interview participants nurses (n=12), administrators (n=7); health officials (n=6) | Inexperience, graduate level, working rotating shift have higher risks of experience violence.<br>Higher anxiety levels about workplace violence and work types were associated with violence<br>Key risk factors perceived by nurses: high cost of medical services, high expectation, overcrowding tertiary hospital, negative publicity, sluggish procedures, heavy workload, long waiting time |
| Pan, Y., Yang, X. h., He, J. P., Gu, Y. H., Zhan, X. L., Gu, H. F., . . . Jin, H. M. (2015). To be or not to be a doctor, that is the question: A review of serious incidents of violence against doctors in China from 2003–2013. | Violent incidents analysis using secondary data | Secondary data: serious violent incident reports available online between 2003 and 2013 (n=101) | Main reasons of disputes reasons: dissatisfaction with treatment or diagnosis, high expectation, dissatisfaction with service, expensive cost, misunderstanding |

| Citation | Method(s) | Sample | Findings |
|---|---|---|---|
| Pan, J., Liu, D., & Ali, S. (2015). Patient dissatisfaction in China: What matters. | Statistic data analysis based on secondary data (survey results from URBMI survey from 2007 to 2010) | | Key reasons for patient dissatisfaction include: exorbitant medical charges; poor staff practice, communication skills of providers, service environment; difficulty of accessing services. |
| Liu, H., Zhao, S.Q., Jiao, M. L., Wang, & Wu, Q.H., (2015). Extent, nature, and risk factors of workplace violence in public tertiary hospital in China: A cross-sectional survey. | Cross-sectional survey | Health workers (n=1129) | The specialist hospital had the highest prevalence of physical violence, while the general hospitals had the highest prevalence of non-physical violence. Inexperienced medical staff were more likely to suffer non-physical violence than physical violence in Chinese medicine hospitals compared to experienced staff. Medical units had a high risk of non-physical violence, surgical units had a high risk of physical violence. staff with higher levels of anxiety about workplace violence were more vulnerable to violence, rotating shift workers had a higher odds of violence compared to fixed day shift workers. |
| Wu, D., Wang, Y., Lam, K. F., & Hesketh, T. (2014). Health system reforms, violence against doctors and job satisfaction in the medical profession: A cross-sectional survey in Zhejiang Province, Eastern China. | Questionnaire survey | Medical staff from 11 public tertiary hosptials in Urban areas of Heilongjiang province (n=2,464) | About 50% of study subjects reported at least one type of workplace violence. The rates of experiencing two episodes or more of physical assault, emotional abuse, threat of assault, verbal sexual harassment, and sexual assault were 11%, 26%, 12%, 3%, and 1%, respectively.<br>Risk factors included working in the departments of psychiatry, emergency, paediatrics, and surgery, male gender, divorce/widowed status, long working hours (≥10 hr/day), and night shift. |

| Citation | Method(s) | Sample | Findings |
|---|---|---|---|
| Xing, K., Jiao, M., Ma, H., Qiao, H., Hao, Y., Li, Y., … Wu, Qu. (2015). Physical violence against general practitioners and nurses I in Chinese Township hospitals: A cross-sectional survey. | Cross-sectional survey | General practioners and general nurses from 90 township hopsitals in Heilongjiang Province (n-840) | 12.6% respondents reported being physically attacked in their workplace in the previous 12 months. Most perpetrators were the patients' relatives, followed by the patient; 56.6% of the physical violence incidents (n =60) resulted in a physical injury, and 45.4% of respondents took two or three days of sick leave. Reporting workplace violence in hospitals was low.<br><br>Risk factors: lack of training on how to avoid workplace violence; general nurses, aged 35 years or younger, and with a higher-level professional title were more likely to experience physical violence. Healthcare workers with direct physical contact (washing, turning, lifting) with patients had a higher risk of physical violence compared to other health care workers. Procedures for reporting workplace violence was a protective factor for physical violence |
| Gong, Y., Han, T., Chen, W., Dib, H. H., Yang, G., Zhuang, R., ... Lu, Z. (2014). Prevalence of anxiety and depressive symptoms and related risk factors among physicians in China: A cross sectional study. | Interviews with a structured questionnaire along with validated scales testing anxiety and depressive symptoms. Multivariable logistic regression models were used to identify risk factors for anxiety and depressive symptoms. | Physicians working in public hospitals in Shenzhen (n=2641) | An estimated 25.67% of physicians had anxiety symptoms, 28.13% had depressive symptoms, and 19.01% had both anxiety and depressive symptoms. More than 10% of the participants often experienced workplace violence and 63.17% sometimes encountered it. Anxiety and depressive symptoms were associated with poor self-reported physical health, frequent workplace violence, lengthy working hours (more than 60 hours a week), frequent night shifts (twice or more per week), and lack of regular physical exercise.<br><br>Anxiety and depressive symptoms are common among physicians in China, and the doctor-patient relationship issue is particularly stressful. Interventions implemented to minimize workload, improve doctor-patient relationships, and assist physicians in developing healthier lifestyles are essential to combat anxiety and depressive symptoms among physicians, which may improve their professional performance. |

| Citation | Method(s) | Sample | Findings |
|---|---|---|---|
| Chen, S., Lin, S., Ruan, Q., Li, H., & Wu, S. (2016). Workplace violence and its effect on burnout and turnover attempt among Chinese medical staff. | The Chinese version of the Workplace Violence Scale and the Maslach Burnout Inventory-General Survey were used to measure the workplace violence and job burnout, respectively. Other potential influencing factors for job burnout and turnover attempt were collected using a structured questionnaire. | Medical employees selected from Fujian province using stratified cluster sampling method (n=2020) | The incidence of workplace violence among medical staff was 48.0%. Workplace violence had a positive correlation with emotional exhaustion and cynicism, and a negative correlation with professional efficacy. Workplace violence, marital status, employment type, working time (≥ 10 h/day), performance recognition, and life satisfaction were significant predictors for turnover attempt among Chinese medical staff. |

Workplace violence in the Chinese health sector is widespread and involves physical violence and considerable injuries. For example, in one study, 57% of the violent incidents resulted in injuries, 30% required one day off, 45% required 2-3 days off, and 18% one week off work (Xing et al., 2015). In most cases, physicians are consistently reported as the target of attacks in the Chinese context (Y. Pan et al., 2015; Xing et al., 2015), which is different from what is reported in the international literature where nurses are the most at risk (Cooper & Swanson, 2002; ILO et al., 2002).

The overwhelming majority of the violent incidents in China have almost zero consequence for the perpetrators (Y. Pan et al., 2015). Xing et al.,'s (2015) study reported that for 51% of the cases there was no consequence for the perpetrators; and for 26% of the cases only a verbal warning issued by the hospital manager—none of the perpetrators were discontinued care. Only 23% of the cases were reported to the police, and none of the perpetrators were prosecuted, although most of the violent incidents resulted in injuries as detailed previously (Xing et al., 2015).

Similarly, there is serious under-reporting of violent incidents in health settings in China. Among respondents who reported experiencing physical violence in the past year, 91% had not reported it. Reasons for non-reporting included viewing it as useless (70%), fear of negative consequence (59%), feeling ashamed (42%) (Xing et al., 2015), or regarding violence as an inevitable part of their job (Cai et al., 2011). Up to 47% of the respondents reported that there was not any procedure for reporting violence in their workplace, and only 58% knew how to use it if there was a procedure. A further 55% of respondents said there was no encouragement to report violence and only 37% reported receiving training in managing aggression and violence (Xing et al., 2015). Such findings indicate the absence of a zero-tolerance-to-violence culture in the organisation and lack of organisational commitment to tackle violence.

Findings from several studies have revealed the connection between the occurrence of workplace violence and organisational factors such as workload, job satisfaction of doctors, and doctor-patient communication during consultation. Higher rates of workplace violence have been reported for physicians working at tertiary hospitals than for physicians working at lower-level hospitals (D. Wu et al., 2014). Although generally low job satisfaction along with heavy workload among

physicians have been reported, significant higher job satisfaction along with lower workload and longer consultation time for patients have been reported for physicians working at lower-level hospitals than physicians at tertiary hospitals (CMDA, 2015; H. Liu et al., 2015; D. Wu et al., 2014). It seems that heavy workload can impact negatively on consultation time and increase risk of violence. The findings also highlight the importance of doctor-patient communication with the length of consultation time as an important index; findings supported by studies in which miscommunication/insufficient communication has been explicitly identified as a major risk factor for violence against physicians (Cai et al., 2011; S. Wu et al., 2012). While consultation time seems to be a factor on the situational level, it is not a choice to be made by doctors as they cannot choose their workload in the Chinese healthcare context. Reasons for this will be examined in the current study.

The reduced general health and wellbeing of medical staff, most notably depression and sudden death (Fu, Schwebel, & Hu, 2018; Wen, et al., 2016), has been explicitly related to organisational problems such as unreasonable workload and prevalence of workplace violence (CMDA, 2015, 2017; J. Wang, Sun, Chi, Wu, & L. Wang, 2010). Depression is common among doctors in China. In one study, over 65% of doctors demonstrated depressive symptoms, almost two times higher than in the general population in Asia and four times higher than in emergency medicine residents in the United States (J. Wang et al., 2010). Other studies have reported similar organisational problems existing across different geographical locations in China, which suggests that those organisational factors can be the manifestation of problems at the system level (H. Liu et al., 2015; D. Wu et al., 2014).

Some studies from China do not directly investigate violence against medical staff, but touch on relevant aspects, which may shed light on the underlying cause of violence from various perspectives. In particular, the issue of mistrust between patient and physician seems to be an important theme found in literature from China. Tucker et al. (2015) noted widespread mistrust between patient and physician in the Chinese context, and linked mistrust as a reason for violence. Patient perceptions of societal injustice and the commercialisation of medicine have been identified as key drivers of mistrust, which is manifested in the explicit pursuit of financial profits at a systems level (Tucker et al., 2015). The schematic of pathways from patient-physician mistrust to outcomes of medical disputes has been mapped, with violence resolution being a possible outcome (Tucker et al., 2015). A vicious cycle of

unintended consequences resulting from patient-physician mistrust and medical dispute (Figure 8) has been mapped to depict how patient-physician mistrust can be easily ignited by a catalytic incident and lead to anger regarding the medical system and enhance the patient-physician mistrust (Tucker et al., 2015). In addition, lack of humanistic elements, together with health system issues around incentives and financing, have also been identified as important reasons for patient-physician mistrust (Tucker et al., 2015).

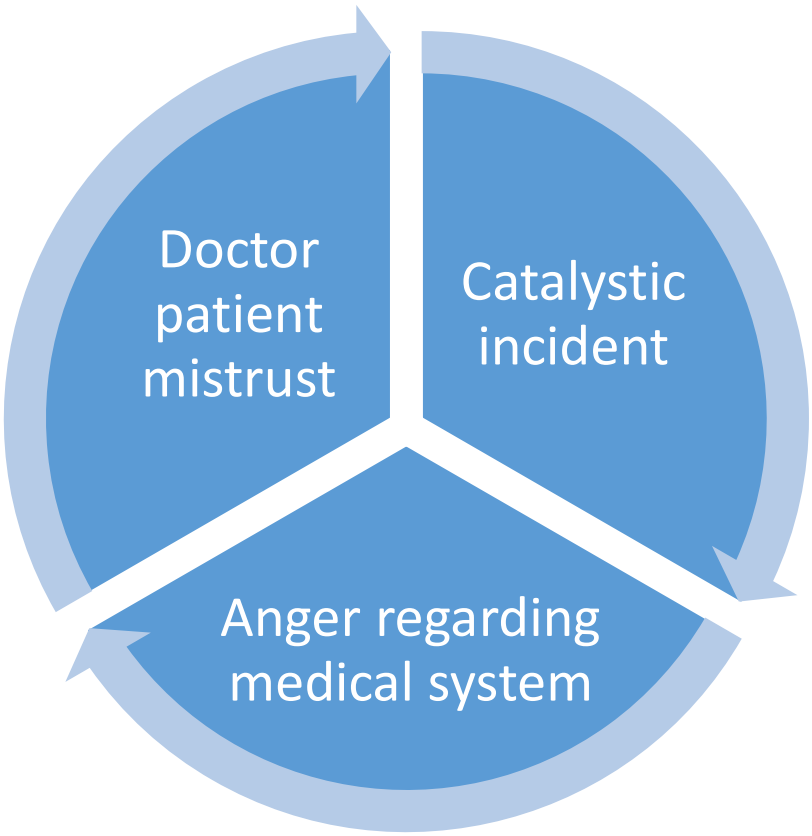


Figure 8. Vicious cycle of unintended consequences resulting from mistrust and medical disputes (Tucker et al., 2015, p. 8, modified by author)

Problems with systems and mechanisms handling patient complaints and medical disputes have been further identified as possible causes of mistrust and violence in the Chinese health sector. Specifically, the dual roles played simultaneously by medical institutions as both the player and the referee in handling patient complaints, lack of consistency and transparency in the handling process have been identified, which can contribute to patients' lack of trust in the system of patient

complaint handling (Jiang et al., 2014). The same problem was also identified by Tucker et al. (2015). Low awareness of the patient complaint system is another possible factor to explain why it is easy for some Chinese people to take matters into their own hands should there be a grievance (Jiang et al., 2014).

Similarly, doctor-patient relationship has been examined in relation to defensive medicine and over prescription in Chinese public hospitals (He, 2014). Defensive medicine describes physicians' behavioural response to threats from medical malpractice litigation (He, 2014). Physicians' self-perceived threats from patients, rather than pure economic incentives, may constitute a major reason for defensive practices, which can take the form of overprescribing diagnostic tests, procedures, and drugs. Meanwhile, physicians' experience of workplace violence can contribute to physicians' defensive practice (He, 2014).

The review of literature from China also highlights the limitation of the available research. Different choices by respondents can significantly impact research findings. For example, a large-scale household survey and statistical analyses have been employed to investigate factors that influence patient dissatisfaction, with medical cost identified as the most important factor for patient dissatisfaction (Pan, Liu, & Ali, 2015). Although financial burden has been consistently identified as a major risk factor (Cai et al., 2011; Jiao et al., 2015; J. Pan, Liu et al., 2015a; Wu et al., 2012), it has not been identified as the most important reason for violence against medical doctors. While most studies on workplace violence used medical staff as respondents, the study on patient dissatisfaction used patients and their family. Medical staff may be more sensitive to patients' response to their service or factors impacting on their interaction with patients more directly and they may not be able to fully comprehend how the expensive medical cost may burden the patient and the frustration it can cause, no matter how empathetic they can be. Patients have their own perceptions as the recipients of medical services, which is hard for medical staff to fully comprehend. The difference caused by using different key stakeholders as respondents suggests the limitation of individuals' perspective and possible bias resulted from using only participants from a particular stakeholder group.

Similarly, although most medical staff believe that irresponsible coverage by media of medical malpractice is responsible for the tension and mistrust between patient and doctor (CMDA, 2015; H. Liu et al., 2015), the literature review revealed

some inherent problems with the health care system and patient complaints and medical disputes handling system, which can undermine trust between patient and doctor. Specifically, the link between the reduced funding of hospitals and medical doctors' over-prescription, and the subsequent escalation of health cost were noted to overshadow doctor-patient relationship previously in section 2.2.2.

## 3.7 Synthesising the literature

If viewed separately, the studies above cannot shed much light on the cause of violence in the Chinese health sector that would support developing intervention measures. However, if the findings are linked and examined with the socio-ecological model, a clearer picture emerges.

### 3.7.1 What is known about violence in the Chinese healthcare sector?

It is interesting to note that, in most cases, authors from China do not narrowly focus on the form and prevalence of workplace violence. Instead, they also ponder on reasons in the wider community and at societal level, such as trust and healthcare system, although they do not use the socio-ecological model to guide their investigation.

The international literature helps explain why the Chinese healthcare sector is an extremely dangerous workplace. At the organisational level, the working conditions of the Chinese health sector, as reported in the studies reviewed, make it a high-risk place for violence: work overload, shortage of staff, patient overload, and unpleasant working environment, including being crowded, noisy, and involving long queues and waiting times. Such working conditions can result in high stress and increase risk of workplace violence. A vicious cycle between stress and violence (Di Martino, 2003) seems to be created in the Chinese health sector wherein the prevalence of violence adds to high levels of work-related stress and anxiety, and results in widespread depressive symptoms among staff (Wang et al., 2010) which substantially increases the risk of violence (H. Liu et al., 2015). Consistent with the international literature, stressful working conditions, the poor general wellbeing of medical staff, along with low job satisfaction, may also result in poor staff attitudes, which can impact negatively on patient-physician interaction and increase risk of violence (Chappell & Di Martino, 1998; Di Martino, 2003; ILO et al., 2002).

A general climate of mistrust between patient and physician in the Chinese context has been noted by researchers and reporters (Tucker et al., 2015). Several studies cover the cause of mistrust between patient and physician from different perspectives. The explicit pursuit of profit at the system level was identified as a driver of the mistrust between patient and physician (Tucker et al., 2015). Low government financial input in the public health system (Hsiao & Liu, 1996; Tucker et al., 2015; Wu et al., 2014), the unreasonable pricing of medical services, and misplaced incentives were further identified as contributing to the mistrust (Tucker et al., 2015). Problems with the patient complaint systems are also regarded as undermining patients' trust in the medical institutions and the medical profession (Jiang et al., 2014; Tucker et al., 2015).

Studies from China also identify the lack of consequences for crime, weak law enforcement, and a lack of forceful response mechanisms towards violence, along with the serious under-reporting of violence as factors contributing to the occurrence of violence in the Chinese health sector. Table 5 summarises the risk factors for violence in the Chinese health sector at the different levels of the socio-ecological model, as identified in the literature from China. It is far from complete due to lack of empirical evidence.

Risk factors for violence in the Chinese health sector seem to load heavily at the societal level. Specifically, there is an element of finance involved in the consultation process, which seems to complicate the patient-physician relationship, and makes the Chinese health sector even more vulnerable to external influence. Although the above review of literature from China is by no means complete—the methodologies used in those studies may not have been robust and the samples were limited to certain geographical locations—it does enable the researcher to gauge the connection between the various factors identified, for example impact of funding of the health service provision and health insurance reform on patients and medical staff.

Based on findings from my literature review, a provisional model depicted in Figure 9 was used to guide investigation and analysis of risk factors in the study. The model was modified based on Urie Bronfenbrenner's ecological theory to meet the need to describe workplace violence in the Chinese healthcare sector. The original terms used by Bronfenbrenner: micro-, meso-, exo-, macro- and chrono-systems were to describe different kinds of contexts that influence the development of

individual children, which means that they may not meet the need to describe contexts of workplace violence. It is more reasonable to view different layers of environments that the individuals are situated in as focal points of interest. Furthermore, there is the need to encompass findings from the literature on violence and workplace violence that either adopted a socio-ecological model or a systems approach, which normally use terms like individual, organisational, community and societal levels to indicate the different layers of focal points of interest for investigation, rather than using the original terms by Bronfenbrenner. Therefore, the present study also generally uses individual, organisational, and societal levels along with situational and community levels to refer to the different layers and dimensions of the ecological system surrounding the individual. Please note that possible confusion may result due to the use of different terms.

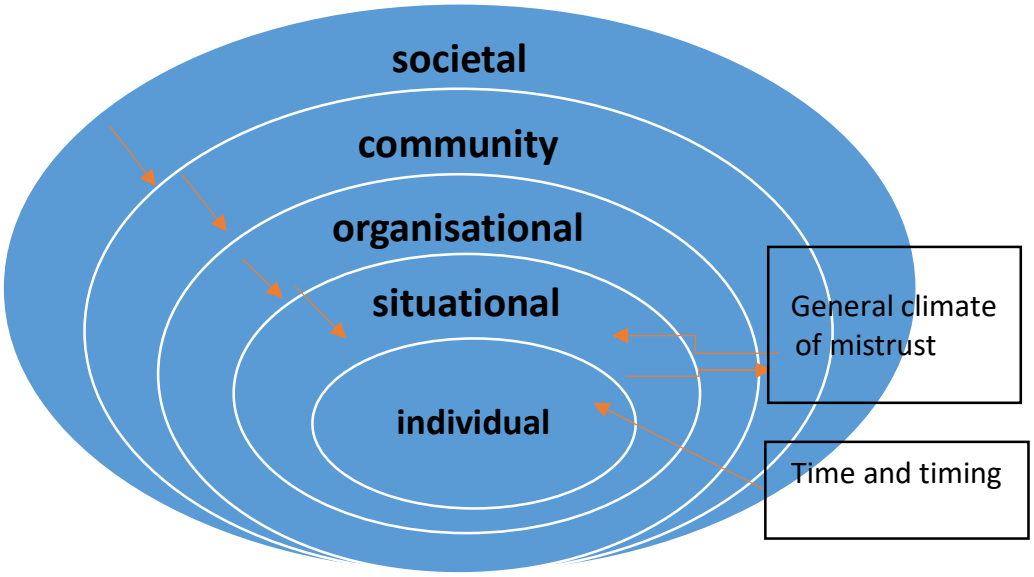


Figure 9. Proposed socio-ecological model for understanding violence in the Chinese health sector

Please note that in the proposed socio-ecological model, individual, organisational, and societal levels are the three basic levels, and situational and community levels are the two interface levels due to possible overlapping and interconnection of layers. For example, situational factors can be the combination and the interplay of individual factors and organisational factors. Likewise, factors in

the community can be part of the societal factors. Factors can be referred to as "situational and organisational factors" and "factors in the community and societal level" due to difficulty of separating them.

Table 5. Summary of risk factors for violence in the Chinese health sector at levels of the socio-ecological model

| |
|---|
| **Individual level:** |
| Perpetrators: individual characteristics, lack of basic medical knowledge, unreasonable expectation of medical services (CMDA, 2015; H. Liu et al., 2015; Huang et al., 2011) |
| Victims: anxious, depressive, fatigue, unhappy, stressful from both work-related stress and violence-related stress), overworked, poor general state of health and wellbeing, poor staff practices (Cai et al., 2011; H. Liu et al., 2015; D. Wu et al., 2014) |
| **Situational level**: |
| Short consultation time, general climate of lack of trust between patient and physician, miscommunication/insufficient communication |
| **Organisational level**: |
| Showing characteristics of typical of high-risk working environment and job organisation, including long waiting time, unpleasant physical environment (crowded, noisy, long queues), open to violence, under the strain of reform, excessive work overload, working with people in distress |
| Explicit pursuit of financial profit at system level in medical institutions; cost of medical care and quality |
| (Cai et al., 2011; Jiao et al., 2015; H. Liu et al., 2015; Y. Pan et al., 2015; Tucker et al., 2015; S. Wu et al., 2012; D. Wu et al., 2014) |
| **Community and societal level:** |
| Problems with the healthcare system, including: personnel management and incentives, pricing of medical services and medicine, systems and mechanisms handling patient complaints and medical disputes, irresponsible negative media coverage, undergoing rapid and substantial socio-economic reforms and cultural changes, response mechanisms for violence in the health sector, uneven distribution of medical resources, low government financial input into the healthcare system, medical insurance systems |
| (An et al., 2013; CMDA, 2015, 2017; H. Liu et al., 2015; Tucker et al., 2015; D. Wu et al., 2014; Xing et al., 2015) |
| Problems with China's medical-help-seeking culture (Wu, 2013) |

While acknowledging the bilateral influence, the red arrows highlight the inroad of external contextual factors to internal contextual factors, emphasising the

impact of external contextual factors on factors at organisational, situational, and the individual factors. The chronological dimension was added to emphasise the significance of time in understanding violence in the Chinese healthcare sector.

### 3.7.2 Conclusion

Review of the extant literature highlights some unique features of violence in the Chinese health sector that cannot be readily explained by existing models of workplace violence. Furthermore, there is a complex interplay between factors at various levels of the socio-ecological model and different sectors in the Chinese context, which makes it almost impossible to single out the impact of one risk factor or to identify a simple one-to-one corresponding cause and effect. For example, factors such as poor or insufficient communication between doctor and patient that are seemingly at the individual and situational levels can be the result of the interplay between underlying factors at the organisational level, or in the wider community and at the societal level, including healthcare system, or policies at the national level.

Another point worth mentioning is that the issue of trust/mistrust seems to be a major concern in the Chinese healthcare setting (Hesketh et al., 2012; Lu, 2013; Y. Pan et al., 2015; Tucker et al., 2015). Widespread mistrust between physicians and patients has been a government concern and efforts have been made to rebuild trust to address the violence against medical staff (Hesketh et al., 2012; Tucker et al., 2015). Furthermore, while international literature seldom highlights the significance of the chronological dimension in understanding workplace violence, time plays a critical role in understanding violence in the Chinese health sector, as China has been through dramatic social and economic reforms and several rounds of healthcare reforms in the past decades as a republic (see Chapter 2). All these unique features indicate that violence in the health sector in the Chinese context may need to be understood in its complex contextual factors and with a culturally specific model.

## 3.8 Identifying research gap and research questions

The review of literature from China indicated that system level issues in the wider community are important factors in the causal chain for violence in the health sector. While problems with the healthcare system, legislation, media coverage, law enforcement, and the general climate of mistrust between patient and physician in China were identified as possible causes of violence, it was largely unknown what

specific problems lay within those areas and what other factors may exist. Further, it was not known how external contextual factors can impact on the risk factors identified at the individual and situational levels. Such a knowledge gap suggested the need to investigate the relevant contextual factors and their dynamics in understanding violence in the Chinese health sector with a socio-ecological model that encompassed issues of trust and mistrust, along with a chronological dimension, so that effective interventions could be developed and implemented.

To contribute to violence prevention intervention in the Chinese health sector, the present study will answer the following questions:

- What are the patterns for violence from patients, their families, or other visitors against medical staff in the healthcare sector perceived in China?
- What are the key perceived risk factors and interplay between risk factors that contribute to occurrence of workplace violence against medical staff in the Chinese healthcare sector?
- What are the necessary elements of a conceptual framework for effective violence prevention interventions in the Chinese healthcare sector?

# Chapter 4 Methodology and Design

In the previous chapter I identified the research questions that the present study strived to answer. In this chapter, I describe the philosophical stance that underpinned the study and present an overview of the sequential three phased mixed-method design. I include rationale for my research decisions based on my philosophical stance, research questions, social-cultural context, and practical constraints of available resources.

## 4.1 Philosophical stance underpinning the study design

Mixed methods methodology combines both qualitative and quantitative research design (Buckley, 2015; Creswell & Plano Clark, 2007). Johnson, Onwueghbuzie, and Tuner (2007) described mixed methods as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study or set of related studies" (p. 120). This was the case with the present study, in which data and methods were mixed in such a way to gain information to answer my research questions.

The choice of methods was underpinned by a post-positivist assumption that there can be multiple truths and there is limitation of individuals' ability to fully comprehend the complexity of the phenomenon of concern (Grant & Giddings, 2002). Therefore, as a researcher, I may only be able to understand part of the truth. Such a post-positivist assumption supports the inclusion of different perspectives and methods in the study.

Adopting a mixed method design seemed natural as I fully embrace the features of mixed methods (see Table 6). Mixed methods research accepts and acknowledges multiple realities and ontological pluralism, rejects singular reductionisms and dogmatisms. The objective, subjective, and intersubjective parts of the world are all viewed parts of the realities. The subjective reality, focus of the qualitative research (e.g., our thoughts, experiences, feelings, emotions), and the objective reality, described in quantitative research, should both be taken seriously and concurrently, and an attempt should be made to interconnect them (Greene, 2006; Johnson & Gray, 2010).

According to Johnson and Gray (2010) there is no singular descriptive or explanatory conceptual system to match reality naturally and precisely. The same is true with multiple disciplinary perspectives: each discipline can help us gain understanding of our world. We seldom rely solely on one disciplinary perspective and reject insights from other disciplines.

Table 6. Philosophical features of mixed methods

| | |
|---|---|
| Ontological position of pluralism | • Recognises that reality is complex and multiple, including objective, subjective, and intersubjective realities. |
| Epistemological position | • There are multiple routes to knowledge. Researchers should make "warranted assertions" rather than claims of unvarying truth. |
| Ways of thinking | • Rejects singular, dichotomous either-or-way of thinking. |
| Views on knowledge | • Knowledge is not something that exists for us to discover or depict.<br>• Agrees with Dewey that knowledge comes from person-environment interaction.<br>• Knowledge is constructed and results from empirical discovery.<br>• Different knowledges are the different outcomes of different actions and approaches. |
| Views on theories | • Theories are instrumental and should not be viewed as fully true or false, but useful for predicting, explaining, and influencing towards desired change one way or another. |
| Values (axiology) incorporated in inquiry | • Equality, freedom, and democracy. |

*Table adapted by the author based on (Johnson & Gray, 2010, pp. 69-94)

Interconnecting multiple disciplinary perspectives can allow for a better, more comprehensive understanding. The same should be applied at the level of philosophy. Therefore, differences in concepts and positions are not necessarily incompatible, but are chances for us to learn from differences and create new syntheses (Johnson & Gray, 2010). There is much to gain from balancing and compromising, and to dialectically examine multiple perspectives so that workable solutions can be created to address important research questions and social problems. Niglas (2010) proposed a holistic multidimensional model of research methodology based on persistent criticism of philosophy-based research paradigms as neglecting the multiplicity of approaches on the philosophical level, their inconsistency and overlapping nature. Niglas contended that it is more helpful and appropriate to conceptualise methodology as a multidimensional set of continuous elements, termed

as “syncretism”; a term originally used by Peirce (1998) to mean “the tendency to regard everything as continuous” (p. 1). Johnson and Gray (2010) described “the principle of syncretism” as a principle for mixed methods research that involves “attempt to reconcile opposing principles and viewpoints in particular research studies to answer particular research questions and meet particular social needs and purposes” (p. 70). It is a principle that acknowledges weak, moderate, and strong forms of concepts, and “avoids the category of necessity” (Johnson & Gray, 2010, p. 70).

Interestingly, researchers argue that there are no clear-cut boundaries between quantitative and qualitative research (Guba & Lincoln, 1994; Johnson & Gray, 2010; Mayring, 2000). The philosophical stance underpinning mixed methods can be traced back to various ancient and modern ways of seeing knowledge, truth, world views, and ways of getting to know the world (Johnson & Gray, 2010), including pragmatism and realism.

A pragmatist view led me to choose mixed methods, with the recognition that all methods have their limitations as well as their strengths (Johnson & Onwueghbuzie, 2004; Teddlie & Tashakkori, 2009). My review of literature on the topic of workplace violence in the Chinese healthcare setting suggested complexity, which to me meant that one approach alone may not be adequate to find the answer and solve the problem. A combination of quantitative and qualitative analysis can “provide a better understanding of research problems than either approach alone” (Cresewell & Plano Clark, 2007, p. 5). A mixed methods approach is believed to enjoy several benefits over a single method, including building a comprehensive picture, increasing validity, and clarifying or confirming findings from other methods (Cresewell & Plano Clark, 2007).

## 4.2 Research design

The current study employed different methods to obtain complementary information in such a way that could help find answers to the research questions. In Figure 10, I provide an overview of the three-phase sequential research design. Identifying risk factors, understanding the roles of the various factors involved, and designing a framework for intervention, these were interlinked processes. The methods were mixed in the study thinking about exploration, complementarity, and triangulation (Creswell & Plano Clark, 2007; Johnson & Turner, 2003; Patton, 1999).

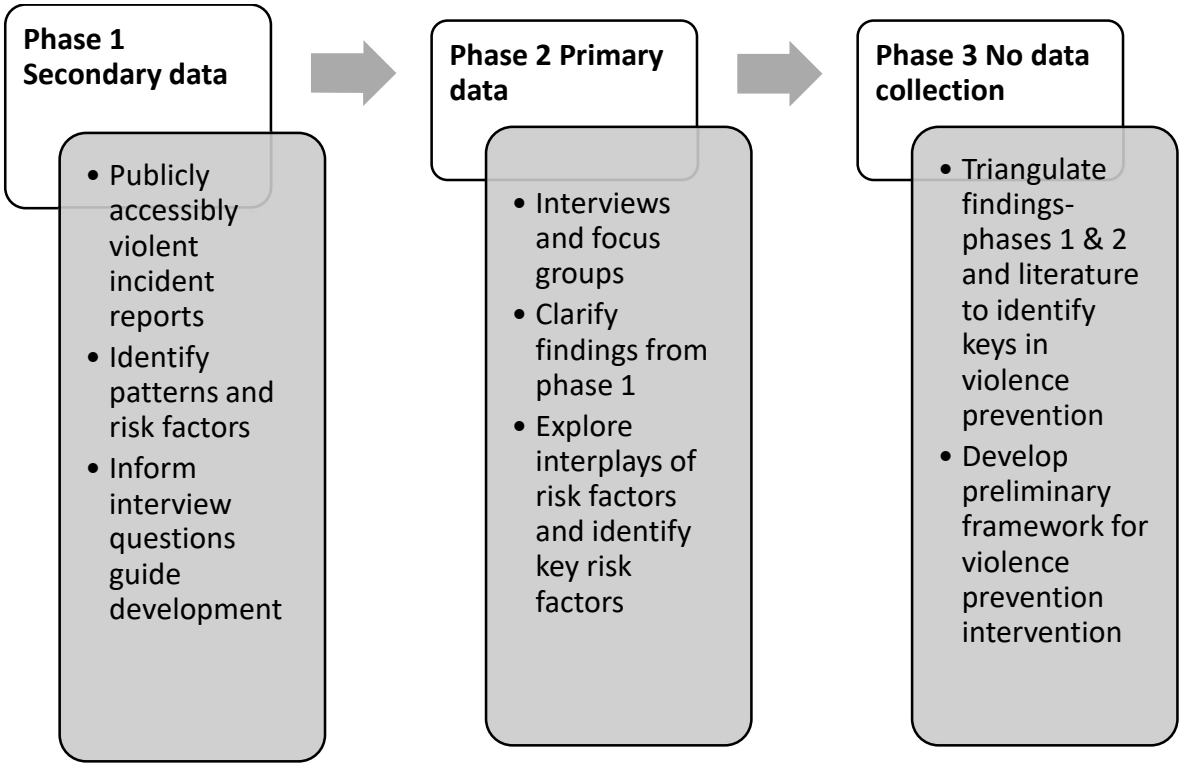


Figure 10. Overview of the research design and associated methods

Phase 1 involved collection and analysis of publicly available health workplace violent incident reports to identify patterns of violence incidents and the relevant stakeholders involved. However, due to the limitations of incidents reported publicly, practical constraints of available time and resources, there were aspects of the violent incidents which could not be answered with Phase 1 alone. Thus, Phase 2 was designed to gather stakeholder perceptions of key risk factors and their understanding of the context. In semi-structured interviews or focus groups with key stakeholders, I was able to probe into the complex interplays of various factors, voices, and perspectives; impossible to gain from Phase 1. With face-to-face interviews, I had the chance to listen to and ask participants questions to clarify their understandings of violence in the health workplace.

The data findings from Phases 1 and 2 were then triangulated with the literature to inform the development of a framework for health workplace violence prevention intervention in Phase 3. As the present research extended over the years 2015 to 2021, the literature review presented in Chapter 3 was conducted prior to

Phase 2 data collection in November 2017. A section of literature updates is included in Chapter 9, Section 9.4 to triangulate findings from the latest literature available after 2017. Triangulation can be done for several purposes (Flick, 2018; Farmer, Robinson, Elliott & Eyles, 2006; Patton 1999). For the present research, triangulation focused on different methods, sources of data, and perspectives. Using multiple methods and data sources in a study is viewed a way to enhance validity of research findings and address possible bias carried by methods and data source (Flick, 2018; Johnson, Adkins, & Chauvin, 2020; Patton, 1999). Triangulation can allow a surplus of knowledge and be a way of analysis (Flick, 2018; Patton, 1999). Understanding violence and developing violence prevention intervention involved various key stakeholders, each with their own perspectives, perceptions, and feelings. Specification of an intervention framework would involve collaboration and cooperation among key stakeholders, the effectiveness of which depends on whether the key stakeholders can gain a shared understanding of the situation. I strove to achieve a shared understanding by including voices and perspectives from different key stakeholders, without being submerged in any perspective, so that the situation could be presented in a relatively more "objective" manner; rather than from limited perspectives or a personal point of view, which would make it "subjective" (Graue, 2015). The process of my decision-making on research methods is the result of my philosophical stance, the study aims, and research questions as depicted in Figure 11. Specification of Phase 1 and Phase 2 methods is provided in Chapters 5 and 7 respectively.

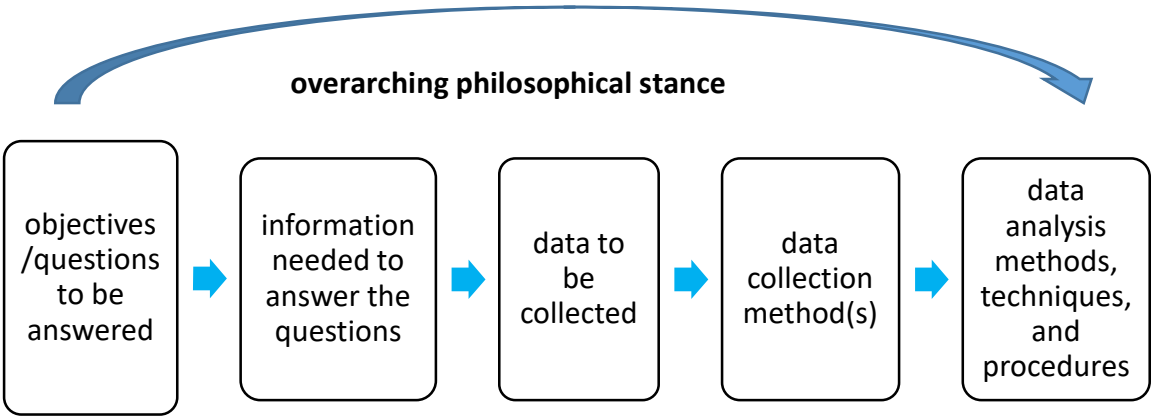


Figure 11. Process of research method decision making in the present study

## 4.3 Cross languages

A critical consideration for this research was addressing the issue of crossing between two languages: Chinese and English. I am fluent in both Chinese and English, which offered me flexibility in making translation-related decisions. This meant that I was not reliant on professional translation to process data. The focus of the translation-related decisions was what could best serve the research purpose, supporting rigour (Birbili, 2000; Temple & Young, 2004), and what was the most time and cost-effective.

An important decision was when to do the translation. Language differences can be dealt with at various points in the research ranging from translating texts into English immediately after original data is collected (Temple & Young, 2004) to translating the original texts after the analysis is completed (Baumgartner, 2012). I dealt with translation in the present research differently for the two phases. Plugor (2013) and Baumgartner (2012) reported similar situations in their research: researchers having fluency in the multiple languages, and that translation was not required before they could process the data. Plugor reported switching between English and Romanian during data collection and while processing the original data, which was termed "transition" or "mixing languages" (Plugor, 2013).

I did something similar in Phase 1: I abstracted the original data (publicly available reports) in the original language, Chinese, with the abstract form in English (see Appendix A). That is, I abstracted the data in Chinese directly before coding them quantitatively aided with SPSS in English (variables and code book were in English). In this process, translation was kept to a minimum. Only a small number of the data included in Appendix B were managed with an extra step of translation and consultation: the original data in Chinese language were first abstracted into Chinese and then translated into English before analysis took place to enhance rigour. With my fluency in Chinese and English, I could easily switch between the two languages. It was natural and easy for me to process the data in both languages: read the abstracted data in Chinese and code them quantitatively using SPSS software package by checking the code book in English.

Phase 2 study involved interviews, which yielded information-rich data. I kept translation until I finished the data analysis, at the point of presenting findings, similar to Baumgartner's (2012) research. I processed the data in the original Chinese

language. The focus of translation was on conceptual equivalence (Birbili, 2000; Plugor, 2013; Temple & Young, 2004) and to re-introduce language and cultural contexts equivalence. For this reason, translation in the research combined both literal and free translation, whichever worked better for the circumstances (Birbili, 2000; Plugor, 2013). Some typical Chinese expressions were kept, with explanation notes to facilitate comprehension, with the acknowledgement that some expressions from Chinese language have no direct lexical matches in English language and using English expressions to replace the original Chinese expressions could lose the original meaning (Plugor, 2013). Participants' quotations included in the finding chapters are the translation of the original remarks in Chinese language.

Techniques suggested to address translation include back translation, using professional translators, consultation, and collaboration with other people (Birbili, 2000; Plugor, 2013). For the current research, due to researcher fluency, external translation services were limited to translation checks carried out by a bilingual translator living in China and teaching English at a university. This person had lived in an English-speaking country previously and was familiar with the Chinese context described in Chapters 5 (Phase 1) and 7 (Phase 2).

At both Phases 1 and 2, the professional translator read the Chinese raw data and the English abstracted data to check the translation, and "transition of data" (Plugor, 2013) during data abstraction. Should there be any disagreements, the researcher and the professional translator worked together until agreement was reached. Consultation is a technique used to address translation-related issues (Birbili, 2000; Plugor, 2013) in a time- and cost-efficient way, given the limited budget for the project.

## 4.4 Summary

My choice of methodology, nature of research questions, and the study context informed the study design (Stockman, 2015). Different types of data may provide different information to answer different questions; and different types of data served different purposes. As the present study consisted of three sequential phases, each phase informed by the previous phase, methods and findings are presented according to the sequence of data collection and analysis. For example, detailed methods used in Phase 1 are presented in Chapter 5, and Phase 1 findings

are presented in Chapter 6. Detailed methods used in Phase 2 are described in Chapter 7.

# Chapter 5 Phase 1 Methods

## 5.1 Introduction

The research question guiding Phase 1 was: what are the different patterns and risk factors of reported violent incidents against medical staff in the Chinese healthcare sector? To understand the different patterns, and risk factors of violence, violent incidents during the five-year period of 2013 to 2017 were collected and analysed.

It is not a simple matter to collect adverse events such as violent incidents due to the unique administration structure in China. Firstly, there has not been an established systematic violent incident reporting system that could yield data to answer the research questions. Secondly, even if there was a violent incident reporting mechanism available, it is not publicly accessible. Thirdly, as mentioned briefly in Chapter 2, the local government is responsible for managing all aspects of local affairs: local healthcare institutions, newspapers and media are within the local government's jurisdiction and under the supervision of local governments. It was possible that a violent incident may not be reported by mainstream media if the local government chief, or relevant local authority, decided that it would not be good to have an adverse event under their jurisdiction known to the public.

However, thanks to the development of social media, especially the emergence of WeChat, one of the most popular social media on mobile phones in China, it is getting easier to report such incidents. Indeed, nowadays, many of the violent incidents against medical staff in the healthcare setting are made known to the public almost immediately after the occurrence, which can then be followed up by mainstream media and brought to the notice of the public. In this current chapter, I report the process for selection of reported violence incidents, data abstraction, and data management and analysis.

## 5.2 Violence incident search strategy

Violent incidents were collected online from mainstream media, social media, and internet searches. There was variation in incident identification over time. Violent incidents from 2013-2016 were collected using both Baidu and Google search engines with the following search terms in Chinese: 伤医事件 (violent incidents against medical staff) and 医闹 (yinao). In 2017, browser searching was

supplemented with subscribing to major Wechat public accounts that keep track of any violence incidents that happened, including: China Medical PhD Network (中国医学博士联络站), yihuxun医护讯, and yishang (医殇), as these WeChat public accounts provide a platform with which individual social media users can upload, report violent incidents in time, or share reports of violent incidents reported by the mainstream media on the internet. The search results were sometimes a summary of individual violent incidents, which would usually provide key information for each violent incident that could help track down the original report.

Incidents were included if they met the three criteria: 1) the primary victim(s) of violence reported in the incident needed to be either doctors or nurses, or allied professionals; 2) report veracity, and 3) sufficient details. Please note that although the primary target population of the research was doctors and nurses and allied professionals, Phase 1 data collection didn't exclude incidents that may also report hospital management, security and even police along with medical staff being victims of the incident, who were involved in handling of the violent incident, mostly yinao incident. The second criteria, veracity, meant that only violent incidents that had been reported as confirmed and verified by relevant authorities and institutions (e.g., specific local police, relevant hospitals involved in the incident, or news reports) and gave specific source of information were included. The third criteria, sufficient details, meant that only cases that reported the following details regarding the event were included: specific location (both name and location of the hospital), time, perpetrator(s), victim(s), consequence, post-incident investigation, and presumed antecedents/triggers of the violence.

In Chinese language, the generic term "shangyi shijian" (伤医事件) can refer to any violent incidents against medical staff. That is, so long as the victim/target of violence is a doctor or nurse, or allied professionals, it is termed shangyi shijian, regardless of the reason. The term "medical staff" is to be used as an equivalent of the Chinese term yi (医) used in shangyi shijian (伤医事件), which is generally the short form of yihu renyuan (医护人员), meaning medical staff, including doctors, nurses, and allied health professionals who met medical service users on a professional basis or at a healthcare providing setting. The inclusion criteria did not specify any specific type of healthcare providing setting to be included or excluded.

Events were included in the database only once, though they may have been reported repeatedly over time and by a range of sources. When there were multiple versions of a violent incident, and reports from multiple sources, the following criteria were applied to make decision about which version to be collected: i) whether the report was from reliable sources; ii) whether the report provided key verified details that enable coding with the standard abstracted form for violent incidents. As it was not possible to have readily available violent incident reports, it could happen that sometimes multiple versions of reports were required to get adequate information to complete the abstraction form.

The search strategy resulted in 118 incidents to review. After applying the inclusion criteria, 97 violent incidents were identified for data extraction (Table 7). It is important to reiterate that the number of violence incidents identified through the search strategy is likely an under-representation of the incidents that occurred over the five-year period. Reporting of incidents in the public domain is variable for a variety of reasons, including changes in the use of social media and WeChat, the process of posting and deleting reports, and the Chinese context.

Table 7. Selection of reported violent incidents

| Year | Number incidents collected | Number incidents excluded | Reason(s) for exclusion | Number selected incidents |
|---|---|---|---|---|
| 2017 | 33 | 6 | Duplication (n=2); details not sufficient (n=4) | 27 |
| 2016 | 29 | 3 | Duplication (n=2); with contradictory reports (n=1) | 26 |
| 2015 | 13 | 4 | Duplication | 9 |
| 2014 | 22 | 2 | Duplication | 20 |
| 2013 | 21 | 6 | Duplication (n=2); Not meeting inclusion criteria with violence occurrence time outside the time frame (n=4) | 15 |
| **Total** | **118** | **21** | | **97** |

## 5.3 Data abstraction

Data abstraction is the first step in data management and data analysis (Mayring, 2000). The data abstraction process involved standardising the variables to be extracted for each incident using the standardised abstraction form (Appendix A).

A sample of violent incident reports extraction categories that help identify the basic pattern of violent incidents are included in Figure 12. Specifying the variables and developing the code book (also referred to as a data dictionary) began with a draft variable list. By reading and getting familiarised with the violent incidents, I derived and defined the different coding options for a specific variable, a process that can be described as "let the data lead" or let data speak.

**Description of incidents**:

1) The type of incident (what)

2) Where the violent incident reported to occur

3) When the violent incident was reported to take place

4) Who were involved in the violent incidents

5) How the violent incident occurred

6) Antecedents of the violent incident; trigger and risk factors of violence during the medical encounter between medical staff and service users

7) Service users' view the medical encounter and experience

8) External stakeholders involved in handling violent incidents

8) Security measures in place to ensure health and safety of medical staff at work; what was missing

9) Consequence and price of violence for victims based on follow-up reports of the incident

10) Consequence and price of violence for the perpetrator (s) based on follow-up report of the incident

Figure 12. Phase 1 violent incident reports extraction categories

The variable list and specific coding instructions were tested using a convenience sample about one third of the violence incident reports. Any inconsistencies found in using the code book, or if any ambiguity arose in applying the code book, resulted in the category being refined. After refinement, all 97 violent incidents collected were coded using the same code book. The coding was done again weeks later to check for consistency and accuracy through intra-rater reliability, testing the reproducibility of coding (Mayring, 2000).

## 5.4 Data management

Data management is the process of making qualitative data manageable and preparing data for more interpretative analysis, which is achieved through labelling and sorting the data according to a set of themes or concepts (Ritchie, Lewis, McNaughton Nicholls, & Ormston, 2014). Overall, Phase 1 involved five basic steps of data management for qualitative analysis: familiarisation, constructing an initial thematic framework, indexing, sorting, reviewing data extracts, and writing data summary and display (Ritchie et al., 2014). However, Phase 1 data management primarily involved abstraction of violent incidents selected and coding them quantitatively, aided with SPSS software.

At the familiarisation stage, all collected violent incidents (in the original Chinese language) were read through carefully to gain an overview of the data. A basic pattern of reporting violent incidents was identified, and the violent incident abstraction form (Appendix A) was developed, covering information that answered the questions listed in Figure 12. As the third step, I tried to work out what parts of the data were "about" the same thing and could answer the research questions. As each violent incident was read, all information that could answer the above questions was identified and highlighted.

As the fourth step of the data management process, the data extracts were reviewed to see what other ways were possible to organise the violent incidents, so that the different pieces of information reported in each violent incident could be indexed and sorted effectively in such a way that could answer the overarching research question: what are risk factors of reported violent incidents against medical staff in the Chinese healthcare sector? The socio-ecological modal adopted for the present study (Chapter 3) was a useful a theoretical framework to guide the investigation of risk factors during the medical encounter: from the situational, and organisational factors, such as job tasks, procedures, and the environmental aspects of hospitals, including its environmental design and security measures, to factors beyond the hospital in the wider community. At the fifth step, it was asked "what in essence was each case about a particular theme?" Many variables were designed or refined during this process.

As Phase 1 collected data in the original Chinese language, extra steps were taken to process the data. Phase 1 violent incident data were processed following

steps as depicted in Figure 13. The abstracted data were entered in an SPSS file in English, with each incident a new row and variables across the columns. The SPSS software facilitates storing, indexing, and sorting data across cases.

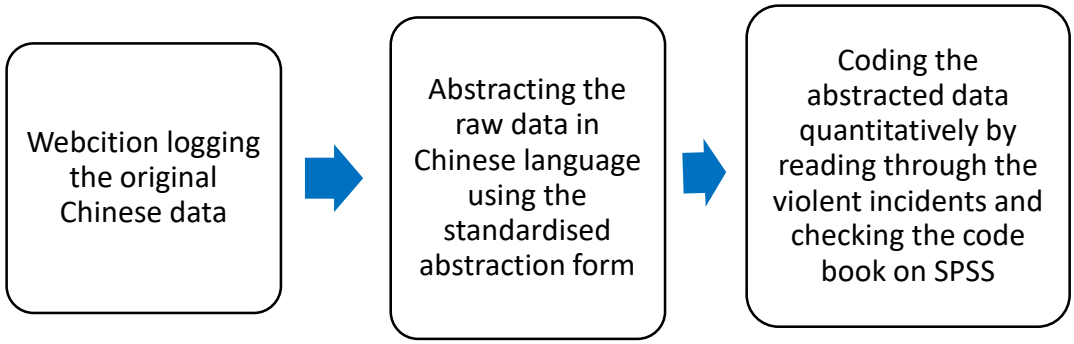


Figure 13. Phase 1 data management procedures

A small number of violent incident data (n=5, see Appendix B) were processed similarly, but with an additional step of translating the abstracted data from Chinese to English with consultation from an external translator, as depicted in Figure 14 for rigour of the study. After this stage, the data were ready to be explored and interpreted.

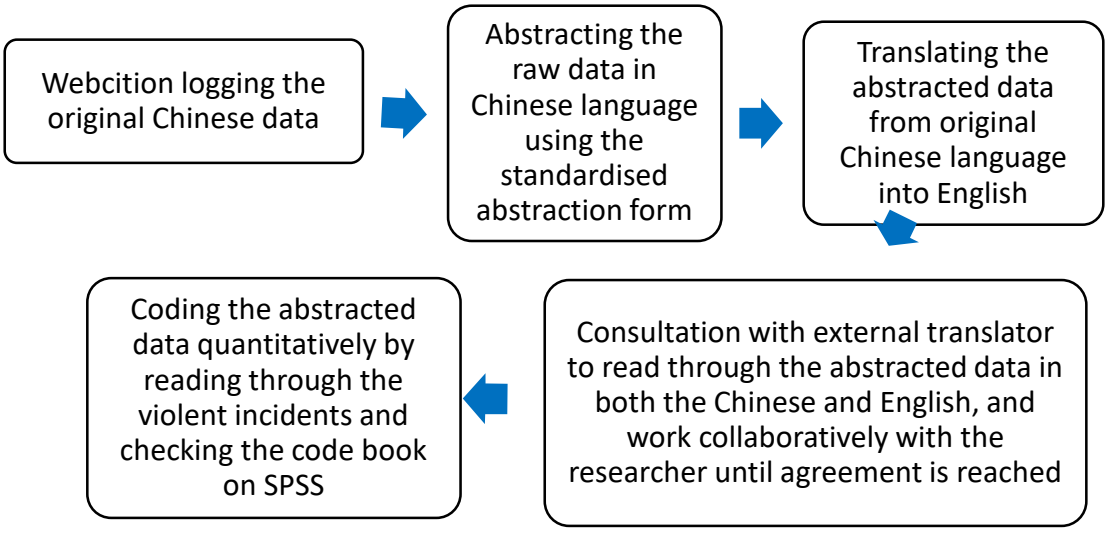


Figure 14. Phase 1 data management with extra translation and consultation procedures

## 5.5 Data analysis

Content analysis was the method used for Phase 1 data analysis. Content analysis is a generic term meaning a research technique for "making replicable and

valid inferences from texts (or other meaningful matter) to the contexts of their use" (Krippendorff, 2004, p. 18). Both quantitative and qualitative content analysis exist, and it is argued that the distinction between them is a mistaken dichotomy as content analysis itself is context sensitive and pure counting of the frequency of words will not be productive enough (Krippendorff, 2004; Lock & Seele, 2015). As a further development, Mayring (2000) specifically termed content analysis as qualitative content analysis to distinguish it from the pure analysis technique of counting frequency of certain lexical items occurrence from the text.

The content analysis used in Phase 1 was consistent with Mayring's (2000, 2014) description of qualitative content analysis. In every step of the analysis, from interpreting textual information to coding, and to identifying patterns and deriving themes as the final products, the analysis of violent incidents was never deprived of its text context. This was made possible as the coding in Phase 1 was largely based on abstraction of information reported, which stayed close to the referent textual information. Frequency counts were never mere counting of lexical frequency, but meaningful analysis with the rich information reported and abstracted.

Efforts were made to achieve a better understanding of workplace violence mainly through description and association. Two levels of analysis were conducted for Phase 1 data. At the first level, a frequency query was run for all relevant variables to help identify possible dimensions or patterns of each variable/factor. Results from frequency counts were reviewed to identify patterns and connections in the Chinese context with or without referring to literature.

The second level of analysis involved interpretation of risk factors during the medical encounter guided with the socio-ecological model. All factors associated with the medical encounter identified from the violent incident reports were closely examined and interpreted to identify links between factors that fall at different levels of the socio-ecological model: individual, situational, organisational, community and societal levels. The focus of analysis was to interpret how these could contribute to occurrence of violence towards medical staff directly and indirectly. These factors could be explicit reasons reported, and implicit accounts that could involve inferring from the incident reports and the literature.

## 5.6 Summary

In all, 97 health workplace violent incidents against medical staff were identified. The findings from the data analysis process follow in Chapter Six.

# Chapter 6 Phase 1 Findings

## 6.1 Introduction

In this chapter I report the findings from analysis of 97 publicly reported violent incidents during the five-year period 2013 to 2017. I begin this chapter with the first level of analysis, describing the patterns of violent incidents against medical staff in Chinese healthcare settings based on frequency count of variables derived from violent incident reports extraction categories identified in Chapter 5 (Figure 12). The reader should be cautious in interpreting the description of frequencies, as denominator data for population catchments, patient, and visitor volumes etc., are unknown. Following the description of incidents, I focus on the second level of analysis, exploring themes of risk factors. This is guided by the socio-ecological model as detailed in Chapter 3.

## 6.2 Incident Description

This section presents results of frequency count of variables to provide description of violent incidents, the first level of data analysis as noted in section 5.3. The results helped gain a basic understanding about patterns of violence against medical staff in the Chinese healthcare context.

### 6.2.1 Type of incident (what)

The most common type of workplace violence against health professionals reported publicly involved physical violence, with or without verbal abuse, and yinao (Table 8). It should be noted that although some yinao incidents may involve physical and verbal violence, aiming for substantial financial compensation by creating disruption is an outstanding feature of yinao (Hesketh et al., 2012). Other types of violence involved hostage taking, vandalism, and internet bullying.

Table 8. Primary violence incident type

| Variable | Value | Count | Percent |
|---|---|---|---|
| Primary violence incident type | Physical violence | 57 | 58.8 |
| | Yinao (aim at causing serious disruption of operation with various means) | 18 | 18.6 |
| | Physical & verbal violence only | 14 | 14.4 |
| | Verbal violence | 1 | 1.0 |
| | Internet bullying | 2 | 2.1 |
| | Taking hostage | 1 | 1.0 |
| | attempted not implemented (due to early intervention) | 1 | 1.0 |
| | Vandalism | 2 | 2.1 |
| | Threat of yinao (with written communication, not implemented under external efforts) | 1 | 1.0 |
| | **Total** | **97** | **100** |

### 6.2.2 Location (where)

The geographic location, type of healthcare facility, and location within a healthcare setting are described in this section. The 97 cases were reported as occurring across China, in almost all provinces and municipalities (Table 9). Hunan and Guangdong provinces had the highest number of violence incident reports (15 and 14 respectively). About 40% of the incidents (n=39) took place in small cities that are neither metropolitan nor provincial cities. Most violent incidents (n=76) were reported in comprehensive western hospitals, with fewer incidents reported in specialty hospitals (n=11), traditional Chinese hospitals (n=7), or out-patient clinics (n=3). Almost all (95%) incidents reported occurred within public hospitals. The emergency department and doctor's office each accounted for 16.5% of the violence incidents. The nurse station and doctor's consultation room were among the second most likely locations that the incidents occurred.

Table 9. Incident location (n=97)

| Variable | Value | Count | Percent |
|---|---|---|---|
| **Geographic location** | | | |
| Province | Anhui | 2 | 2.1 |
| | Beijing | 1 | 1.0 |
| | Fujian | 1 | 1.0 |
| | Gansu | 1 | 1.0 |
| | Guangdong | 14 | 14.4 |
| | Guangxi | 4 | 4.1 |
| | Guizhou | 1 | 1.0 |
| | Hebei | 4 | 4.1 |
| | Heilongjiang | 2 | 2.1 |
| | Henan | 4 | 4.1 |
| | Hubei | 3 | 3.1 |
| | Hunan | 15 | 15.5 |
| | Inner Mongolia | 1 | 1.0 |
| | Jiangsu | 7 | 7.2 |
| | Jiangxi | 1 | 1.0 |
| | Liaoning | 1 | 1.0 |
| | Not a province | 11 | 10.3 |
| | Shaanxi | 4 | 4.1 |
| | Shandong | 6 | 6.2 |
| | Shanxi | 3 | 3.1 |
| | Sichuan | 6 | 6.2 |
| | Yunan | 1 | 1.0 |
| | Zhejiang | 5 | 5.2 |
| Municipality details | Not a municipality | 86 | 88.7 |
| | Beijing | 2 | 2.1 |
| | Shanghai | 7 | 7.2 |
| | Tianjin | 1 | 1.0 |
| | Chongqing | 1 | 1.0 |
| Level of location | Major metropolitan cities | 14 | 14.4 |
| | Provincial capital city | 23 | 23.7 |
| | City of neither metropolitan nor provincial capital city | 39 | 40.2 |
| | County | 18 | 18.6 |
| | Township | 2 | 2.1 |
| | Village | 1 | 1.0 |
| **Health settings** | | | |
| Type of Hospital | Comprehensive western hospital | 76 | 78.4 |
| | Traditional Chinese hospital | 7 | 7.2 |
| | Specialty Hospital | 11 | 11.3 |
| | Outpatient Clinic | 3 | 3.1 |

| | | | | | |
|---|---|---|---|---|---|
| Hospital Level | Tertiary hospital | 41 | 42.3 | | |
| | Secondary hospital | 52 | 53.6 | | |
| | Primary | 4 | 4.1 | | |
| Hospital Ownership | Public | 92 | 94.8 | | |
| | Private | 5 | 5.2 | | |
| **Initial Incident Site** | | | | | |
| | Emergency department (ED) | 16 | 16.5 | | |
| | Doctor's office excluding that of ED | 16 | 16.5 | 16 | 16.5% |
| | Consultation room | 10 | 10.3 | | |
| | Hall or other open space of the hospital | 10 | 10.3 | | |
| | Nurses' station | 10 | 10.3 | | |
| | Ward | 9 | 9.3 | | |
| | Other | 9 | 9.3 | | |
| | Examination room/ treatment room | 7 | 7.2 | | |
| | ICU | 5 | 5.2 | | |
| | Not specified | 3 | 3.1 | | |
| | Operation room | 2 | 2.1 | | |

### 6.2.3 Time (when)

Of the 97 cases reported, 73 cases (75%) represented single 'events' that took place within a short time (Table 10). Sixteen cases lasted for hours, and 5 cases were reported to last for several days, which were typically yinao cases. Violent cases occurred at all times of the day and night.

Table 10. Time of incident occurrence

| Variable | | Count | Percent |
|---|---|---|---|
| Time of Violence | Late night to early morning | 27 | 27.8 |
| | Morning, excluding early morning | 33 | 34.0 |
| | Noon and afternoon | 23 | 23.7 |
| | Night, excluding late night | 6 | 6.2 |
| | Not given | 8 | 8.2 |
| Incident Duration | Brief | 73 | 75.3 |
| | Hours | 16 | 16.5 |
| | > 24 hours and <7 days | 1 | 1.0 |
| | >days | 5 | 5.2 |
| | Over months | 1 | 1.0 |
| | Undocumented | 1 | 1.0 |

### 6.2.4 Offenders using violence (who)

A family member of a patient was reported to have used violence against healthcare professionals in 58 of the 97 cases (n=55+3). Current patients were the second largest source of violence (n=16). Patient's close family members, including parent(s) (n=14) and adult brother/sister (n=11) were two major sources of perpetrators (see Table 11). Patient family and relatives were found to be among the offenders in 16 cases, which were typically yinao incidents. No noticeable features of perpetrators can be identified from the cases reported.

Table 111. Details about the offender(s)

| Variable | Value | Count | Percent |
|---|---|---|---|
| Main Offender | Current patient, seeking health services and with registration | 16 | 16.5 |
| | Former patient of the hospital | 15 | 15.5 |
| | Patient's family member | 55 | 56.7 |
| | Visitors unrelated to hospital or patient | 1 | 1.0 |
| | Both patient and family | 3 | 3.1 |
| | Visitor of a patient, non-family | 5 | 5.2 |
| | Patient and people related to the patient | 2 | 2.1 |
| Offender Features Reported | No special features reported or unknown | 82 | 84.5 |
| | Perpetrator impaired by alcohol | 6 | 6.2 |
| | Under effect of medication | 1 | 1.0 |
| | Drug-related | 0 | 0.0 |
| | Mental health history | 2 | 2.1 |
| | Professional yinao | 4 | 4.1 |
| | With history of drug addiction | 1 | 1.0 |
| | With criminal record | 1 | 1.0 |
| Number of Offenders | 1 | 55 | |
| | 2 | 11 | |
| | 3-10 | 7 | |
| | >10 and <100 | 9 | |
| | About 300 | 2 | |
| | Unspecified | 11 | |
| Offender Gender | Male | 57 | 58.8 |
| | Female | 12 | 12.4 |
| | Both male and female | 15 | 15.5 |
| | Undocumented | 13 | 13.4 |
| Offender Age | Adult >18 and <65 | 93 | 95.9 |
| | Aged people ≥65 | 2 | 2.1 |
| | Teens >10 and ≤18 | 2 | 2.1 |

### 6.2.5 Victims of violence (who)

Over 77% of the cases (n=75) reported an individual staff member as the target of violence. Medical doctors were predominantly the victims of the reported violence (60% of the cases, n=58), and 14% (n=14) reported as nurse(s) being the victim. More violent incidents were reported to involve a male victim (n=39) than a female (n=26). The specialties of the victims were most commonly emergency, surgery (n=22), obstetrics (n=6+3) & gynaecology (n=7), and paediatrics (n=6).

Table 9 provided information about the initial incident sites. Table 12 on the following page focuses on the victim speciality. While the initial incident site sheds more lights on the possible spots within hospitals where security measures can be improved, knowing which speciality or department victims are from can be useful for providing staff training, as the initial incident site may not necessarily coincide with the department of the victim's specialty.

### 6.2.6 Characteristics of patients involved in violence incidents

Characteristics of patients involved in the reported violent incidents are summarised in Table 13. The patients mentioned here may or may not be the offender of the violent act; however, it is still meaningful to identify what patient groups may need extra caution from medical staff during the medical encounter. For example, was the violence related to adult or child patients, inpatients, or outpatients? Of the cases reported, 63% involved an adult patient (n=61), and 29% (3.1%+18.6%+ 5.2%) involved an unborn/new-born (n=2), small children (n=18), and both maternal patient and the unborn (n=5). Thirty eight percent of the cases (n=37) were reported to be related to inpatient, 30% (n=29) to with an ED patient, and 18% (n=17) with an outpatient.

Table 12. Victim characteristics

| Variable | Value | Count | Percent |
|---|---|---|---|
| **Victim characteristics** | | | |
| Victim Job Title | Doctor | 58 | 59.8 |
| | Nurse | 14 | 14.4 |
| | Doctor and nurse | 6 | 6.2 |
| | Hospital management | 2 | 2.1 |
| | Security | 2 | 2.1 |
| | Medical staff and hospital management | 2 | 2.1 |
| | Medical staff and security | 5 | 5.2 |
| | Police | 2 | 2.1 |
| | Unspecified | 1 | 1.0 |
| | Other | 1 | 1.0 |
| | Not applicable | 2 | 2.1 |
| | Doctor and other hospital staff | 1 | 1.0 |
| | Medical staff, security, and police | 1 | 1.0 |
| Victim Gender | Male | 39 | 40.2 |
| | Female | 26 | 26.8 |
| | Both male and female | 11 | 11.3 |
| | Undocumented | 21 | 21.6 |
| Victim Specialty | ED | 22 | 22.7 |
| | Obstetrics and Gynaecology | 11 | 11.4 |
| | Paediatrics | 6 | 6.2 |
| | General Surgery | 7 | 7.2 |
| | ENT | 4 | 4.1 |
| | Cardiology | 4 | 4.1 |
| | ICU | 4 | 4.1 |
| | Internal medicine | 4 | 4.1 |
| | Respiratory Medicine | 2 | 2.1 |
| | Dental | 2 | 2.1 |
| | Nurse | 2 | 2.1 |
| | Breast surgery | 1 | 1.0 |
| | Gastroenterology | 2 | 2.1 |
| | GP | 1 | 1.0 |
| | Hepatobiliary | 1 | 1.0 |
| | Cardiothoracic surgery | 1 | 1.0 |
| | Infectious Disease | 1 | 1.0 |
| | Nephrology | 1 | 1.0 |
| | Not applicable | 1 | 1.0 |
| | Oncology | 1 | 1.0 |
| | Radiation Oncology | 1 | 1.0 |
| | Radiology | 1 | 1.0 |
| | Traumatology | 1 | 1.0 |
| | Ultrasound intervention treatment (UIT) | 1 | 1.0 |
| | Undocumented | 10 | 10.3 |
| | Urology | 1 | 1.0 |
| | Whole hospital | 1 | 1.0 |

Table 13. Patient age and type

| Variable | | Count | Percent |
|---|---|---|---|
| Patient Age | Unborn or new-born baby | 3 | 3.1 |
| | Small child (>6 months to 10 years) | 18 | 18.6 |
| | Adult | 61 | 62.9 |
| | Aged people (>65) | 7 | 7.2 |
| | Both the maternal patient and the unborn/new-born baby | 5 | 5.2 |
| | Not applicable | 2 | 2.1 |
| | Teens ≥ 10 to 18 | 1 | 1.0 |
| | Total | 97 | 100.0 |
| | | | |
| Patient Type When Incident Occurred | Inpatient | 37 | 38.1 |
| | Outpatient | 17 | 17.5 |
| | ED patient | 29 | 29.9 |
| | Not applicable | 3 | 3.1 |
| | Former patient of the victim | 9 | 9.3 |
| | Person who came to seek medical help yet not registered yet | 2 | 2.1 |

### 6.2.7 Mechanism of injury (how)

The most common mechanism of injury was assault with body parts (54%), which included beating, kicking, punching, and slapping (Table 14). Twenty five percent of cases involved an assault with a weapon, most commonly with a sharp implement (e.g., stabbing, cutting, chopping). These assaults often resulted in serious injuries or even death of the victim.

Twenty four percent of the cases were reported to have involved a weapon that was brought in either intentionally (n=23) or unintentionally (n= 4) by the perpetrator, or weapons grabbed on the spot (n=16). While no weapon except body parts was used in 37% of cases (n=36), knife was reported to be the second most used primary weapon (26% of cases, n=25). Heavy objects such as hammer, sticks, and chairs were also reported to be used as the weapon (n=8).

Most of the violent incidents involved multiple attacks (strike), and only four cases reported a single attack. Some extreme cases (VI8 and VI43) even reported overkill, in which the victim was stabbed over 15 or even 30 times. In case VI56, the perpetrator was reported to stop only after the chair that he used to beat the victim was broken and was unable to be used as a weapon anymore. He was stopped by force by others.

Table 14. Mechanism of injury (n=97)

| Variable | Value | Count | Percent |
|---|---|---|---|
| Primary Mechanism of Injury | Not physical assault | 2 | 2.1 |
| | Stabbing, cutting, chopping | 24 | 24.7 |
| | Beating/kicking/stepping/punching/slapping | 52 | 53.6 |
| | Choking (attempted strangulation) | 2 | 2.1 |
| | Burning | 3 | 3.1 |
| | Other | 8 | 8.2 |
| | Throwing objects towards victim and attempt to Harm | 4 | 4.1 |
| | Scratching | 2 | 2.1 |
| Weapon Access | Weapon brought in intentionally | 23 | 23.7 |
| | Things grabbed on spot | 16 | 16.5 |
| | Weapon brought in unintentionally | 4 | 4.1 |
| | Both weapons brought in and things grabbed on the spot | 3 | 3.1 |
| | Undocumented | 11 | 11.3 |
| | NA | 40 | 46.3 |
| Primary Weapon Type | No weapon except fist/leg or other body parts | 36 | 37.1 |
| | Knife (e.g, chopping, sharp, fruit knife, cutting objects) | 25 | 25.8 |
| | Heavy object (e.g., hammer, chair, post) | 8 | 8.2 |
| | Petrol | 2 | 2.1 |
| | NA | 16 | 16.5 |
| | Unspecified | 9 | 9.3 |
| | Other | 1 | 1.0 |
| Reported Primary Targeted/ Injured Body Parts | Unidentified/undocumented body parts, all over the body | 22 | 22.7 |
| | Head | 14 | 14.4 |
| | Neck/throat | 4 | 4.1 |
| | Abdomen | 5 | 5.2 |
| | Hands/arms/legs | 2 | 2.1 |
| | Face/mouth/eyes/ears | 14 | 14.4 |
| | Not applicable | 10 | 10.3 |
| | Including one or multiple key vital body parts (hearts, head, neck, kidney, liver) | 22 | 22.7 |
| | Face, head, hair | 2 | 2.1 |

A significant portion of cases reported vital body parts being targeted or injured, including the victim's head (n=14), neck/throat (n=4). Other cases (n=22) reported either multiple vital body parts or at least one vital part being injured,

including head, heart, neck, kidney, and liver. In the Chinese culture, violence specifically targeted at the head, neck, and other vital body parts, normally conveys the intention to kill, and determination to cause serious harm.

### 6.2.8 Antecedents (why)

Antecedents of violence across the 97 reported cases (Table 15) mainly fall into the following categories: death of a patient or unborn/new-born (n=23), discontent with treatment provided (n=18), unpleasant communication between medical staff and service users (n=12), misunderstanding or miscommunication (n=11). Altogether 23 (n=12+11) cases were explicitly identified to be triggered by communication problem. Unpleasant communication could involve service users' requests being turned down by medical staff; or, in some cases, direct verbal disputes between them. Dissatisfaction with treatment is a general term, ranging from dissatisfaction over treatment plans to handling of treatment and treatment outcomes, including death of patients.

Table 15. Trigger of violence

| Trigger of Violence | Count | Percent |
|---|---|---|
| Death of patient or unborn/new-born baby | 23 | 23.7 |
| Dissatisfaction or resentment with treatment (plan/results/handling) | 18 | 18.6 |
| Unpleasant communication (e.g., request being turned down or verbal exchange) | 12 | 12.3 |
| Misunderstanding or miscommunication | 12 | 12.3 |
| Not known | 8 | 8.2 |
| Request for financial compensation from hospital rejected after the patient's death | 5 | 5.2 |
| Dissatisfaction over procedures/bed/ward arrangement | 4 | 4.1 |
| Deterioration of patient's medical conditions or concern over patient's medical condition | 4 | 4.1 |
| other | 3 | 3.1 |
| Request regarding challenge to rules and regulations being rejected | 3 | 3.1 |
| Dissatisfaction with waiting | 3 | 3.1 |
| Dissatisfaction over settling of the medical dispute | 2 | 2.1 |

### 6.2.9 Consequences (Outcomes)

Reported victim consequences ranged from requiring time off work (n=5) to death (n=11). Among them, 5 deaths occurred at the time of the assault, and six died as a direct result of critical injuries from the assault (normally within days of the

violent incident, otherwise the case would be reported as a critical injury case). Sixteen cases reported severe injuries requiring ICU admission. From the cases reported, violence against medical staff in the Chinese healthcare context could result in serious injury of victims, and even death of the victim (e.g., VI97). Some could lead to possible disability and permanent loss of workability for the victim. For example, in one incident (VI38), the victim was burned and seriously injured, with over 22% of body suffering 3rd degree burns: almost all fingers on both hands were burnt and necrosis. In another incident (VI48), the victim surgeon was injured with a chopping knife, leaving him with an open fracture on his right-hand index and middle fingers, which would mean that the victim may not be able to practice as a surgeon even after recovery. Cases like that were great losses for both the individual and the hospital.

Consequence of violence on perpetrators was also examined. Due to the complexity of handling violent incidents, it was usually hard to know immediately what consequence a perpetrator may face when the violent incident was first reported, particularly with violent incidents that resulted in serious harm and damages. In some cases, it may take up to one or two years for the case to go over the jurisdiction procedures. Even after a decision had been made by the court, the case may have been forgotten by the media, and there may not be any follow-up report for the violent incident.

Some incidents documented that the perpetrator was only requested to apologise to the victim orally or with a letter, or was educated by police, and then released. Among the 97 violence incidents, only in 6 cases perpetrators were sentenced to jail, and 3 cases received capital punishment or life sentence by the court. For other cases passed to courts, 47 were still under investigation and the final consequences for the perpetrator were unknown. In some yinao incidents that resulted in both serious disruption and physical injuries, only a few key perpetrators were charged and sentenced, even though the incident had involved up to 300 perpetrators, which means that most of the perpetrators faced no consequences.

Consequences the perpetrator had to face were reported to depend largely on the seriousness of the victim's injury. For example, the victims in two cases (VI82 & VI93) were both several months pregnant; however, the offenders may face criminal charge only if the victim "had a miscarriage due to the violence" according to the police. Similarly, in another case (VI20), according to the update given by the police

bureau involved, the offender was "under administrative arrest for 10 days… further legal action will be taken against the offender if victim's medical assessment shows it serious enough to justify it a criminal case". For violent acts which resulted in injuries, but not so serious as to be life-threatening, perpetrators could be arrested for a few days with or without a fine; for example, a fine of 300RMB (VI20 & VI41), 500RMB (VI18) and no fine (VI40). The fine amounts were typically small, and rarely up to 1500 RMB [NZD330]. For comparison, a typical takeaway meal nowadays in China can cost up to 30RMB. According to national statics, the average annual income in China in 2019 is 90501RMB (China Statistics Bureau, 2020). The small fine, compared with the average income and the cost living in China, would hardly have a substantial impact on the perpetrator's life. The consequences and price of violence is summarised in Table 16.

Table 16. Consequence and price of violence

| Variable | Value | Count | Percent |
|---|---|---|---|
| Victim Injury Degree | Rest for days | 5 | 5.2 |
| | Hospitalised | 33 | 34.0 |
| | Severe, requiring ICU admission | 16 | 16.5 |
| | No injury documented or not applicable | 14 | 14.4 |
| | Injured without detailed info | 17 | 17.5 |
| | Death | 11 | 10.4 |
| | Other | 2 | 2.1 |
| Perpetrator Consequence | Oral apology or education by police, no practical impact for perpetrator | 9 | 9.3 |
| | Security or administrative arrest without fine | 13 | 13.4 |
| | Security/administrative/criminal arrest with small Fine | 8 | 8.2 |
| | Arrested for investigation | 16 | 16.3 |
| | Arrested under criminal charge and undergoing Investigation or court procedures | 21 | 21.6 |
| | Sentenced to jail under criminal charge | 7 | 7.2 |
| | Capital punishment or with probation or over life sentence | 4 | 4.1 |
| | Undocumented or unknown yet | 9 | 9.3 |
| | Police shooting at the scene resulting in death of perpetrator | 1 | 1.0 |
| | Perpetrator turned him/herself in to police for investigation | 1 | 1.0 |

| | | | |
|---|---|---|---|
| | Case recorded and investigated, further action depending on the upcoming victim's injury assessment report | 2 | 2.1 |
| | Perpetrator killed him/herself | 1 | 1.0 |
| | Case under investigation | 4 | 4.1 |
| | Sentenced under criminal charge with probation | 1 | 1.0 |

## 6.3 Incident risk factor interpretation

Medical encounter refers to the interaction between service users and medical staff. The term is believed to reflect the impersonal feature of the medical interaction due to commercialisation of medicine (Matusitz & Spear, 2014). In the present research, "service users", rather than "patients" is used to include both patients and their family as they are both important in the medical encounter in the Chinese context. The term "service user" is also to acknowledge the fact that a person may need medical services at any point of his/her lifetime, so there is no need to specify whether it is a current, previous, or future service user.

In this section, communication and service delivery during the medical encounter are examined using the socio-ecological model to identify risk factors that can contribute to the occurrence of violence within hospitals. Factors at the organisational level, including medical staff's job tasks, hospitals rules and regulations, and service provision processes that impact on the medical encounter are examined. The interpretation was based on information in the incident reports.

### 6.3.1 Identifying risks associated with medical staff's job tasks

One main task for medical staff at work is to communicate with service users. Table 17 presents results of frequency counts for variables that ask: "what may pose a risk when medical staff do their job?" In about 27% of the cases (n=26), violence occurred while medical staff were carrying out communication to make sure service users comply with rules and regulations of hospitals. Service users may or may not understand these regulations, contributing to their reluctance to comply. For example, the two perpetrators of VI4 attacked the victim doctor because their request to jump the queue had been rejected. The perpetrators of VI58 attacked the nurse after the nurse asked them to leave the ward as per compliance of the hospital's rule one visitor at a time per patient. According to the report, the rule was meant to protect the vulnerable new-born and the puerperia at the ward. However, the service

users in the reported case seemed unable to understand the rule and became angry for being approached several times by the nurse and her colleagues and being requested to leave. As a researcher, I am not in the position to comment on whether such rules are reasonable and necessary. However, violent incidents like this highlight the need for hospitals to carefully design and communicate rules involved with service provision to service users.

In another 14% of the cases (n=14), violence occurred when the medical staff were carrying out communication over treatment plans or ward arrangements, which service users may find hard to understand due to lack of medical knowledge or understanding the hospital situation. For example, the perpetrator (VI2) stabbed the doctor nine times in the chest, leaving the doctor in a critical condition, simply because the doctor had refused to treat his child based on results from his own internet search.

Table 17. Job tasks during the medical encounters

| Variable | Value | Count | Percent |
|---|---|---|---|
| What can cause a risk in communication with service user | Not applicable | 51 | 52.6 |
| | Related to carrying out communication for compliance of rules and regulations that service users may not understand | 26 | 26.8 |
| | Communication of medical professional knowledge which can be difficult for service users to understand | 14 | 14.4 |
| | More communication among medical staff or more consideration should have been given to the service users to save their trouble | 3 | 3.1 |
| | Procedures and handling should have been considerate of service users' values and background | 3 | 3.1 |
| Rules and regulations compliance-related or not | Not related to following hospital rules and regulations or not applicable | 69 | 71.1 |
| | Related to carrying out administrative tasks following hospital rules and regulations, including following rules and procedures for technical compliance | 26 | 26.8 |
| | Unknown | 2 | 2.1 |

In over 6% of the cases (n=3+3), the victim medical staff member was targeted while carrying out administrative tasks that may appear neutral to medical staff. The perpetrator's anger was triggered by inconveniences caused either by a lack of communication among medical staff or failure to show consideration for the

service user (n=3). Perpetrators' anger could be triggered by procedures and handling of patients and treatment that should have been more considerate and respectful of service users' values, background, and individual differences (n=3). For example, in one case (VI62) the offender, who was the patient's family member, was angry because although the patient was discharged from the hospital, the patient's medical report was only available the following day, which meant that the patient's family had to return to hospital to collect it. After knowing their difficulty, the nurse was trying to contact the doctor on the patient's behalf, but the irritated family member was reported to have attacked the nurse. Although there was no information given in the report, beds in tertiary hospitals are normally in high demand and if the doctor believes the patient can be discharged from hospital, the decision is unlikely to be changed.

In another case (VI21), the female patient believed the male doctor who squeezed her nipple and areola during the examination had sexually harassed her, even though she had a third person accompanying her. The angry patient posted online with the doctor's name, picture, and the name of the hospital, accusing the doctor of sexual harassment. The victim hospital later made a public announcement online to clarify that it was their standard practice that a male doctor can examine a female patient provided a third person is present when a female doctor is not available. According to the hospital, such an arrangement was inevitable due to shortage of female doctors in that speciality. In this case, the patient was shocked to have her breast examined by a male doctor, and there seemed to be inadequate or no communication to get the patient's consent prior to the examination, which left the patient shocked and angry at such arrangements.

In another case (VI79), the victim was a male doctor who was undertaking routine inspection of the gynaecology ward with his female colleagues. The patient's husband was angry at seeing that his wife' private body parts were being spotted by another male. The angry husband later carried out revenge with two of his friends and fiercely beat the victim doctor.

Service users in the six reported violent incidents resorted to violence following their negative experience (n=3) or, in their eyes, serious disrespect (n=3) due to the handling of medical staff. It was unknown whether the victims in these reported cases were good or not at communication in other situations, but they unfortunately became the target of anger from the service users because something

was missing from the communication context. Throughout the service delivery process, little attention was given to take care of the service users' feelings, which put medical staff in danger. There seemed to be little efforts reported to create normal, or at least close to normal, communication context out of an unfavourable situation, while charged with keeping order and complying with the rules (e.g., VI4, VI58). No security guards were involved in these two cases. Furthermore, hospitals' rules and regulations, and the need for compliance, seem not to be known and understood by service users. Individual medical staff members ended up having to explain the rules and request compliance from service users individually, which put them at risk. In the two above mentioned cases, if service users had been advised of the possible situation that they could expect during medical service provision and given opportunities to express their opinions, they could have been better prepared for the situation, thus avoiding the unpleasant and unwelcome surprise, as reported.

Several types of service users' discontent could be identified from the reported cases. Results show that about 23% of the cases (n=22) were related to dissatisfaction of treatment handling or proceeding, and 9% of the cases (n=9) were related to dissatisfaction with treatment results for various reasons. A closer examination of cases which reported dissatisfaction of treatment results revealed that most of the dissatisfaction was due to patients' suspicion of the possible connection between own medical conditions and the treatment received (e.g., case VI45). Worth noting is that about 25% of the cases (n=24) explicitly reported violence occurred following the death of the patient, which suggests that the patient's family had difficulty in taking bad news. In these cases, anything that happened to the patient was attributed to the treatment provided and the fault of medical staff by the service user. Patients' discontent, on a deeper level, reflects their mistrust towards medical staff associated with limited health literacy.

### 6.3.2 Identifying risks related to the situational context

Only 9% of the cases (n=9) specifically identified access to resources or facilities within the hospital as the trigger of violence, ranging from bed arrangements to wheelchair availability. While the result does not seem to suggest that resource shortages as a major trigger of violence, it does show how some violent incidents could be easily prevented by simply improving resource provision within hospitals.

Waiting accounts for a significant number of violent incidents reported (see Table 18). That having to wait briefly or not being able to get immediate attention became a trigger of violence in over 10% of the cases (n=10), suggests an unreasonable expectation some service users may have towards medical service provision. Another 6% of the cases (n=6) were related to having to wait due to technical or administrative reasons, or a combination of both. Offering a better understanding for the reason behind the waiting could possibly help service users.

Table 18. What the violence was about

| Variable | Value | Count | Percent |
|---|---|---|---|
| Resource shortage-related | Yes, related to the practical reality of supplies of facilities or resources | 9 | 9.3 |
| | No, not related to resource supplies nor staff shortage or not applicable | 78 | 80.4 |
| | Yes, related to waiting and possible shortage of staff | 9 | 9.3 |
| | Yes, related to both inadequate supplies of facilities and medical staff | 0 | 0.0 |
| | Unknown | 1 | 1.0 |
| Waiting-related | Not related to waiting or not applicable | 79 | 81.4 |
| | Related to having to wait briefly, or not being able to get immediate attention | 10 | 10.3 |
| | Related to having to wait, due to technical or administrative reasons | 6 | 6.2 |
| | Related to having to wait to get access to resources | 2 | 2.1 |
| Trust-related | Not related to trust or not applicable | 21 | 21.6 |
| | Yes, related to trust towards medical staff | 53 | 54.6 |
| | Not sure or hard to tell | 18 | 18.6 |
| | Yes, related to trust towards medical staff and medical dispute resolution authorities | 5 | 5.2 |

The fact that communication situations, that may appear to be neutral with its administrative or informative nature could also trigger violence, highlights the low tolerance from service users for medical staff, and lack of trust towards medical staff (Webb, 1997). Lack of trust was identified as one important reason behind the observed low tolerance (Table 18). The coding was based on referent context information of the violent incidents. Over 54% of cases (n=53) were found to be related to trust towards medical staff; and, in another 5% of the cases (n=5), violence was found to be related to trust towards both medical staff and medical dispute

resolution authorities. The results suggest that trust is an important factor that impacts on the medical encounter and its outcomes.

### 6.3.3 Identifying risk associated with the medical encounter

This section examines communication, the medical encounter experience, and tries to interpret the violence from the service users' side.

#### 6.3.3.1 Seeing things from service users' perspective: purpose and reason of violence

How service users perceived their experience of receiving services and communicating with medical staff is examined in this section. Not all cases explicitly reported reasons of violence given by the perpetrator or documented service users' feeling; thus, referent information was used. The variable provides a glimpse of service users' perception of their experience. It also sheds light on what service users may care about, what could trigger service users' anger, and what could be the possible communication barriers between service users and medical staff during the medical encounter. In about 60% of the cases (n=56), violence was the result of situational reaction or spontaneous outward expression of anger/frustration towards staff and property. About 20% of the cases (n=19) belong to premeditated violence that aimed to injure or harm an individual. Variations can be observed, in which the drive for financial gain was expressed in violent incidents reported. There were a small number of cases, such as perpetrators in VI5, that demonstrated a drive purely for financial gain, and all other cases (n=16) in which the perpetrators viewed causing harm as means to seek financial gain and do justice.

In 28%, 33 (n=21+6+3+3) of the reported cases, the service users found it hard to accept the outcome of the medical service, including death of the patient/unborn/new-born (n=21+3), no improvement or perceived change/deteriorations of medical conditions (n=6), or simply dissatisfaction with the treatment outcome (n=3). Service users, in these cases, seemed unable to comprehend and accept the unpredictable nature of medical science and the risks carried with medical services.

Besides expecting positive outcomes from the treatment received, service users also care about subtle aspects that medical staff may easily take for granted. For example, medical staff's indifference/lack of understanding of patient's suffering/situation (n=8), doctor's negative attitude (n=4), and medical staff's

unpleasant words (n=4). Medical staff's inability to meet service users' requests immediately (n=6+3), and arrangements of treatments/bed (n=7+2), might have been due to practical constraints of supplies or a standard practice. Not knowing the reason behind such arrangements may have led to negative perceptions from the service users. Overall, service users wanted to see positive treatment outcomes, being cared for, and being looked after by medical staff in time during the medical encounters. The findings clearly reveal that service users expected both their rational and emotional needs to be met.

Table 19. Purpose and reason of violence from perpetrators' side

| Variable | Value | Count | Percent |
|---|---|---|---|
| Presumption of perpetrator's purpose | Revenge and planned in advanced (premeditated) to injure or harm an individual | 19 | 19.6 |
| | Seeking personal justice and/or financial gain (premeditated) causing harm or disruption to hospital | 16 | 16.5 |
| | Situational reaction (spontaneous) outwardly expressing anger/frustration to staff or property | 56 | 57.7 |
| | Unknown | 6 | 6.2 |
| Service users' perspective reported explicitly & referent | Death of patient/unborn was hospital/medical staff's fault | 21 | 21.6 |
| | Unknown or undocumented | 17 | 17.5 |
| | Medical staff showing indifference/ lack of understanding to patient's suffering/situations | 8 | 8.2 |
| | Dissatisfaction over treatment/bed arrangements | 7 | 7.2 |
| | No improvement or even change/deteriorations of medical conditions | 6 | 6.2 |
| | Medical staff's rejection to the request for immediate attention or delay in providing treatment | 6 | 6.3 |
| | Medical staff's words sound unpleasant | 4 | 4.1 |
| | Dissatisfaction with medical staff's performance while providing healthcare | 4 | 4.1 |
| | Dissatisfaction over treatment received and doctor's attitude | 4 | 4.1 |
| | Medical staff finding excuse to not to provide needed service/help in time | 3 | 3.1 |
| | Death of patient/unborn was hospital/medical staff's fault and hospital refusal to pay compensation as demanded | 3 | 3.1 |
| | Worry over patient's medical condition | 3 | 3.1 |
| | Dissatisfaction with treatment outcomes | 3 | 3.1 |
| | Arrangement/process was unacceptable, a disgrace | 2 | 2.1 |
| | Other | 4 | 4.1 |
| | Revenge | 2 | 2.1 |

The results show that in the Chinese healthcare context, should there be any negative outcomes, whether death or deterioration of medical conditions, service users tended to blame the medical staff. Sometimes, even change of medical conditions or no significant improvement of medical conditions could trigger anger and suspicion. For example, the offender in VI56 was angry because his child was still having a fever after his first visit to hospital. Although the parents failed to follow the doctor's instruction to get the child to take the medicine prescribed, the offender suspected the child's lack of improvement was the fault of the medical staff. The results also revealed the fragile doctor-patient relationship in the Chinese context, coupled with a lack of trust from service users towards medical staff. Some communication tasks can be perceived as neutral due to their administrative or informational nature; however, there is still danger of them being interpreted negatively by service users. Therefore, medical staff should handle all areas of communication with service users with caution to lessen potential negative impact.

#### 6.3.3.2 Risks associated with medical disputes

In China, when the service user is dissatisfied with the medical service received, there is a 'medical dispute' process that may be initiated. This section presents findings on whether the alleged malpractice case was grounded in evidence, and what effort was made from service users to resolve problems before turning to violence (see Table 20). In 35 of the 97 violent incidents, a medical dispute process had been initiated. Such a process is usually termed yiliao jiufen (医疗纠纷), meaning "medical disputes", in which service users may or may not make a formal complaint to seek settlement of the dispute. However, was the so-called medical dispute really grounded? This question was not applicable for 62 incidents as the violence was not related to a medical dispute. Among the 35 cases reported, service users seemed to demonstrate a lack of trust or acceptance of medical dispute handling procedures, turning to violence at different stages, and none of their claims had the support of a valid medical assessment.

In some cases, the service user may skip the autopsy or medical assessment offered by the hospital that could help determine the cause of patient's death and responsibility of the service provider, and directly turned to violence (n=10). The patients' family members were reported to have been repeatedly informed of the patient's serious medical conditions and the prospect of the patient's death at any

time (n=4). For example, in one case (VI94), when the patient was sent to hospital, the patient had no heartbeat and rescue efforts were provided at the family's request. Given that context, it would be reasonable to believe the death of the patient was not the hospital's fault. However, the patient's family insisted that they had a case. In three cases (VI86, VI89, VI92), the service users refused to accept the medical evaluation for malpractice, which suggests the low credibility of the existing medical evaluation mechanism. In one case (VI69), the service user turned to violence while still waiting for the medical evaluation result. It was not clear whether the perpetrators involved truly believed they had a case or simply used it as an excuse. In either case, the results demonstrated the difficulty of getting service users, especially patients' family, to accept adverse outcomes, such as death of patients.

Table 20. Service users' efforts to resolve problems in non-violence ways before turning to violence

| Variable | Value | Count | Percent |
|---|---|---|---|
| Was the alleged malpractice grounded on evidence? | Not applicable or not related to medical dispute | 62 | 63.9 |
| | To be determined by autopsy or medical assessment, which patient's family skipped before turning to violence | 10 | 10.3 |
| | Not sure; already in the process of going through medical assessment and waiting for result | 1 | 1.0 |
| | The patient's family had been adequately informed of the prospect of the patient's death due to the seriousness of medical conditions prior to the death of the patient | 4 | 4.1 |
| | Unknown but unlikely based on the report | 12 | 12.4 |
| | To be determined by medical assessment yet patient's family refused to go through the process | 1 | 1.0 |
| | Based on information, the patient's death happened prior to being sent to hospital and there should be no dispute; yet the patient's family still think they have a case | 4 | 4.1 |
| | The service user(s) refused to accept the medical dispute assessment results and still believed they had a case | 3 | 3.1 |
| Attempt to try non-violent ways to resolve problem | Not applicable | 61 | 62.9 |
| | Service users directly resorted to violence after the death of the patient | 14 | 14.4 |
| | Service users have approached medical staff to communicate or seek shuofa several times and not satisfied | 7 | 7.2 |
| | Violence occurred during communication with medical staff | 4 | 4.1 |
| | Undocumented | 4 | 4.1 |

| | | | |
|---|---|---|---|
| | Service users refused to go through formal channel to resolve despite hospital initiating the process | 2 | 2.1 |
| | Service users refused to accept mediations/communication conclusion over the handling of medical dispute | 2 | 2.1 |
| | Violence took place while waiting for medical dispute assessment result | 1 | 1.0 |
| | Other | 1 | 1.0 |
| | Yes, attempt made by service users to go through formal complaint channel or resolve through mediation previously | 1 | 1.0 |

Whether medical service users had made efforts to resolve the dispute before resorting to violence was examined. Over 14% of the cases (n=14) reported the deceased patient's family directly turned to violence after the death of the patient. In over 7% of cases (n=7), service users had previously approached medical staff to communicate or seek shuofa (a Chinese term, meaning explanation and settlement for the dispute) several times and were not satisfied with the response given from the medical service provider, which indicates problems in handling patient complaints and medical disputes. In four incidents, violence occurred during communication between service users and medical staff. Results of the two variables revealed the challenge medical staff face due to lack of trust from service users with medical staff. Results also revealed hospitals and medical doctors are very vulnerable when having to directly face upset and angry service users in the absence of established credible medical dispute resolution mechanisms and procedures. Hence, violence appeared to be the only option known to those service users.

### 6.3.4 Summary

Results from analysis of this section revealed that many factors surrounding the medical encounter could constitute a risk to medical staff at work. Among them, organisational factors such as medical staff's job tasks, job designs, the hospital's medical service delivery management, and the conflict between hospital resources and demand from service users (community and societal level), may impact the communication dynamics and subsequent outcomes.

Absence of consideration and respect for service users' emotions, values and background, and lack of communication with service users about the hospital's situation, rules, and regulations, was noted in Section 6.3.1. Such absence of consideration and respect, when coupled with inadequate communication with

service users, could result in misunderstanding and even violence, as previously mentioned.

In addition to factors inside hospitals that could jeopardise effective communication between service users and medical staff during their encounter, in most reported cases, health literacy was also noted as an issue. The limited health literacy of the service user prevented them from comprehending the unpredictable nature of medical service and medical science, and to accept the fact that not all diseases are curable, and death can be unavoidable even with hospital treatment.

It is also noted from most of the reported cases, in which service users tended to attribute the death of their loved one to the fault of medical staff without any reason, that trust from service users towards medical staff and medical service providing facilities was missing. Limited health literacy, coupled with mistrust, could intensify the mistrust towards medical staff. Furthermore, absence of established and trusted credible medical dispute resolution mechanisms were also obstacles for communication with patients' families after death of the patient (Section 6.3.3).

Results of this section reveal that much needs to be done to significantly improve communication between service users and medical staff from inside the hospitals and within the wider community to effectively promote trust and improve relationships to prevent violence and minimise harm. Results also indicate that it is not enough to simply provide communication trainings to medical staff to prevent violence and improve the health and safety of medical staff in Chinese healthcare settings. Hospital management can contribute significantly to improve doctor-patient communication and, consequently, medical staff's health and safety.

## 6.4 Risk factor interpretation: Risks in the environment and context

In this section I examine the security measures taken by hospitals, and the environment designs of hospitals as a workplace, based on the information given by the violent incident reports. I identify risks in the physical context of the medical encounter and the external ecology for medical service provision. The role of security measures and environment designs are explored in preventing violence and minimising harm. Also examined are the external environment and the context for medical service provision to identify key stakeholders involved in handling of violent incidents. Factors examined in this section fall at the organisational, and community and societal levels of the socio-ecological model.

### 6.4.1 Identifying risks in the environmental design and security measures within hospitals

The environment design and security measures taken within hospitals are examined in this section (Table 21) to identify their impact on the safety of medical staff and see how they can be improved to minimise harm in the case of violence occurrence.

Table 21. Security measures check

| Variable | Value | Count | Percent |
|---|---|---|---|
| Help availability at site | Yes, immediately before | 2 | 2.1 |
| | Yes, help available and helpful to prevent further harm | 29 | 29.9 |
| | Yes, help available, yet major harm has been caused | 21 | 21.6 |
| | No help available until after perpetrator left or violence stopped | 20 | 20.6 |
| | Undocumented | 15 | 15.5 |
| | Yes, help available after some time but violence continued until further actions taken | 6 | 6.2 |
| | Not applicable | 4 | 4.1% |
| Alarm or panic button or other means to get instant help | Not available | 2 | 2.1% |
| | Available | 0 | 0.0 |
| | Undocumented | 73 | 75.3 |
| | Not applicable | 22 | 22.7 |
| Security camera check | Available and helpful to minimise harm prior/during incident | 2 | 2.1 |
| | Available but not helpful to minimise harm prior/during incident | 14 | 14.4% |
| | Availability unknown | 67 | 69.1 |
| | Available but not sure helpful or not | 3 | 3.1 |
| | Not applicable | 11 | 11.3 |
| Instant help seeking | Unable to seek help by themselves in time and availability of help was totally random | 61 | 62.9 |
| | Yes, able to have instant communication to seek help prior to violence or while violence is taking place | 1 | 1.0 |
| | Not applicable | 9 | 9.3 |
| | Colleagues helped to call police from violence site immediately after the violence | 6 | 6.2% |
| | Unsure or unknown | 2 | 2.1 |

| | | | |
|---|---|---|---|
| | Security/ police were around in time yet not enough to stop violence | 11 | 11.3 |
| | Violence continued until police arrived | 5 | 5.2 |
| | Help from colleagues/ security/ passers-by were available yet not able to end violence effectively | 2 | 2.1 |
| **Variable** | **Value** | **Count** | **Percent** |
| Security help at site availability check | Not applicable or unknown | 22 | 22.7 |
| | Yes, after the violence took place | 11 | 11.3 |
| | Yes, but still not enough to stop the violence | 9 | 9.3 |
| | Yes, and helpful to stop the violence or minimise harm | 2 | 2.1 |
| | No security help available documented | 53 | 54.6 |
| Police help at site availability | No, not available | 32 | 33.0 |
| | Yes, only after harm has been done and violence has been stopped | 28 | 28.9 |
| | Present but not helpful to stop violence. Helpful later with tougher actions and more police | 8 | 8.2 |
| | Unknown or not applicable | 15 | 15.5 |
| | Instant direct communication with police officer | 1 | 1.0 |
| | Yes, after some harm has been caused, but still helpful to prevent further harm | 12 | 12.4 |
| | Present after the violence was reported and no effective action was taken to stop violence | 1 | 1.0 |

Although help at site during violence was usually helpful to prevent further harm (n=29), it was usually not available in time or quick enough to be effective (n=21+20). The results suggested a lack of efficient violence response system to prevent harm, as the existing way of response to violence could be largely identified as ad hoc responses, rather than proactive prevention.

Of the 97 cases reported, in 61 cases the victim was found to have no means to seek instant help based on the referent information—being alone and no alarm or panic button available. With the small number of cases in which the security camera was reported available (n=17), only 2 cases identified the security camera as helpful to minimise harm. Such a result showed that availability of security camera alone was not adequate.

Help from security was not documented as being available when violence occurred with majority of the cases (n=53). Of the limited cases that security help was reported to be available during violence, only 2% of the cases (n=2) reported that it was helpful to stop the violence or minimise harm. Often, the presence of

security guards was not enough to stop violence (n=9) and was only available after occurrence of violence to catch the perpetrator (n=11). All such cases considered, help from security was identified to be not very effective in hospitals.

Police were more likely to be involved in handling of the violent incidents after occurrence of violence, possibly due to the time required for police to respond and make their way to the site. Only 12% of the cases (n=12) reported police were available and helpful to prevent further harm after harm had been caused (e.g., VI6, VI29). In 29% of the cases (n=28), help from police at site was available only after harm had been done and violence had been stopped. Police were then at site to handle the case according to procedures

Based more on referent information, I reflected on what went wrong that had led to the serious consequences in terms of security measures and environment design (Table 22). A total of 26 cases reported were determined to not be applicable, either because security measures or environment design of the hospital could not have made any difference to the consequence of the violence or because it was viewed beyond the hospital environment design and security measures taken within hospital to make any difference to the occurrence of violence. For the applicable cases reported, it seemed that there had been at least one security measure missing from the reported cases that made the violence possible. For example, perpetrators of the three cases (VI39, VI45, VI61) all entered the hospital with the intention to kill. They had planned, carried deadly weapons, and attacked when the victim was alone or busy with work. Detecting weapons at the entry and closely monitoring visitors' access within medical staff's working areas could have prevented the victim being attacked when alone or unprepared in the hospital. In another 14 cases, security guards were only at the scene after the violence had stopped or major harm had been caused, which again highlights the significance of real time security monitoring for quicker response to minimise harm.

Only 13 cases reported some violence response mechanisms in place and helpful to minimise harm. Such mechanisms included having security guards on site and keeping close monitoring at the site (VI1), and medical staff having instant contact with police (VI6). In another 13 cases there were some security measures taken at the workplace, such as having security guards stationed at hospital and hospital staff being able to call the police; however, these measures alone were not helpful to prevent or minimise harm at the reported incidents. In 42 cases, some

mechanisms to respond to violence at the workplace were documented, but these were only after harm had been caused or violence stopped. It was noted that the reported existing responses to violence were largely limited to rescuing the victims, offering condolences to victims and their family, and condemning the violence rather than prevention and minimising possible harm.

Table 22. Security measures and violence response system evaluation

| Variable | Value | Count | Percent |
|---|---|---|---|
| Security measures evaluation (what went wrong in the reported case) | Not applicable or it goes beyond security measures /environment design of the hospital | 26 | 26.8 |
| | Persons entered health facility with undetected weapons. | 2 | 2.1 |
| | Monitoring visitors' access within hospital could have made a difference | 1 | 1.0 |
| | Panic button or staff being able to control access to their own working space not in place | 12 | 12.4 |
| | Undetected weapons, unmonitored visitor entry, and visitors' easy access within hospital, no panic button | 13 | 13.4 |
| | Slow security involvement without close security monitoring | 30 | 30.9 |
| | Inadequate training and support provided to help staff to cope with violence effectively and minimise harm | 7 | 7.2 |
| | Little or no support provided to ensure staff's safety during outbound assignment | 3 | 3.1 |
| | Response from security guards not effective due to inadequate security guard number and inadequately trained | 2 | 2.1 |
| | No measures taken to avoid easy access to weapons | 1 | 1.0 |
| Violence response system | Some mechanisms to respond to violence at the workplace but only after harm has been caused or violence has been stopped | 42 | 43.3 |
| | No sign of established violence response mechanisms at the workplace observed or documented | 16 | 16.5 |
| | Some violence response mechanism at the workplace documented and helpful to minimise harm | 13 | 13.4 |
| | Some security measures taken at the workplace, but not effectively to be helpful in this case | 13 | 13.4 |
| | Not applicable | 2 | 2.1 |
| | Unknown | 8 | 8.2 |
| | Some mechanisms to respond to violence, yet it took a long time to end the violence | 3 | 3.1 |

It was found that the majority of the 97 cases reported were either preventable or the harm resulted could have been minimised if more security measures had been in place. Entry security check to detect weapons, monitoring visitors' access within hospital (especially medical staff' working and resting areas), security camera, panic button to seek help in time, monitoring use of knives, or training to help medical staff to cope with violence effectively, were areas identified that needed to be addressed.

Only in one case (VI6), violence that was intended was successfully prevented. The potential victim was able to detect danger at the sight of the would-be perpetrator and seek help directly from the police prior to the occurrence of violence. Furthermore, the police officer had previously been involved in handling the mediation of the dispute, and therefore knew both parties and the case. In addition, the police officer arrived at the scene and offered help in time, and he was able to skilfully talk the would-be perpetrator out of his revenge plan. This case shows how effective prevention relies on effective planning and training for violence response. The case also reveals the value of recording those attempted, yet successfully prevented violent incidents, as valuable insights can be gained in violence prevention or coping with danger for establishing an effective and systematic violence response system relevant within the workplace and beyond the workplace that involves medical staff, security, and police officers. The ability to detect danger and seek help in time was key for prevention of violence in this case. Indeed, every single factor in the response system was viewed being critical.

In most of the cases reported, no evidence of a systematic violence response mechanism could be identified, wherein any sign or act of violence may trigger higher security alert. This falls into the category of hospital management. Responses from security guards were found to be in effective due to lack of close monitoring of security cameras and inadequate numbers of security guards. Medical staff, in most of the cases, were unable to identify possible risks in their interaction with service users (e.g., entering verbal conflicts or even verbally rebuking the perpetrator – VI68). In four cases (VI16, VI41, VI54, VI57), medical staff had been previously physically or verbally attacked by the perpetrator without being injured. However, no action or measures were documented to be taken in response to the violence, and the victim involved was not alert to the potential danger of further irritating the perpetrator, which resulted in the more serious physical violence and greater harm reported. Medical staff's responses in these cases clearly indicate a lack of adequate

training to help them to effectively cope with, and respond to, violence to stay safe. Therefore, a lot is needed to be done to improve security measures and training for medical staff in hospitals for their health and safety.

### 6.4.2 Identifying risks associated with external involvements in handling violent incidents

Local police were reported to be involved in almost every violent case that resulted in harm and damage in accordance with law and procedures. This is not surprising, as incidents had to meet the criterion of having adequate information in the incident report to be included. Although a great majority of cases reported timely and positive handling by the police (n=40+32), a small number of cases (n=6) reported police to be present at the scene, but not helpful to stop the violence effectively or to handle the violence, with some arguable practices in some cases (n=6). In one case (VI37), the victim doctor, after being attacked by the perpetrator, was trying to fight back in self-defense. However, the local police determined the incident a fight between the perpetrator and the victim, rather than violence against the medical doctor, which seemed to disregard the fact that the perpetrator initiated the violence, and the victim doctor was merely acting out of self-defense. Such inconsistent handling of violence reveals a lack of clear legal reference for police to handle such cases consistently, which could puzzle medical staff as to what should be their correct response to violence and how to effectively protect themselves.

Although police were reported to be involved in most of the violent incidents, they did not appear to play an important role during the occurrence of physical violence. The way police responded to yinao and the actions taken by police during yinao incidents appeared to be dependent of the local government's supervision based on the referent context (e.g., VI27, VI32).

The Local Health Authority (LHA) was reported to be involved in less than 25% of the cases reported. Yet, even with the very limited number of cases reported, there were significant number of cases (n=17+6+1+1) in which the LHA demonstrated arguable involvement (n=7), including forcing the victim hospital to reach a compensation deal with yinao perpetrators and to pay substantial compensation to the perpetrator who was the deceased patient's family member (VI27). In case VI31, one LHA officer was reported to step in after the case was brought up by the perpetrator, who accused the police of improperly handling the

case despite the evidence and procedures. Cases like these show inconsistencies in the LHA's involvement and reflect the performance status of some local officers' involvement in handling of violent incidents; that is, some government officials were not familiar with relevant laws and may act out of instinct rather than protocol. Of the limited cases that documented local government's involvement, 13 reported positive and 9 arguable involvements, which was either not helpful originally or too slow to be effective. Some later required change of settlement with instruction from a higher authority. The reported cases revealed local government was usually involved in handling yinao cases that involved a large group of perpetrators, when necessary, rather than involved immediately after the violence. Again, local government officials' involvement and decisions were observed to largely depend on personal judgement rather than following specific laws and regulations. The inconsistencies of local government handling of yinao incidents reflects the complexity of the local context, the dynamics, and the interplay of local government officials' individual ability to interpret and implement central government policies.

From the violent incidents collected in Phase 1, although local government was not involved in every single case, it could decide what kind of responses other local government agencies may have. While police were involved most of the time, when it was about yinao that involved a large group of people, their actions were found to be largely dependent on the decision of the local government officers, who are directly accountable for handling all local affairs.

Individual victims' employers, the victim hospitals, most often were supportive and helpful. However, in one incident, the hospital management was reported to expect the perpetrators (parents of the child) to apologise to the victim and settle the incident, on the ground that if the perpetrators were arrested, the child patient may have no one to take care of them. It is interesting to observe that when the perpetrator was a government agency employee, the perpetrator's employer may also get involved in the violent incident. Most of the time, they were supportive of the victim. Yet, in two cases, messages from the perpetrator's employer were confusing, in that their wording appeared to be too supportive of their own employees, the perpetrator in the violent incident, which, to some degree, reflects a general tolerance towards violence against medical staff in the community. There is still a long way to go to implement "zero tolerance to violence".

Although most violent incidents (n=74) reported overall positive and no arguable external involvement, 17 cases reported overall positive with some arguable handling and in 5 cases some inconsistencies were identified from the handling and outcomes of the violence. Both the arguable and inconsistent external involvements suggest the complexity of handling violent incidents in China's healthcare context (see Table 23).

Table 23. External involvement in handling violent incidents

| Variable | Value | Count | Percent |
|---|---|---|---|
| Local police involvement | Not applicable or unknown | 6 | 6.2 |
| | Yes, arrived at scene after call and handled the case in a timely manner | 40 | 41.2 |
| | Yes, involved after the case being reported and handled the case accordingly | 32 | 33.0 |
| | Present but not helpful to stop the violence. Helpful only after tougher actions and more police involved | 6 | 6.2 |
| | Arguable and inconsistent involvement | 6 | 6.2 |
| | Police involved at certain stage, yet not enough to stop the violence | 4 | 4.1 |
| | Police handled the case yet with some arguable handling | 2 | 2.1 |
| | Perpetrators turned themselves in to police | 1 | 1.0 |
| Local health authority involvement | Not documented or unknown | 72 | 74.2 |
| | Yes, involved, supportive and helpful | 17 | 17.5 |
| | Involvement was arguable | 6 | 6.2 |
| | Involved after the violence lasted for a while | 1 | 1.0 |
| | Involved and supportive, but not enough to solve the problem | 1 | 1.0 |
| Local government involvement | Not documented or unknown | 75 | 77.3 |
| | Yes, involved, supportive, and helpful | 13 | 13.4 |
| | Yes, involved, and not helpful originally | 3 | 3.1 |
| | Involved after the case was known by the public online and medical staff's petition | 4 | 4.1 |
| | Involved after the case was known by the public online and hospital operation was seriously disrupted | 1 | 1.0 |
| | Involved with arguable handling | 1 | 1.0 |
| Evaluation of overall external involvement | Not applicable or unknown | 1 | 1.0 |
| | Overall positive and no arguable involvement | 74 | 76.3 |
| | Overall positive and some arguable involvement | 17 | 17.5 |
| | Some inconsistencies being reported with the handling and outcomes of the violence | 5 | 5.2 |

### 6.4.3 Summary

In this section the environmental design and security measures taken were examined, and loopholes and flaws identified. Proper security facilities and effective usage of the facilities, measures to detect weapons at entry and to monitor visitor access within hospital, especially visitors' access to medical staff's working and resting areas, were found absent from hospitals. What is more, training for medical staff was found to be either absent or not effective. Systematic violence response systems within hospitals were found to be absent from almost all the violent incidents reported.

Key external stakeholders involved in the handling of violent incidents included the local police, local government, and the LHA. Among them, the local government was identified as playing a decisive role in determining the action and response from the local police and LHA. Inconsistencies were identified with the handling and outcomes of the violence. Both the arguable and inconsistent external involvements suggest the complexity of handling violent incidents in the Chinese context, in which decisions can be made based on individual discretion without clear legal reference. Such individual discretion could constitute potential risks to medical staff.

## 6.5 Summary of Phase 1 findings and how they inform Phase 2 study

Phase 1 study successfully answered the research question raised at the beginning of the chapter: what are the different patterns and risk factors of reported violent incidents against medical staff in the Chinese healthcare sector? Main findings are summarised in Table 24.

Table 24. Summary of main variables/tables and learnings from Phase 1

| Key variable/tables | Area of learning | Learnings |
|---|---|---|
| Primary violence type (Table 8) | Violence form | Physical violence, yinao, and combination of physical and verbal violence are the main forms of violence |
| Incident location (Table 9) | Violence distribution | Violence is a nationwide phenomenon, with distribution over different parts of the country, at different levels and different types of hospitals, across private hospitals and public hospitals |
| Main perpetrator, Perpetrator feature (Table 11) | perpetrator | Patient's family made up the biggest source of violence |
| Duration of incident occurrence (Table 10) | Duration | Most violent incidents lasted only briefly. Yinao incidents aimed at substantial financial compensation from the victim hospital tended to last hours or days |
| Victim injury degree (Table 12) | Degree of violence | Violence against medical staff in China can be very serious and can even cost the victim's life |
| Offender gender (Table 11) | Gender | Males were reported to be both the perpetrator and victim of violence in more cases than female; although both female and male were both reported |
| Victim job title (Table 12) | Victim | Doctors were the predominant victims of violence, suffering the most serious consequences, including loss of life |
| Health setting (type, level, and ownership of health setting (Table 9) | Incident site | Doctor's office was the most vulnerable place where victims were attacked and even killed, which made a case for close monitoring or controlled access to medical staff's working and resting space |

| Key variable/tables | Area of learning | Learnings |
|---|---|---|
| Presumption of perpetrator's purpose (Table 19) | Purpose of violence | Purpose of violence, according to the perpetrator, was mainly spontaneous response to situation, or for revenge, or in some cases, to claim their justice; some aims at financial gain |
| Security measure check (Table 21), violence response system (Table 22) | Preventable or not; Violence response system | Most violent incidents were preventable or at least harm could be minimised with tighter security measures |
| Proximal trigger of violence (Table 15) | Trigger of violence | Communication plays an important role in the medical encounter. Carrying out communication tasks can constitute risks for medical staff and should be handled with caution. Medical staff's job tasks could be challenging and risky, subjected to many management aspects of the hospital as a workplace |
| Job tasks during the medical encounter (Table 17) | Possible contextual factors | There were possible areas of communication barriers where miscommunication may arise. Lack of trust, basic health literacy and understanding of the practical situation of supplies and demands, service users' unreasonable expectation of medical staff and medical services, can all lead to misunderstanding and contributing to risk of violence |
| Service users' efforts to resolve problems in non-violence ways before turning to violence (Table 20) | risks in wider community | It could be difficult to communicate with service users over a range of topics, which highlights the lack of trust and basic health literacy, and the supplies and demands situation in China among the public, which constitutes a potential risk for medical staff in China |

| Key variable/tables | Area of learning | Learnings |
|---|---|---|
| Was the alleged malpractice grounded, attempt to try non-violent way to resolve problem (Table 20) | Medical dispute handling mechanisms | Lack of established medical disputes handling mechanisms and lack of trust from medical service users towards medical dispute handling mechanism were apparent from the incidents reported |
| Security measures check (Table 21) | Security measures | Inadequate security measures taken; visitor access not being monitored |
| Violence response system evaluation (Table 22) | Violence response system | Absent of violence response system |
| External involvement in handling violent incidents (Table 23) | External involvement | The inconsistencies of external involvement from some key main stakeholders of government agencies in handling violent incidents observed revealed a not very favourable exo-system and macro-system for the medical service provider and service users' encounter. |
| Consequence and price of violence (Table 16) | Victim injury degree; Perpetrator consequence | Cost of violence for perpetrators too small to be adequate for both punishment and deterring violence against medical staff |

Besides gaining a good understanding of workplace violence against medical staff in China, about its forms and patterns, Phase 1 data analysis provided understanding about possible ways to prevent violence and minimise harm. The results reveal various factors that lie on the different layers of the socio-ecological system that can constitute risks or contribute to occurrence of violence. Learnings gained by analysing violent incidents in Phase 1 make a good case for systematically reporting violent incidents within the organisation.

One important finding from Phase 1 analysis is that workplace violence against medical staff in China is preventable, and the harm resulting from violence can be minimised which highlights the importance of effective prevention intervention. The results from analysis of the reported violent incidents show that although specific responses depend on the individual, many factors within the hospital as a workplace can be improved for violence prevention and minimising harm. Specifically, many management aspects of hospitals, such as job designs, service provision procedures, environmental designs, security measures, and violence response mechanism within hospitals were all found to have great room for improvement. These factors build a case for believing that workplace violence against medical staff in China is preventable; the harm resulted from violence can be minimised and hospital management can do a lot to improve medical staff's health and safety in the areas specified above.

Communication is a critical element that can potentially determine the outcome of the medical encounter. Hospitals, as the workplace and context for service users and providers' encounter, can play a key role in enabling positive communication and service user experience. Factors that lie at the organisational level and within hospitals are the focal point for the present study. Problems identified from service users' communication and experiences, indicate that much can be done to improve service delivery management within each individual hospital. A summary of key risk factors identified in Phase 1 can be found in Table 25.

Analysis of factors beyond the hospital indicates the need for collaboration between hospitals and the wider community, along with other sectors, to promote health literacy, establish and improve awareness of credible medical dispute mechanisms among the public. Although results also reveal possible risks in the wider community and at a systems level, they are factors to be determined by the national policies and legal systems. The present study is satisfied with simply

offering brief comments and suggestions, pinpointing possible direction for improvement.

Phase 1 study has successfully identified patterns and risk factors of reported violence against medical staff in the Chinese healthcare sector. The results from Phase 1 have helped identify the key stakeholders to be included in Phase 2 study, and to develop the interview guide.

Table 25. Summary of key risk factors identified from Phase 1 within the context of socio-ecological model

| |
|---|
| **Individual level:**<br><br>**Service users:**<br>Mistrust, limited health literacy, communication problems<br><br>**Medical staff**:<br>Compromised wellbeing; communication problems, including inadequate communication, lack of respect, inadequacy in communication skills |
| **Situational level:**<br>Long waiting time, lack of trust between patient and physician, miscommunication/ insufficient communication<br><br>**Organisational level:**<br><br>Showing characteristics of typical of high-risk working environment, including long waiting time, unpleasant physical environment, demanding job tasks due to job design and service provision management problems<br><br>Inadequacy in hospital environment design and security measures taken, problems in handling patient discontent and complaints, absence of humanistic care<br><br>**Community and societal level:**<br>Lack of trust between service users and medical staff, service users' limited health literacy, absence of established credible medical dispute resolution mechanisms, problems with the external legal environment in handling medical disputes and handling violence towards medical staff |

# Chapter 7 Phase 2 Methods

## 7.1 Introduction

Phase 2 collected primary data through in-depth interviews or focus groups. Phase 2 data collection was to answer the research question: what are the key risk factors and their interplay that contribute to violence against medical staff in the Chinese healthcare sector. Qualitative data collection allowed in-depth understanding of the experience, feelings, perceptions, and opinions of different stakeholders on issues involved during the medical encounter that contribute to violence in the health sector.

Despite the learnings gained from Phase 1, there were many questions unable to be answered through analysing violent incidents alone. For example, while communication issues from Phase 1 were prominent, it was not clear how and why mistrust and miscommunication could occur. It was suspected that discrepancy between service users' and medical staff 'perceptions and their different opinions may result in communication barriers and misunderstanding. It was also suspected that knowledge gaps could cause communication barriers between service users and medical staff that lead service users' to mistrusting medical doctors. In addition, literature suggests that heavy workload of medical staff, brief consultation time, and long waiting time can all contribute to negative communication outcomes and increase the risk of conflict and violence during medical encounters (Bao et al., 2017; He & Qian, 2016). However, these factors were unable to be verified in Phase 1. In this sequential study, I invited participants in Phase 2 to share their views and perceptions on some key topics identified from Phase 1 and the literature to further probe possible cause of misunderstanding and mistrust. Phase 2 data collection offered opportunities to clarify doubts and confirm assumptions face-to-face with participants. During these qualitative interviews, I directly heard how different stakeholders felt about the violence situation and their rationale for their responses.

The data collection was based on findings from the literature review and Phase 1 and was guided by the socio-ecological model. Interview probes centred around factors relevant to the medical encounter between medical staff and service users, directly and indirectly. These factors may affect the individuals involved (e.g., their knowledge, perception, and opinions). Alternatively, they may be situational factors such as the physical service provision environment, and medical staff's work

and life, which can affect their working state, their ways of interacting with service users, and, consequently, the outcome of the medical encounter. Indicative probes, across all stakeholder groups for Phase 2 interviews are listed in Figure 15. Specific interview guides used for each stakeholder group were then developed, with tailored general and probing questions. The interview guides were sent to key informants and a field supervisor in China for feedback and were piloted with Chinese speaking local Aucklanders who had experience of using medical services in mainland China within the six months prior to being interviewed. Improvement was made based on feedback.

**A. Gaining a better understanding of the medical encounter**
What is the typical experience for service users in using medical service? What risks are carried in the service provision process? What are the communication barriers that can cause a risk between service users and medical staff?
**B: Understanding medical staff's work and life**
What is the reality of medical staff's work and life? What risks can be caused by the state of medical staff's work and life? How is medical staff's state of work relevant to the medical encounter between service users and medical providers? How is the hospital human resource management problem relevant to medical staff' work state and service provision? What other aspects of hospital management are also relevant to the doctor-patient communication and doctor-patient relationship?
**C: Understanding the wider community and how it impacts on the medical encounter**
What is the state of doctor-patient relationship? How is the mistrust towards medical staff manifested in the medical encounter? What are the noticeable characteristics with general service users, in terms of their expectation towards medical staff and medical service, health literacy and their knowledge about making complaints and resolving disputes? How are service users' characteristics relevant to the medical encounter?
**D: Exploring cause of conflicts/violence and medical disputes**
What are the main causes of conflicts and violence? What are the main causes of patient complaints and medical disputes?
**E**: **Understanding workplace violence situation against medical staff**
What is the violence situation against medical staff? What is perceived as threats to medical staff's health and safety?
**F**: **Understanding external ecology for medical service provision**
How were the loopholes and imperfection with law and law enforcement affect law enforcement in handling medical disputes and yinao? What are the changes made in law in handling medical disputes and yinao? What positive changes have been brought by such change?

Figure 15. Phase 2 indicative interview guide for all stakeholder groups

Based on post-positivism and pragmatism, the two philosophical stances that underpinned the design of the study, Phase 2 also provided method triangulation and

data triangulation opportunities to enhance validity of the study. Collecting different types of data through using different data collection methods with the current research design enabled triangulation of different methods. By including the multiple key stakeholder groups at Phase 2, the data collected enabled triangulation from different perspectives. This is consistent with the post positivism stance that subjective perception of individuals based on their specific key stakeholder perspective is part of objective reality (Johnson & Grey, 2010; Mayring 2000; Patton, 1999).

## 7.2 Qualitative data collection methods

Data collection methods were flexible and included semi-structured focus groups and individual interviews. There are advantages to both focus groups and individual interviews. Advantages of focus groups include being efficient, and that participants can express their opinions in their own words in a natural social setting. Participants in a focus group can be stimulated by thoughts and comments of others in the group, and may generate more spontaneous, critical, and honest comments than if interviewed on their own (Doody, Slevin & Taggart, 2013; Robinson, 1999; Then, Rankin & Ali, 2014). Focus groups are particularly useful for probing the insights, perceptions, and assumptions that underlie attitudes (Kellmereit, 2015). In contrast, advantages of individual interviews include having the opportunity to create deep "rich data" exploring topics in considerable detail and creating a safe, private environment for participants to express their opinion and share experiences (Goodman 2001; Morris, 2015a; Tod, 2015). When focus group interviews were not possible, either due to insufficient number of participants available or participants' preference for an individual interview due to personal consideration or availability, in-depth individual interviews were planned as an alternative. Both methods provide for rich qualitative data. Ethical approval for data collection using both individual interviews and focus groups was obtained from AUTEC in 2017 (Ethic Approval No. 17/30). See Appendix C for approval letter.

### 7.2.1 Purposeful sampling

The purpose of the present study was to gain a better understanding of workplace violence against medical staff in the Chinese healthcare context, which was expected to be achieved through listening to key stakeholders' perceptions of

workplace violence against medical staff. The focus was on gaining in-depth understanding of the perception and emotions of key stakeholders rather than having a surface look at a large sample, which makes non-probability samples suited for Phase 2. After all, the precision and rigour of the present study, like other qualitative studies, lies in its "ability to represent salient characteristics" (Ritchie et al., 2014, p. 113).

Purposeful sampling is defined as "criterion-based" or "purposive" (Curtis, Gesler, Smith, & Washburn, 2000; Rapley, 2014; Ritchie et al., 2014) and was used in Phase 2. All participants included in the present study were chosen because they could offer knowledge from their unique perspective either due to their roles in workplace violence or handling of violence. Each of the key stakeholder groups has specific features or characteristics which enable detailed exploration and understanding of the central theme.

Efforts were made to ensure that all key constituencies of relevance to the subject matter were covered. Further, within the same target sample group, efforts were made to include diversity so that the impact of the characteristics concerned could be explored. However, due to time constraints for field work, the sample size was subject to the availability of participants.

The present research is a mixed method design that leans towards information-rich qualitative and descriptive data, which is not likely to use a large sample. Further, subject to the practical constraints of the present research (i.e., time and resources available), it was impossible to use a large sample size (Rapley, 2014; Ritchie et al., 2014). All these factors make it more critical to use a sample that can be as diverse as possible, even with a small sample size. Purposeful sampling is a technique that can make it possible to have a sample that can meet such expectation. Diversity was achieved by identifying key stakeholder groups and recruiting participants by applying inclusion criteria (Ritchie et al., 2014).

### 7.2.2 Participant inclusion criteria

Consistent with purposeful sampling, participants had to be engaged with episodes of workplace violence in the health setting. Other inclusion criteria are listed in Figure 16. These criteria were to ensure respondents had adequate knowledge and experience of the healthcare system and medical services in China, so that smooth running of each focus group or interview session, validity and reliability

of the data collected was possible (Morris, 2015b; Stewart & Shamdasani, 2015). The rationale is that each person is an expert based on how they engage with the system, and no one has the whole picture.

- Normally based in mainland China
- Able to understand the study information and be willing to sign the consent form
- Has sufficient experience and knowledge of Chinese medical services or handling issues related to violence in the Chinese healthcare setting in their jobs or from their social status to be able to provide insights, personal experience, and insider perspectives for the specific segment group they represent
- Able and willing to abide by the confidentiality agreement and follow the rules and instruction during group discussion (focus group only)
- Able and willing to share opinions among a small group (focus group only)

Figure 16. Participant inclusion criteria (Johnson et al., 2020; Morris, 2015b)

Recruited participants included eight key stakeholder groups identified in Phase 1 as repeatedly being involved either in violent incidents or handling of violent incidents. These included medical staff, medical services users, senior hospital management, and those in the health system responsible for handling complaints. External to the health system, government officers, police officers, and legal professionals were also included. Finally, while media are not directly involved in either violent incidents or handling of violent incidents, they can play a role in influencing the public's perception, opinion, and knowledge (Langdridge et al., 2021; E & Sakura, 2020) about health professionals and health systems.

Interviews with participants from each of the target stakeholder groups were opportunities to hear voices from different perspectives. Separate interview guides, including demographic questions, were developed for each stakeholder group. Interviews with different stakeholder groups strove to achieve objectives as specified in Table 26.

Table 266. Stakeholder groups and interview objectives

| Stakeholder Group | Objectives |
|---|---|
| Medical staff | To know about the reality of medical staff's work and life, their encounters with patients/family; to learn about possible causes of violence from medical staffs' point of view; to identify possible areas of improvement to help medical staff to better cope with the communication needs in their job and improve doctor-patient relationship, including trust; to identify possible changes made in hospitals as workplaces in terms of job design, staffing; clarify possible security vulnerability/flaws with intention to identify solutions for improvements |
| Medical service users | To understand medical service users' perception and expectation of medical staff, medical services, and communication with medical staff in their medical encounters; gauge medical service users' awareness of channels for resolving medical disputes and their preference; clarify communication barriers for doctor-patient communication; identify possible ways of improving doctor-patient communication and relationship, including trust |
| Hospital senior management | To understand what security measures have been in place, and what have not; understand managements' opinions and their practices in building safe hospitals; investigate what measures can be taken to improve hospital security and what is not possible |
| Those handling patient complaints | To offer in-depth perspectives on improving doctor-patient communication, building positive doctor-patient relation, and avoiding medical disputes |
| Government officers | To learn principles and procedures in handling violent incidents; identify role of government agencies involved in handling violent incidents; identify factors that may impact on their decision making and actions taken in response to violence |
| Police officers | To understand procedures and principles in handling violent incidents; identify strategies for improvement |
| Legal professionals | To learn legal expert opinions on medical mediation channels; and advice on preventing risks of medical disputes |
| Journalist/reporters | To learn about principles and procedures in news reporting; to listen to perspective on improving public opinion and perception of medical staff |

### 7.2.3 Participant recruitment

My initial recruitment plan included advertising on the two major Chinese social media, WeChat, and Weibo, searching on the internet for potential key

gatekeepers, and then sending out invitation letters and request for assistance. The Participant recruitment advertisement and Participant information sheets can be found in Appendices D (Chinese version) and E (English version). Special caution was taken in the wording of the recruitment advertisement and information sheet, which was modified with field supervisor's feedback, to avoid negative association of violence for the Chinese version. Specifically, 职业安全与健康 (meaning occupational health and safety) rather than 暴力 (violence) was used in the research topic. I also tried to seek institutional endorsement and support for participant recruitment by applying for ethics approval from Hong Kong University Shenzhen hospital with the facilitation of my field supervisor. Unfortunately, these efforts were unsuccessful. Advertising on internet and social media only recruited 2 participants (one medical doctor and one hospital senior management). These unsuccessful recruitment attempts led to the awareness that the sensitivity of the topic meant it could be perceived negatively and talking in a group on such a topic could be threatening for some people. As a result, people may be less likely to share their views in a group; and reinforces what has been described by Greene and Caracelli (2003) as "context, substantive theory, practical resource constraints and opportunities", and even political dimensions of social research are "equally important bases for practice decisions in our inquiry" (p. 108).

For the second round of recruitment, personal contacts and snowballing were used as recruitment methods (Child, Mentes, Pavlish, & Philips, 2014; Morris, 2015; Stewart & Shamdasani, 2013). I consulted with my personal networks in China, within the context of my ethical approval, and asked for their assistance to find potential participants who belonged to the stakeholder groups identified. Recruiting participants from some stakeholder groups required several referrals before being successful; thus, personal networks and snowballing were critical. I kept contact with my key informants in China and potential participants through Wechat and obtained their confirmation which, for some participants, required several referrals. I only met participants on the day of interviews and obtained their informed consent (see Appendix F for Chinese version and Appendix G for English version).

### 7.2.4 Field supervision

For ethical and safety considerations, it is required that data collection not involve health or safety risks, including that of participants and the researcher. I was

fortunate to have a field supervisor with whom to consult on the cultural and social context of my research. My field supervisor was normally based in both Hong Kong and Shenzhen, simultaneously teaching, and working as a medical professional in management, and as a researcher at Hong Kong University Shenzhen hospital. My field supervisor was a good source of consultation for Phase 2 data collection. Following digital communication ahead of my travels, I met with my field supervisor upon arrival in China. Our constant consultations helped me cope with challenges in the Phase 2 data collection and ensure the research was ethically safe for everyone.

### 7.2.5 Procedure

As data collection took place in China, across different locations in multiple provinces, and within a short time span, a lot needed to be done to ensure smooth proceeding of data collection. I communicated with my field supervisor and personal contacts as I travelled from one destination to the next. All interviews were semi-structured, and participants were asked questions from the specific interview guide that was tailored to the specific stakeholder group (Table 26). Questions were also adjusted according to each individual participant's situation and their response in accordance with the dynamics between the interviewer, the participant, and between the participants in focus groups. The relationship between the researcher and participant was also considered.

Some key stakeholders participated in the interview because I was their former schoolmate, whom they have known for a long time yet not seen for years, in some cases over 30 years. Due to time constraints, several interviews had to combine multiple functions at the same time: it was an interview and an occasion to catch up. For the participant, I was there both as a researcher and a friend. Therefore, our interaction shifted back and forth from interview to informal chat. Participants whom I met for the first time, they were there because they were friends or colleagues with my key informants. Therefore, I strove to quickly establish connection and trust with them. While I followed the interview guide, I sought to shift between being an outsider and insider, with conversation as a friend and as a researcher. I fitted in small talk and informal conversation with participants; shared my experiences, feelings, and observations with them; let them feel my empathy and understand my commitment to my research. I knew very clearly that if they had not trusted me as a friend, they would not have been there and opened up to share their feelings and

emotions. This is important in Chinese culture—Chinese people always view building relationship and trust essential before doing business with another person. Only after they find they can trust a person will they consider doing business with the person; no trust or no bond, means no business.

As the researcher I tried to keep a balance between building connection and trust with the participants to enable good conversation dynamics; yet avoid influencing the participant's responses. On the one hand, I had to encourage and motivate my participants to open up and be willing to share their true experience and opinion as best as I could. On the other hand, I had to ensure participants saw that it was their experience, perception and opinions that really mattered. To establish the connection and trust that would encourage them to open up and talk, on occasion I had to shift between being an insider and an outsider. I showed empathy and understanding towards with my medical doctor participants by sharing my observations and reasons for doing the research. I showed empathy with service user participants by sharing my personal experiences and feelings as a medical service user. Other strategies used to cope with challenges and adaptations to avoid risks and ensure smooth running of interviews for better data collection are discussed in the following section.

### 7.2.6 Field work challenges

Data collection was both exciting and challenging. There were many difficulties I had to overcome. The first was uncertainty, of which there were many prior to my arrival in China. As a researcher who had been away from China for about 5 years, I was not sure what could be expected from this trip. With a few exceptions, I was not very sure who would participate. I only knew whom I could contact as a key informant. Furthermore, it was hard to ask participants to give a specific time one month in advance, given their busy work and life. Things were further complicated by the fact that China is a vast territory, and all the participants and potential participants lived in different cities, located in provinces across diverse parts of the country. Lastly, I had to complete Phase 2 data collection within 40 days, including days of travel from New Zealand to China and back, due to the constraints of time and geography, financial resources, and other practical considerations.

Through active and honest communication with key informants and potential participants, I gained their support and willingness to accommodate an interview in

their already busy schedules. I managed to identify whose time was more flexible and scheduled interviews smartly to avoid unnecessary travel back and forth between locations; thereby saving time and money (e.g., scheduling interviews with participants from the same city on the same day, or on consecutive dates to minimise time spent on travelling). After the preliminary planning of travel, I double checked with each participant their preferable day of the week or date to be interviewed. The whole field trip turned out to be effective and productive.

Being flexible is one strategy that I used to cope with challenges I encountered during data collection. I also had to compromise the interview arrangements, knowing very clearly that if I wanted to conduct the interviews strictly following best practice and my data collection plan, few would have been possible. Variations between what was planned and what really happened are summarised in Table 27 on the following page.

It was the first time that most of my participants had participated in qualitative research; therefore, having a conversation recorded and being asking to sign an informed consent could be intimidating, especially for participants who met me for the first time. For the first few interviews, I asked participants to provide their oral consent instead. To avoid intimidating the participant, I also moved collecting demographic information to the end of interviews.

According to the plan, there was to be a research assistant present to assist the administration of focus groups and note taking. When I was in China, I realised it was impossible to have such arrangements and people were reluctant to participate without an established relationship of trust. Presence of a third person who was unknown to the participant would be intimidating and hinder interview interaction. In addition, as most interviews were one on one, a third person was not required. Therefore, all the interviews were between only the participant(s) and the researcher. I also adjusted the sample size, originally projected to be 96 across 16 focus groups, it was too ambitious. The actual sample size was subject to availability of participants. Altogether 19 interviews were conducted with 22 participants.

Finally, although stakeholder specific interview guides were prepared, collecting data I learned that participants could ‘fit’ into more than one group. For example, one participant was recruited as a service user yet shared that he had been trained as a medical doctor but later quit medical practice. I decided to take advantage of this unique perspective and asked questions relevant for both medical

doctors and service users. Similarly, when a lawyer, medical dispute mediators, and a former nurse mentioned their experience of using medical services, I readily adjusted questions and prompted them to give details of their experience. In this way, my data collection was productive and able to yield rich data.

Table 27. Differences between data collection plans and the actual happening during interviews

| Issue | Planning | Actual situations |
|---|---|---|
| Choice of interview venue | Neutral | Participants' office/home/or venue suggested by the participant(s) |
| Environmental aspects | Quiet, without disturbance | Noisy restaurants, café, and workplace; could be with children around, phone ringing, people chatting |
| Environmental aspects | Private | Interviews often conducted in public or health settings when others were within hearing distance |
| Choice of time | Convenient time for participants | Any time that the participant was available for the interview, which may not be that convenient for participants (e.g., early morning or late night, as late as 10 pm); for some, a short break during their work |
| Length of interviews | 90 to 120 minutes | Ranged from 40 to 120 minutes |
| Focus group Facilitator | The primary researcher with an assistant to help with recording and take notes at each session. | All focus groups/interviews by the researcher, without an assistant |
| Sample size | 96 (8 stakeholder groups, with 6 participants each focus group, 2 focus groups per stakeholder) | Final sample size 22 |
| Stakeholder recruitment | Participants recruited into specific stakeholder group | Learned that many participants belonged to, or had direct knowledge of, more than one group |
| Data interview methods | Primarily stakeholder focus groups, with individual interviews as needed | Only three stakeholder focus groups possible (with two participants each, n=6); majority individual interviews (n=16) |

## 7.3 Data analysis

This section describes Phase 2 data analysis methods and process, and data management.

### 7.3.1 Data analysis method

As with Phase 1, qualitative content analysis was used to analyse data collected in Phase 2. Qualitative content analysis has been widely applied as a data analysis method and is viewed as a rigorous approach to the analysis of focus group data by researchers from various disciplines and backgrounds (Rabiee, 2004). It is a method emphasising "reliability and replicability" of observations and interpretations (Krueger & Casey, 2000; Stewart & Shamdasani, 2015). Authors argue for the systematic, consistent, verifiable procedures involved in its data analysis process as a scientific method (Graneheim & Lundman 2004; Mayring 2000, 2014). On a continuum that indicates the degree of transformation of data between description and interpretation, content analysis is more on the side of description and thematic analysis is more on the side of interpretation (Sandelowski & Barroso, 2003; Vaismoradi, Turunen, & Bondas, 2013). To achieve Phase 2 study objectives, data analysis aimed to be as close as possible to different key stakeholders' views, and the level of interpretation from the researcher be as low as possible.

With the original raw data in Chinese, and the objectives of understanding feelings and perceptions, there was a need to pay close attention to the exact words and phrases used, otherwise the colloquial meaning would be lost if abstraction to themes occurred too early during analysis. Content analysis allows paying closer attention to details, in addition to themes of the data, and is, therefore, a suitable fit for the philosophical stance that underpinned my research and the study purpose.

### 7.3.2 Data management

Data management is the initial step in data analysis. This section gives brief information of the data management process for Phase 2 data (more details are given in Section 7.3.3). Through a data management process, raw data can be broken down, interpreted, abstracted, and reorganised in such a way that data become more manageable to allow the meaning of the string of text to emerge and be understood (Ritchie et al., 2014). It is through this process that manifested meaning of data is ready to be understood and interpreted to bring up latent meanings of the data

(Ritchie et al., 2014). Data management includes the following steps, although it is not a linear process: getting familiarised with data/being immersed in the data, trial coding, and open coding of the whole interview scripts (Ritchie et al., 2014).

The original audio recordings of the interviews were transcribed into Chinese by me, aided with transcribing software (see Appendix H for examples). The Chinese scripts of each interview were put into separate word documents and double checked by the researcher, with the researcher reading through the scripts and listening to the original audio recordings at the same time. The Chinese scripts, the raw data, were then uploaded to Nvivo software package (Nvivo Version 11) which facilitated the data management process and made the process more efficient. Next, the data management process began.

As Phase 2 data were collected in Chinese language, extra steps were taken to process the raw data before they were ready for analysis. A small number of Phase 2 interview data were processed with an extra translation and consultation procedure as depicted in Figure 17 (See Appendix I for examples). The Chinese scripts were coded in Chinese language, aided with Nvivo software, and the codes (nodes) were then translated into English by me. The same professional translator/bilingual expert from Phase 1 was invited to read the Chinese scripts, Chinese nodes, and the English translation to check for discrepancies in terms of interpretation, coding, and translation. When disagreements arose, there was discussion between me and the translator until agreement was reached.

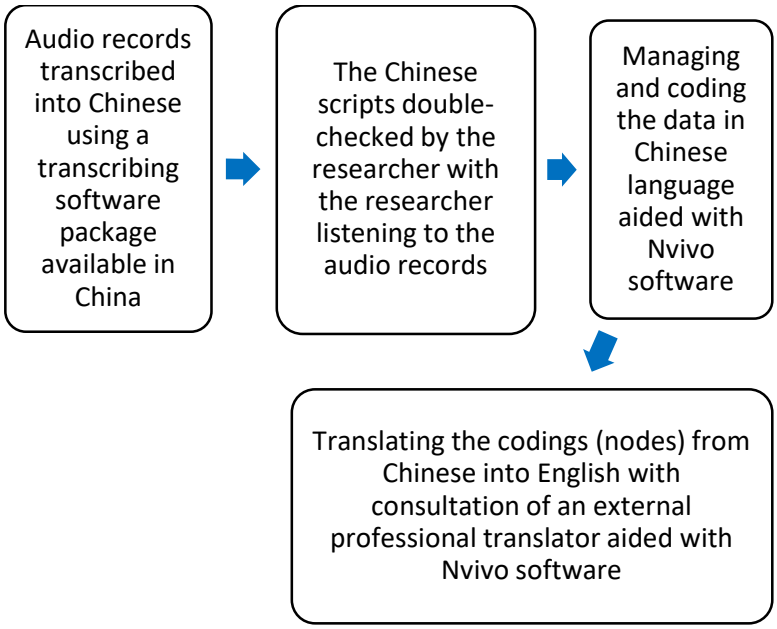


Figure 177. Phase 2 data management procedures with extra procedure of translation and consultation

Other data at Phase 2 were processed in a simplified procedure, with which the Chinese scripts was directly coded in Chinese aided with NVivo. Then the codes (nodes) in Chinese were read for further analysis and categories developed in Chinese. Consultation from the external translator was used when presenting findings in English as depicted in Figure 17.

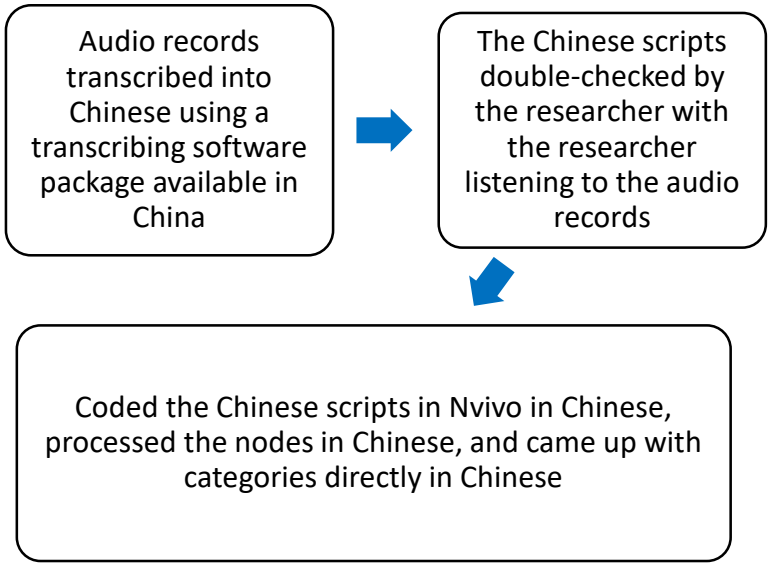


Figure 188. Phase 2 data management with a simplified procedure

After going through the initial rounds of data management process, several key interview questions answered by each subset of data for different stakeholder groups were identified (Figure 19).

1. What was the individual's experience from the specific stakeholder's perspective?
2. What mattered to the individual in their experience?
3. How was the experience perceived and interpreted?
4. What were the problems observed by the individual?
5. How things could be improved?

Figure 19. Key questions answered by different subset of data

Next, two processes were used to find connections and differences. The first process compared responses to the same questions from different stakeholder perspectives to see whether views changed due to the different perspectives. The second process compared responses on the same topics from different participants within the same stakeholder groups to determine whether different perspectives can result in the same or similar views, or how different perspectives can lead to different perceptions and views on the same topic.

### 7.3.3 The analysis process

The strength of qualitative content analysis lies with its verifiable systematic and consistent abstraction procedures that transform data from concrete to abstract (Vaismoradi, Jones, Turunen, & Snelgrove, 2016). Content analysis makes meanings carried by the massive raw data visible, with increasing level of generality and abstraction in every step of the analysis procedure. Eventually, the latent meaning carried by data can be brought to notice and become visible through the themes developed. Some authors see the process of data analysis in qualitative content analysis as the process of theme development (Vaismoradi et al., 2016). This section presents my process of data analysis, in which themes were developed following a step-by-step process.

An inductive way of qualitative analysis was used for the present research as knowledge about workplace violence against medical staff is still fragmented (Elo & Kyngas 2008). The process of qualitative content analysis is iterative rather than linear. The cyclic process consists of some major steps although terms used by different authors may vary. The process of data analysis for Phase 2 matches more closely with what Graneheim and Lundman (2004) described as

familiarising/immersion, condensing/abstraction, categorisation, and finally interpreting to bring up the underlying connection and latent meanings carried by the raw data. During the familiarising/immersion stage, I listened to the audio recordings of interviews, transcribed the scripts, and double-checked scripts while listening to the audios. I made myself familiar with participants' responses by listening to the recordings several times until I had gotten an idea of participants' responses.

Next, I began to engage in condensing/reduction of data, in which I derived codes and coding the data. A code is a descriptive label for the condensed meaning unit resulting from data reduction, a tool to see the data in a new way so that connections between meaning units can be identified more easily (Vaismoradi et al., 2016). Coding the raw data was a process of data reduction, and a means to reorganise and classify the data, a way to break them into more manageable themes and thematic segments (Ritchie et al., 2014). Then, I compared codes and sorted them into categories. Codes that dealt with the same issue resulted in a category. Creating codes, doing coding, and creating categories were all ways used to reorganise data to facilitate interpretation and enable analysis to address the research questions (Ritchie et al., 2014) for the present study.

Open coding is the process of breaking text strings from the raw data according to the manifest meaning carried in the excerpts. The term "open coding" highlights one key aspect of the data analysis: let data speak for themselves, or to be led by the data, meaning abstracting data with limited interpretation. The open coding of Phase 2 data was aided with Nvivo software. It took place as I read through the interview scripts, interpreted excerpts/text strings, abstracted excerpts, and put them into "nodes", the first step of organising and analysing raw data. Nodes are containers of similar or related themes in Nvivo software, equivalent to codes. Codes were then compared to determine how they were related to each other. Codes that dealt with the same issue were sorted into a category. A category refers to explicit content of text that provides a simple description of the participants' account. Categories for Phase 2 analysis were mainly derived from the data through careful reading of the text. Categories were then applied to the whole data through close reading and interpreting (Forman & Damschroder, 2015). At this stage, I tried to follow the advice to keep close to data with limited interpretation of content for the interpreting of data (Erlingsson & Brysiewicz, 2017).

It is a general guideline that after trial coding of the first 10-50% of the data, codes can become relatively stable and can be used to complete coding of the whole dataset. For the present research, the trial open coding included two parts. First, trial open coding of multiple interviews of the same stakeholder group explored the possible rang of coding within the same group. About 30% of the interview scripts were coded for trial coding purpose. As medical doctors (n=5) and service users (n=6) were the two biggest groups, three interviews were randomly picked for the trial open coding for each of these two groups. Then codes (nodes) across individual interviews were compared, and adjustments were made. Open coding was conducted for the rest of the subset data. Second, trial coding of other stakeholder groups was conducted. If some stakeholder groups had only one interview, then the interview script was included in the trial coding.

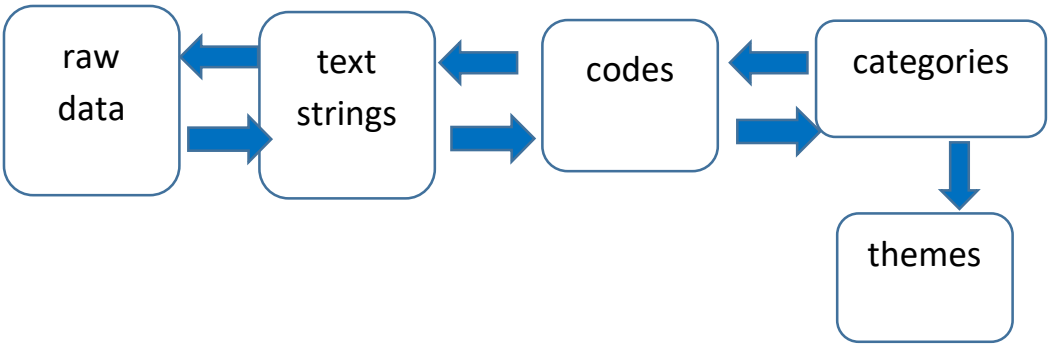


Figure 20. Basic process of data analysis in phase 2

Figure 21 depicts the iterative process of data analysis in Phase 2 with content analysis, in which raw data are broken into text strings, to codes, through researcher's interpreting and abstraction, and are interpreted and abstracted further to derive categories and themes.

After the trial coding, nodes and groups of nodes were compared and modified, renamed, combined, or deleted to achieve more accurate coding. Next, I applied the nodes for open coding of the whole data. After finishing encoding the entire data, excerpts/references put in the same nodes were closely examined, and interpreted to identify connection and differences, and codes were then abstracted further to come up with categories and to derive themes. The underlying connection of meaning determined whether different nodes could be put under the same categories and whether categories could be put under the same group. By the end of data management, codes were compared, and codes related to a common theme were

further abstracted to a higher level of categories (see Appendix J for examples). The following steps were taken in the analysis of data as shown in Figure 22.

- Content analysis was used in identifying patterns and themes
- All comments made in an interview were transcribed and put into a simple word file in Chinese language, which was then be imported into the same NVivo file separately and analysed to identify themes directly in its original Chinese language
- Themes identified from participants of the same stakeholder group were triangulated with themes identified from participants of other stakeholder groups for clarification and identification of possible connection between themes
- Identifying risk factors and protective factors, and the possible dynamics of various factors, with supervision team

  (Graue, 2015; Krippendorff, 2004; Krueger & Casey, 2000; Lock & Seele, 2015; Stewart& Shamdasani, 2015)

Figure 21. Steps for Phase 2 data analysis

As Phase 2 data collection involved participants from several key stakeholder groups who were asked similar questions with a tailored approach, I firstly sorted the data based on participants' stakeholder perspectives. To achieve source triangulation (Flick, 2018; Goodman, 2001; Patton, 1999), Phase 2 asked different stakeholders for their perceptions on the same topic areas with specific questions asked for different key stakeholders according to the individual's circumstances. As a result, it could be possible to have diverse codes and categories for the data and the trial coding had to involve up to 50% of the data before I coded the entire data set.

Although abstraction and interpretation are presented one after another, like two separate steps, it should be noted that in every step of abstraction, from coding to categorisation and to themes, interpretation is involved. Interpretation occurs while using the codes to re-assemble data in a way that promotes understanding and explanation of the data. It is the phase to identify patterns, test preliminary conclusion, and attach significance to a particular result (Ritchie et al., 2014).

There were three levels/steps of analysis involved in data analysis for the present research, which strove to answer questions at three different levels as depicted by Figure 22. Analysis at the surface level was to determine the experience and reality perceived by participants. Analysis at the second level looked closer into participants' experience and perceptions to identify succinct factors. Guided by the

socio-ecological model, the third level of analysis focused on the risks at different levels of the ecological model and the keys for violence prevention intervention.

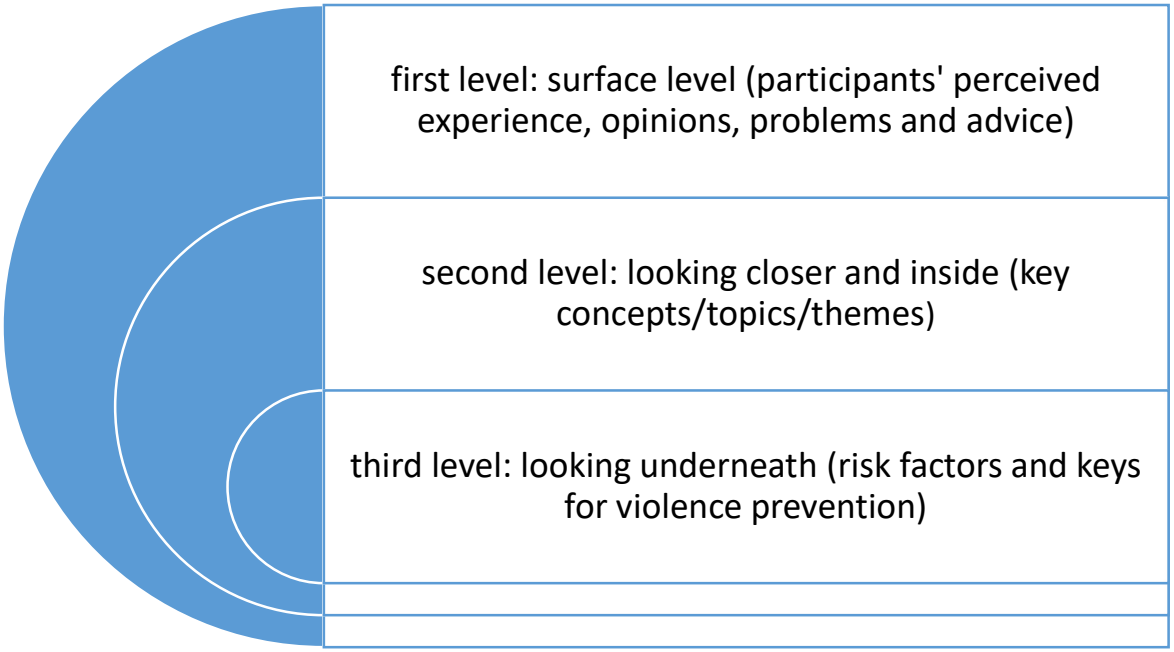


Figure 22. Layers of data analysis in Phase 2

Chapter 9 will present findings from Phases 1 and 2 with reference to literature to identify key risk factors and key intervention strategies. Literature may help shed new light on results of data analysis and help interpret findings from a new perspective. Therefore, interpreting results of analysis in light of literature is an important step in data analysis as it allows researchers to make inference from data beyond what has been made (Ritchie et al., 2014).

An overriding aim for the present research was to contribute to violence prevention intervention in the Chinese health sector by identifying the different patterns, key risk factors of violent incidents and their interplay that contribute to violence against medical staff reported in the Chinese healthcare sector and proposing a preliminary violence intervention prevention framework for medical staff in the Chinese healthcare sector. However, it was not a straightforward process: some underlying causes were not readily visible, and some observed triggers of violence may not be the real cause of violence. For that reason, the present study reached its aim step by step, guided by the socio-ecological model as described in Chapter 3 with several layers of analysis. The analysis process for the present study

was like peeling an onion: unless one peels off the layer that lies immediately above, and peels the onion layer by layer, one cannot see the inner layer immediately from the outside. Every factor lying at the next level underneath remains invisible until it is peeled off at the previous level.

### 7.3.4 Language issue in presenting findings

As explained in Chapter 4, Section 4.4, translation for the present research was made along with presenting the findings of the data analysis. Translation was more for the need of overcoming language barriers in presenting the research in English rather than helping me to process the data. Therefore, translation of Phase 2 data was made after data analysis was done, and for the purpose of presenting data analysis findings in English.

To address cross language issues in presenting the findings, participants' original remarks will be presented in one of the following ways:

1) English translation is used in findings presented in tables and figures, and in the body of the present report if the original remarks can be translated without impacting its meaning.
2) For participant quotes, if the original remarks can be translated without impacting its meaning in English, the English version only is used in the body of the present report.
3) If the idiomatic meaning can be lost in translation, both the original Chinese language, in the form of Chinese pinyin, and the English translation are included with added explanation.

## 7.4 Rigour

Rigour of qualitative research is defined by as "trustworthiness" of the research, and is the indicator for quality of qualitative research, which can be established through four components: credibility, transferability, dependability, and confirmability (Krefting, 1991). There are multiple strategies and criteria to help establish rigour or trustworthiness of qualitative research as summarised by various researchers (Krefting, 1991; Patton, 1999). However, as Krefting (1991) noted, "not all are appropriate to every qualitative study" (p. 217). Table 28 in the following page summarises the methods and strategies used that helped establish rigour of the present research.

Table 288. Evaluating rigour of the present study

| Criteria/elements | Key techniques used | Strategies/methods used |
|---|---|---|
| Credibility | Sequential mixed method design | Data source triangulation, method triangulation |
| | Purposeful sampling with participants from multiple stakeholder groups; interview questions based on semi-structured interview guides that focus on similar topics | Sources/perspectives triangulation |
| | Data collection and analysis guided consistently with theoretical framework. | The socio-ecological model and a system approach used as a theoretical framework contributes directly to determining sample definitions, size, and recruitment of participants |
| Dependability | Multiple geographic locations for interviews | Varied field experience |
| | Coding-recoding procedure, rater/inter-rater consistency | Coding consistency aided with Nvivo software |
| | Detailing data collection, management, and analysis methods; detailing participant recruitment methods and procedure | Dense description of research methods |
| Confirmability audit | Triangulate findings from Phase 1, Phase 2 and literature, and participants' observation | Triangulation to reduce systematic bias in the data |
| Transferability | Specification of context | Description of demographics and geographic boundaries of study |

(Flick, 2018; Guba & Lincoln, 1994a; Johnson et al., 2020; Krefting, 1991; Patton, 1999)

For some qualitative research, it can be desirable to reach data saturation. However, data saturation is hard to define. Due to the diversity of research design,

there is no one-size-fits-all method to reach data saturation. Carefully designed interview questions, in a way that multiple participants are asked the same questions, is believed to enhance data saturation (Guest, Bunce, & Johnson, 2006). It is agreed that data saturation depends on methodology and every research is unique. Yet, it is generally agreed by researchers that when the data reaches the point of redundancy in terms of new data, themes, new coding, and ability to replicate the study, then it possibly means data saturation is achieved (Fusch & Ness, 2015). Dibley (2011) believed for qualitative research, it is better to think of data in terms of rich (quality) and thick (quantity). However, it is also recognised that due to time and resource constraints, it is not possible to reach the desirable saturation of data.

It is desirable and had been planned to have multiple focus groups or individuals for different key stakeholder groups. However, it was neither possible nor realistic to make that happen due to time and resources constraints. I could only accept the result of data collection as it was, knowing that I had tried to get the best result out of what could be done. Furthermore, both the data collection methods used in Phases 1 and 2 were able to collect qualitative data with rich information that could help find answers to the research questions and achieve the research objectives.

Triangulation is the way in which one explores different levels and perspectives of the same phenomenon (Fusch & Ness, 2015). Triangulation is one of the techniques for enhancing the quality of analysis (Patton, 1999). There can be methods triangulation, sources triangulation, analyst triangulation and perspective triangulation (Farmer et al., 2006; Flick, 2018; Patton, 1999), in which consistency of findings are generated by different data collection (methods triangulation) and data sources (triangulation of sources). The purposive sampling technique used for Phase 2 and the different key stakeholders included in the sample enabled comparison of subgroups and provided good triangulation in terms of source and perspectives, which could be further divided into subgroups (triangulation of sources and perspectives).

Triangulation was an important step for Phase 2 data analysis to reach findings (Flick, 2018; Johnson et al., 2020). Phases 1 and 2 each collected different types of data with different data collection methods, which enabled method triangulation and source triangulation. In Phase 2, interview guides were developed to ask the same questions to different key stakeholders, which also enabled data triangulation of different sources. Source triangulation ensures data are rich in depth.

Reference to literature, as in Chapter 9 discussion, provides another way of triangulation, analyst triangulation. These four types of triangulations were used to enhance rigour of the present research.

Further, the present research included some of the good practices suggested for sampling and data collection to increase rigour of qualitative research (Johnson et al., 2020); for example, having clear rationale for sampling design decisions (Sections 7.2.1 and 7.2.2), care taken to follow ethical practice in research designs and data collection (Section 7.2.7), checking participants against inclusion criteria and providing clear description of participants recruitment methods and procedures (Section 7.2).

## 7.5 Summary

In this chapter I presented Phase 2 study methods and procedures with rationales. I addressed the challenges and practical constraints of the data collection process to present the complete process of decision making for Phase 2. It had been planned previously to recruit for multiple focus groups of different key stakeholders. However, it was neither possible nor realistic to make that happen due to sensitivity of the research, constraints of time and resources. I could only accept the result of data collection as it was, knowing that I had tried my best to achieve an optimal result. Although the small sample size made it hard to achieve data saturation, the design of the study was able to compensate in many ways, including carefully identified key stakeholders, employing the purposeful sampling techniques, carefully designed interview guides, and the sequential mixed method design. Furthermore, both the data collection methods used in Phase 1 and Phase 2 were able to yield qualitative data with rich information that could help find answers to the research questions and achieve the research aim.

# Chapter 8 Phase 2 Results and Findings

This chapter presents results of Phase 2 data collection and data analysis. Three levels of analysis were conducted as outlined in Figure 21 (Chapter 7, Section 7.3.3). The first level was to make sense of participants' personal experience, perceptions, and observations from their specific perspectives. The second level of analysis was to develop themes and factors that captured their experience, perception, and observations. The third level, guided by the socio-ecological model, sought to identify risks. This chapter presents findings from all the three levels of analysis to identify possible gaps in stakeholders' perception, knowledge, and understanding, as well as misunderstandings and barriers to effective communication that may arise during the medical encounter.

Guided by the socio-ecological model, Chapter 8 presents findings from examining key elements of the socio-ecological environment for the medical encounter: the medical encounter process, the individuals involved (medical staff and service users), and the context of the medical encounter; that is, hospital environment, the wider community, and the legal and national policy environments.

Findings are presented following the order of specific questions being answered for Phase 2: 1) What is the typical medical encounter between service users and medical staff in medical service providing facilities in China? What can pose a risk to medical staff's safety during the medical encounter? 2) What is the typical state of work and life for medical staff? What risks can medical staff's work and life situation cause to their health and safety? 3) What are the general service users like? What expectations do service users have towards medical staff and medical services? What is the state of health literacy that general service users have? 4) How do some key aspects of hospital management shape the medical service provision environment and impact on the medical encounter between service users and medical staff? 5) What is the general community like, in which the medical service provision is situated? What can work against effective doctor-patient communication and doctor-patient trust? 6) What is the external macro environment like for medical service provision? What can cause a risk to medical staff's health and safety?

## 8.1 Phase 2 participants

Twenty-two people consented to participate in a Phase 2 interview. There were slightly more female participants than male participants. The gender ratio, to some degree, may reflect the gender ratio among some professions, and is not likely to significantly impact the data given the focus of the present study. For example, all three medical dispute mediator participants happened to be female. Table 29 shows participant characteristics by stakeholder groups. While only six participants were recruited as 'service users', participants across all stakeholder groups commonly shared their experiences of using medical services. Any comments made on using medical services were treated as data from general service users. Comparing the study participants to the demographic information based on national statistics revealed that Phase 2 participants had a higher education level than the general population (Ministry of Education of P.R.C, 2021).

Table 29. Participant characteristics (n=22)

| Variable | Value | Count | Percentage |
|---|---|---|---|
| Stakeholder group | Medical service user with no medical background | 6 | 27.3 |
| | Medical doctor | 5 | 22.7 |
| | Medical dispute mediator | 3 | 13.6 |
| | Hospital senior management | 2 | 9.1 |
| | Patient relationship coordinator within hospital | 1 | 4.5 |
| | Government officer | 1 | 4.5 |
| | Service user with medical background | 2 | 9 |
| | News reporter | 1 | 4.5 |
| | Lawyer | 1 | 4.5 |
| Age | 20s | 3 | 13.6 |
| | 30s | 4 | 18.2 |
| | 40s | 9 | 40.9 |
| | 50s | 3 | 13.6 |
| | 60s | 3 | 13.6 |
| Gender | Male | 8 | 36.4 |
| | Female | 14 | 63.6 |
| Education | Diploma | 4 | 18.2 |
| | Bachelor's degree and above | 18 | 81.8 |
| Province | Guangxi | 9 | 40.9 |
| | Guangdong (including Shenzhen) | 6 | 27.3 |
| | Zhejiang | 4 | 18.2 |
| Municipal cities | Shanghai | 3 | 13.6 |

## 8.2 Medical service experience

This section presents the key elements identified in service users' experience of using medical services, including service users' overall experience, their communication with medical staff, doctor-patient communication during the consultation, and their perception of doctors' prescription.

### 8.2.1 Service users' experience of using medical services and key determinants of service users' perception of their experience

Participants shared the same overall impression of using medical services in tertiary hospitals. Exhausting, unpleasant service provision environment, and long waiting time were the most frequently mentioned features of using tertiary medical services. When asked for her experience of using tertiary hospitals services, Participant B immediately answered, "*it was so very xinku*" (a Chinese term meaning very difficult, exhausting as to be torturous and hard to bear). Other participants echoed a similar message describing hospital visits as typically being "time-consuming, very inconvenient" (Participants A, B), hospitals being "crowded with too many people", "have to queue for a long time", "queue for everything" and "as noisy as free market" (Participant D).

Participants (A, C, D, G, H) explained how the unpleasant service provision environment and the long waiting time caused negative perceptions of the experience and even resulted in conflicts:

> It may have something to do with medical staff shortage. It could happen when patients queued and waited for a long time but only found they only had a few minutes for the consultation, then they became frustrated and lost their temper. Sometimes, after waiting for a very long time, and waiting among so many patients with viruses in the air, I can't help worrying about catching some serious disease there. (Participant A)

Despite participants' negative perception of the hospital experience, they admitted to learning to cope as needed. Participant A described going to tertiary hospital for services as something they would do only when they had no other options:

> It is so time-consuming. But even so, sometimes, you would still need to go to tertiary hospitals. However, when it was about some serious conditions or children I still needed to go to a tertiary hospital.

Participants shared their negative, unacceptable experiences of using medical services. Some reported they had almost made a complaint. The reasons for their negative and positive experiences are summarised in Table 30.

#### 8.2.1.1 Communication

Communicating with medical staff was viewed as a key element contributing to a negative service experience. Participant G, a former nurse, talked about how the unpleasant attitude of the medical staff, on top of long waiting time, concerns about the unpleasant environment, and the consultation doctor's inadequate communication, led to her negative perception:

> The medical staff, they were so zhuai (an idiomatic Chinese expression that means being arrogant, cold, and indifferent that make people feel unwelcome). I just wanted to ask whether it was my turn or not. The nurse, she would not tell you nicely. She said: "wait outside!". They would feel that you were being impatient. But I really felt frustrated from the long waiting time, the noise and crowd in the hospital. I could not help worrying whether I would catch some serious disease. I felt very unhappy about why the doctor prescribed lot of medicines that did not make sense to me. I felt it was so tricky.

Participant C further noted the inconsistencies in service delivery:

> If the doctor didn't know you, then the attitude may not be so good. … If you knew him/her, then the doctor would explain everything very clearly, even some symptoms. He wouldn't ask you to register as an inpatient for observation first. If you didn't know the doctor, then he/she would ask you to stay in the hospital as an inpatient. He wouldn't say that much to you. He would rush and he wouldn't bother to respond even when you wanted to ask him something else.

Participant A shared her experience of being used as a "*specimen*" without being asked for her consent. The medical doctor instructed medical students to feel her abdomen and, on another occasion, to take over her surgery for "*hand-on practice*". The students' improper handling caused pain in her body that lasted for several months after she left the hospital. Overtime, she realised how bad the experience was, and that she had a right to be angry as she had not been treated with respect.

#### 8.2.1.2 Service provision

Problems in service provision and management were also found to result in negative experiences. Participant D shared the sad experience of how her mother passed away while waiting for her panel consultation:

> What I feel hard to accept was that although when my mother was admitted to hospital for cerebral infarction, the initial examination results already showed possible signs of heart attack, and despite my request for a panel consultation with cardiology specialists, the specialist was not available for more than a week. My mother passed away while waiting for the panel consultation... I still can't help thinking why they hadn't got my mother to have the cardiac examination when they first had the suspicion?

Participant D's experience reveals problems in managing in-patient treatment, job design, staffing and coordinating care: the experienced specialist was observed to supervise several wards simultaneously and was too busy to attend to each individual patient. Meanwhile, the residential doctor, although able to have close contact with the patient, appeared to lack the experience to notice the patient's deteriorating medical condition. The panel consultation was supposed to bridge the gap, yet it was not available in time. Participant D noted the lack of coordination in care:

> I think the problem was with the over specific division of specialities. You have an aged patient here, who suffered from multiple medical conditions common to aged people, however there was no one there to coordinate and oversee treatments provided by different specialities.

Lack of consideration for regulations, rules, and procedures contributed to indifference from hospital staff as perceived by service users. Participant U shared one such unpleasant experience in hospital:

> I didn't have any cash with me. I went to the registration desk and told the staff about that. (They said) "You don't have cash with you? We only accept cash here. You need to get cash yourself. You'll have to sort it out". We went there and wanted to get a registration ticket, and they asked for the hard copy medical history book, which they didn't make it clear in advance either.

What upset Participant U was that nowadays, in China, people normally carry their mobile phones to pay for almost everything; therefore, it was rare to find a place that only accepted cash and offered no alternative options. This participant's experience reveals how hospital regulations and rules are inflexible and lack consideration for service users' needs. Additionally, the harsh language used by hospital staff, "*you'll have to sort out yourself*", and indifference were commonly interpreted as lack of empathy, further triggering negative emotions from service users.

Participant H had a medical education background and experience working as an intern in a hospital. He believed it was impossible for doctors to have a good attitude towards patients given the existing medical encounter context. Drawing on his experience, he described the typical mentality of medical doctors, and the high degree of frustration service users may experience during their medical encounter:

> (Doctor): I am here to help you to fix your problems, and you still expect me to hear you do all the talking and offer service? No! You are not related to me in any way. I am not going to do that. You need to find your own way. This is hospital, just to provide treatment and cure.
> (Patient): The doctor told me to go to get a CT. The hospital is so big, and I can't find my way and I don't know where to go.

In this quote, the frustration of both medical doctor and patient could be due to problems with the service provision process. Stuck in an unpleasant situation, they found themselves without readily available resources, which could result in service users' perception of medical staff's apathy and coldness.

#### 8.2.1.3 Doctor's knowledge and ethics

Medical staff, particularly consulting doctors, played a key role in determining service users' experience with both their yishu (a Chinese expression meaning the combination of doctor's professional knowledge, skills, and experience to help patients and provide treatment) and yide (a Chinese term for medical ethics). Absence of or compromising either yishu or yide could cause negative experiences for service users. It was noted that participants may have had difficulty in trusting the doctor if they did not personally know the doctor.

However, participants also shared their positive experience of their medical encounter. Table 30 summarises the three main sources of service users' positive

experience: consulting doctor, service environment, and service provision management. The doctor's good attitude and professional behaviour during the medical encounter was the most important factor associated with service users' positive experience. Doctors who demonstrate patience, professionalism, commitment, and consideration for patients and care were observed to enhance service users' experience. During consultation, the doctor was the key determinant in the medical encounter. A sound service environment and efficient service provision procedure that saved service users' time also contributed to positive experience in using private hospitals as shared by Participants A and L. A significant gap between what was expected and what was experienced, normally resulted in disappointment and frustration.

In both negative and positive experiences of service users, doctors' yishu/jishu and yide play a key role in determining a patient's experience. Participants shared the view that yishu is of critical importance. For example, Participant A commented, "Yishu is one of the most essential and critical quality of being a medical doctor". Participant F shared his relative's experience that showed how medical doctors' yishu could make a marked difference in service users' experience and perception:

> I have a friend, whose wife had had a medical condition for years… Her problem was not solved even after seeing many different doctors at different places for over a decade. …I referred them to a good doctor whom I know. They came to see the doctor and she was cured. They were very happy.

Communication can comfort or worry patients; take away patients' doubts or make patients horrified. A patient went to see a doctor in the township but after consultation, the patient was horrified and puzzled by the wording of the doctor. He described the difference as:

> My relative was really scared by the doctor's words. …The doctor's words were so confusing that they were really horrified. (F)

After Participant F referred the patient to a specialist, the patient was happy and released. The patient was provided with a clear explanation and ceased to worry, understanding that her concern was not a big issue, and what to do to make things better along with taking medication.

Table 30. Key elements associated with service users' positive and negative experience

| Negative Experiences | | | | Positive Experiences | |
|---|---|---|---|---|---|
| **Source** | **Categories** | **Sub-categories** | **Quotes or Abstraction** | **Sub-categories** | **Quotes or Abstraction** |
| Medical staff | Communica-tion | Poor attitude | Some medical staff sound very impatient; most medical staff are very zhuai (idiomatic expression in Chinese meaning arrogant and lack empathy). (G) | Good attitude | Doctors nowadays normally have good attitude. (B)<br>The doctor was patient to answer my questions. (A)<br>These days doctors' attitudes are normally good. (F) |
| | | Unpleasant words | Some well-intentioned message could be worded very unpleasantly by medical staff. (T)<br>They wouldn't say it in a nicer way by telling me it was not my turn yet. They just said "wait outside!" (G) | | |
| | | Discretion based on acquaintances | The attitude was not so good if you are not acquainted with the doctor. (C) | | |
| | | Lack of respect in skipping necessary communication | No, they didn't even ask me (before the doctor entered with his student and used me as a specimen for his teaching). (A) | Adequate communication; adequately informed of treatment options | They will let you know what treatment options are available and let you choose. They will tell you what happen with conservative treatment and what happen with surgery. (B) |
| | | Lack of empathy | (Medical staff said) You don't have cash? We can't do anything here. You need to sort that out yourself. We only accept cash here. (T) | Humanistic care; | He would ask what medicine I have at home and sometimes he said I can use what I have at home to save my money. (A) |
| Service provision management | Service provision manageme nt problem | Needed medical attention not provided in time; not being responsive enough | The panel consultation was not available even after a week and my mother passed away while waiting for it. (D) | | |

| | | | | |
|---|---|---|---|---|
| | Staffing of service provision not being patient-centred: staffing for inpatient unable to meet the needs of quality service provision | The doctor in charge was too busy with too many patients and the residential doctor assigned lacked experience. (D) | | |
| | inefficiency, inconsistency in service provision | You would have to queue for a long time and for everything. It is so time consuming. (D)<br>You would need to have guanxi (connections) to get a bed with tertiary hospital. There are too many people waiting and once there was any, it would be given to those people with guanxi. You need to have some guanxi. If you want to see a specialist in big tertiary hospitals without a guanxi, it was possible that you could never get the bed. (H) | Efficient service; help available when needed; being attended to | Once I entered the (private) hospital, there was someone to greet me and then the examination was conducted one after another. I didn't need to wait for long. (A) |
| | Rules, regulations, procedure lack consideration for service users; hospital service information not made known to service users and with no alternative options available | They asked for a hard copy of medical history book. They didn't make it clear in advance.<br><br>They accepted only cash at the registration desk. I didn't have any. I told them I had no cash. They said you had to get cash yourself. (U) | | |
| | Service process and procedures; brief | Having to wait for a long time and the consultation was only a few minutes, you could feel it unfair and wanted to let out of your | | |

| | | | | | |
|---|---|---|---|---|---|
| | | consultation time and long waiting time | anger. It could be one reason of their violence. (A) | | |
| | | Service provision procedure and patient management Environment design and management not being user friendly | Little assistance available to service users to ensure smooth proceeding of service provision (e.g., signage, directory, not assistance provided to facilitate going around hospital). (L*Abstraction) | | |
| Environ-ment | Environment management issues | Service provision environment | Unpleasant service provision environment<br>Noisy as free market. (D)<br>With all the noise and crowd. (G) | | |
| Consulting doctor | Doctors' yide | Doctors rush in reaching diagnosis and treatment plans | Doctor rushed to reach diagnosis, prescription and treatment plan without careful examination and showing care and caution about possible risk; brief consultation time after long waiting. (A *Abstraction) | | |
| | | Possible over prescription | I felt very unhappy about why the doctor prescribed lot of medicines that didn't make sense to me. I felt it was so tricky. (G) | | |
| | Doctors' yishu | Doctor failed to reach clear diagnosis | I was not that satisfied because he didn't help me to understand the reason for my not feeling comfortable with my ears if there was nothing wrong with my ear. (E) | Examined in a professional, thorough manner | The doctor examined me in a very carefully. (D)<br>The doctor was very professional and very committed. (D) |
| | | Doctors fail to explain patient's medical condition clearly | Doctor in the township told them there her blood was turbid, which frightened them as they didn't know what that meant. | | |

The consulting doctor's yishu is another key determinant of service users' experience. For example, Participant D believed the doctor's inadequacy in yishu was partially responsible for her mother's death. In the following scenario, the doctor rushed to make a treatment plan for the participant's son without asking for her opinion, which triggered her doubts:

> He just glanced briefly at my son, then immediately said "Go and get through admission procedure for inpatients! Have surgery!" It was something like, anyway, that required anaesthesia. It sounded very horrible to me. It was so dangerous to a child. It was such a haste that the doctor made such a big decision and put a child to face such a big risk of surgery, painful and involved anaesthesia. (Participant A)

As a mother, Participant A was worried by a treatment plan of surgery. The way the doctor rushed to make such a decision about her precious child intensified her concerns and was interpreted by the mother as the doctor not being caring and considerate. The rush took away her trust and confidence in the doctor and she later sought help from another doctor, who, after carefully examining the child, determined that there was nothing serious and solved her child's problem with a minor prescription of medicine, advising them to pay attention to the child's diet.

In this section, the complex, emotionally charged and often contradictory experiences of seeking medical services are portrayed in answering the research questions: what could cause a risk to violence during the medical encounter? What could prevent violence? Further questions to which answers were sought included: what could cause negative experience and what could lead to positive experience? What were the key determinants of using medical experience?

Everything about the medical doctor—attitude, professional behaviours, yishu—and whether the doctor demonstrated yide, was key in determining service users' experience. In addition, the service provision environment and service provision procedure, particularly waiting time, were found to significantly impact service users' experience. Key desirable factors in using medical services included good yishu and yide, which could be manifested in multiple ways that lead to service users' positive perception.

An unpleasant hospital environment, crowdedness, noise, and long queues, due to the high volume of patients, could lead to a negative experience for service users. Doctors were observed to normally work under pressure to cope with the number of visiting patients within a brief consultation time. Participants L and H reported doctors in some tertiary hospitals of their city typically see about 100 patients in a day, averaging 5 minutes with a patient, without the chance for a proper break. Some hospital procedures and administration handling of patients were found to be inconsiderate and cause inconveniences which, when coupled with medical staff's lack of empathy and indifference, could cause negative experiences for service users. Findings on key determinants of user experience in this section were consistent with literature (Wang, Chen, Burström, & Burström, 2019).

### 8.2.2 Communication during the medical encounters from medical doctor perspective

User experiences described above (Section 8.2.1) echoed Phase 1 findings that communication plays an important role in determining the experience of the medical encounter. This section presents stakeholder perspectives on communication between doctors and patients, and how miscommunication might arise.

#### 8.2.2.1 Communication between service users and medical staff

All medical doctor participants acknowledged the importance of effective communication with service users. Doctors identified how various communication topics served different purposes (Table 30). One participant talked about the importance of communication in reaching the correct diagnosis:

> I feel that the essential communication is critical to get to know patients' medical conditions. Without adequate communication, you won't know enough about the background for a patient's medical conditions, and it is easy to misjudge the medical condition. (Participant M)

Another doctor, Participant K, spoke of educating patients about their illness to reduce their concerns and promote confidence. These participants viewed communication with patients as a chance to involve patients in decision-making regarding their treatment plans based on their financial situation and the available options.

Table 31. Summary of doctor-patient communication topics and functions from medical doctors' perspective

| Communication function | Communication topics (quotes) |
|---|---|
| Assessment for diagnosis/ information seeking | Patients' medical conditions (L)<br>Medical history (L, M, O, P)<br>Patients' situation behind the medical conditions (e.g., living conditions, life situations) (M)<br>Patients' health insurance (O) |
| Information giving | Issues related to diagnosis and treatment (O)<br>Service provision procedures (K)<br>Issues related to medical conditions and treatment; treatment plan options (K)<br>Information related to the upcoming operation (K)<br>Information for patients to get extra help (M) |
| Health literacy education | Answering patients' inquiry to help patients to interpret examination results (M)<br>Educating patients with knowledge related to the specific medical conditions (K) |
| Humanistic care | Extra care to help patients and family to take the info about patients' medical conditions (L)<br>Communication before surgery and after surgery: encouraging patients and to get rid of their fear for the operation, ensure their confidence with me and themselves for the operation. Comforting patients and education about handling after operation pain (K) |

#### 8.2.2.2 Consultation time and humanistic care

All medical doctor participants acknowledged the importance of humanistic care for medical treatment. Most participants specifically mentioned how humanistic care could contribute to positive treatment outcomes. Participant K explained humanistic care as:

> Doctors, firstly, need to have good jishu (alternative Chinese term to yishu, which means combination of professional skills, knowledge & experience). Secondary (to be a doctor) you need to know how to care your patients and to comfort your patients. Doctors are to get rid of two kinds of pains: physical and psychological pains. Always care. That is what a person once said about medical services.

Participants K, N, and L specifically mentioned how humanistic care could contribute to positive treatment outcomes; whereas lack of humanistic care may impact negatively on the treatment outcomes as explained Participant N:

> It is not only helping the patient with technology. It is better to help them from all aspects. For example, better service provision environment and our humanistic care is also one aspect, to give the patient more care and help, so that eventually it can benefit the treatment outcome and may double the benefit.

Despite awareness of the significance of humanistic care in treatment, almost all doctors talked about having to compromise humanistic care to cope with the number of patients.

> It is impossible, impossible. It is completely impossible to have more detailed communication. (Participant M)

> Basically, issues related to diagnosis could be covered during the consultation. However, humanistic things may not be able to cover. (Participant L)

The number of patients waiting to be seen was reported to create pressure for doctors to rush through their consultations, as reflected in Participant L's remarks:

> We go through a patient as quickly as possible. Anyway, seeing a patient here is to handle the patient with the fastest speed possible.

Participant N explicitly pointed out lack of time as the biggest barrier to adequate communication with patients, explaining why it is impossible to spend more time with a patient:

> If you want to communicate, you need more time. If you are very busy, then how can you have that much time to communicate with each individual patient? You are always busy every day, with so many tasks to work on. How can you find that much time for communication? If you spend more time with a patient, then other patients who are waiting will have to wait for longer time, and they will be unhappy about that. …We need time, and we don't have (enough time).

To cope with the number of patients, doctors also reported making decisions about the time spent with each individual patient based on complexity of patients' medical conditions:

> For more complicated cases, it could take about half an hour. For those very common cases, it generally only takes about several minutes to handle. Usual cases it takes less than an hour to go through lab tests and examinations. (Participant O)

Participant M noted how her patients were satisfied, simply because she, as a doctor, chatted with them when she was not busy:

> Recently I found some patients, when there were few patients I chatted with them, then they would feel very satisfied, for they felt I was such a good doctor to them.

The above quote demonstrates how consultation time and real communication with the patient could make a difference, and that with personal engagement and relationship building patients became satisfied. However, all doctor participants, except for Participant K (a surgeon working in a tertiary hospital), mentioned lacking enough time to do more than just the technical aspect of diagnosis and treatment.

Similarly, Participant L's remarks about her own and her colleagues' communication with patients show a practical awareness of humanistic care delivery:

> Our patients are quite special. In China it often happens that a patient get tumour and everyone around knows about that, but the patient himself/herself doesn't. Therefore, we are usually very cautious when communicating medical conditions. When the patient comes for the first time, we need to know whether the patient knows about the medical condition or not. If the patient didn't know about the tumour, then we break down the communication into two steps, one part is communication with the patient and patient family together, covering things relevant to the disease. We will also have a second session with the patient family to explicitly talk about the actual medical conditions.

What can be observed in the above quote is that medical doctors are trying very hard to have adequate communication with their patients. Some may think they do not have time to cover humanistic elements during their consultation. However, the way they handle the communication encompasses humanistic care without them knowing it. It was noted that such detailed communication was more likely to happen between doctors and inpatients.

The medical doctor participants' remarks evidence their awareness of the importance of communicating with patients, and the need to spend more time with each individual patient to reach accurate diagnosis. However, heavy workload and large volume of patients do not support communication. Lack of time could prevent medical staff from having adequate communication with patients to address the humanistic aspect of medical services. Inadequate communication and having to rush through patients could possibly be interpreted by service users as a sign of doctors being irresponsible and inconsiderate, having no medical ethics, not being caring and even being indifferent, which can result in service users' mistrust towards medical doctors. That is exactly how Participant A felt about the doctor who rushed to make decision about her child's diagnosis and treatment.

#### 8.2.2.3 Communication barriers

According to medical doctor participants, service users can have misunderstandings for all kinds of reasons. Table 32 summarises communication barriers perceived by medical staff and service users respectively. Communication barriers can come from medical doctors' work and life situation, service users, and situational factors. Limited consultation time, medical staff being overloaded due to shortage of staff, patients' high expectations, and patients having no or little knowledge of how medical staff work, are all barriers for communication. Further, when service users are suffering from pain and anxiety, they may expect more care and empathy from medical staff, a potential situational barrier. Specialised knowledge can be too difficult for lay people to understand, and this factor was also identified as a barrier for communication in the current study. Mistrust and misconception as result of negative media reports was also perceived as a barrier. Media reports in relation to doctor-patient trust and public opinion are discussed in Sections 8.6.3 and 8.6.4.

Table 32. Summary of communication barriers perceived by medical staff and non-medical staff

| | Source of Barrier | Categories | Quotes/Abstraction | |
|---|---|---|---|---|
| **medical staff' s view** | **Doctor/ medical staff** | Heavy workload, Limited consultation time Busy | Busy, limited consultation time, heavy workload (L, M, N, O, H) | |
| | | Compromised wellbeing | Medical staff can be in bad state (O, M) | |
| | **Patients** | Personality | Doubting personality, stubborn (M, K) | |
| | | Misperception resulting from limited health literacy | Patients cannot accept bad news (K) | |
| | | | Expecting a cure regardless the circumstances (J) | |
| | | | Patients believe doctors should be held accountable for everything once they enter hospital (M, O, K, I) | |
| | | Knowing little about medical staff's work and service provision | Patients know little about medical staff's work cause unreasonable expectation and frustration (N, G, I) | |
| | | Misconception and mistrust towards medical doctors under influence of media and public opinion, mistrust due to the perceived conflict of interest | Perhaps, they feel that we work just for money. I suspect that because of this kind of mentality, they don't trust us doctors. I think it can be the main reason (N) | |
| | | | There is a perception in the society that doctors are only thinking of making money when they are providing medical services (K) | |
| | | Personality, mistrust of medical doctors due to lack of health literacy | Patients not trusting doctors, stubborn, over relying on info from the internet (L, M, K) | |
| | | High expectation | Towards medical staff's attention | Patients expect to be served immediately once they were there (O) |
| | | | Towards medical staff's yishu and efficiency | Patients expect to have examination immediately and clear diagnosis can be made immediately (O) |
| | | | Beyond what is possible | Patients' expectation is beyond what our current medical service environment and services can offer (O) |
| | | | expecting quality service experience | Patients believe since they pay the money and |

| | | | | |
|---|---|---|---|---|
| | | | the same as in non-medical services | they should be treated like god as in non-medical consumption (N) |
| | | Limited education | Some patients having little education (M, N, O, K, J, P) | |
| | | Compromised state of wellbeing | Patients being in a state of expecting more understanding, empathy, and care (E) (P) | |
| | **Situation for doctor** | long waiting time | Too many patients waiting (A, B, D, G) | |
| | | limited consultation time | Limited consultation time for each individual patient | |
| | **Features of medical science and medical services** | Specialised knowledge involved | Specialised knowledge can be difficult for lay people to understand (H) | |
| | | unavoidable risks and uncertainties in medical services | Side effect of medication, unavoidable human errors, complexity, and uncertainties of medical science can be difficult for lay people to comprehend (M) | |
| **Non-medical staff' s view** | **Source of Barrier** | **Categories** | **Perceived Barrier** | |
| | **Doctor** | Heavy workload | Doctors are overloaded and are too busy (C, D) | |
| | | Poor attitude | Doctors lack patience with patients of different cognitive abilities (E) | |
| | | | Some doctors when they were busy, their attitude could be really bad (R) | |
| | **Patient** | Unreasonable expectation | Patients' unreasonable expectation. Expecting cure all the time regardless of the medical conditions. They blamed everything that happened to doctors (B) | |
| | | Limited health literacy | Patients lack basic health literacy (A, B) | |
| | | Compromised wellbeing | Patients are not in good state and expecting empathy and care from medical staff (F) | |
| | **Situation** | Inadequate communication | Inadequate communication | |
| | | Context unfavourable for communication | Long waiting time, brief consultation time amid unpleasant environment | |

Participant N talked about how his patients were not happy with the waiting time involved for their examination:

> We would explain to the patient, or our colleagues would help to explain. We told the patient when she made the appointment that the actual time needed would depend on how the examination would proceed: it could be

> only about a quarter of an hour, or one or two days. However, even though we had explained, it may still happen that those patients couldn't understand why it could take so long.

Here the communication can break down and result in misunderstanding due to service users not being familiar with the service provision process and the way medical staff work.

Most medical doctor participants believed service users held a negative stereotype of medical staff and the consequent mistrust could hinder communication. Participant N mentioned that negative medical coverage was a primary reason behind the mistrust of patients towards medical doctors:

> Most of the media reports are negative. Really very negative remarks. Most comments, not only not to show sympathy and mercy, but also there to attack us, saying how bad we were with medical ethics, saying we all accept red pockets, or being black-hearted doctors. Perhaps, they feel that we work just for money. I suspect that because of this kind of mentality, they don't trust us doctors. I think it can be the main reason.

The same message was echoed by Participant K:

> There is a perception in the society that doctors are only thinking of making money when they are providing medical services. With that perception, when you asked them to go through some necessary examinations, they would think you do that just for money. When you made prescriptions, they thought you only thinking of making money. They tended to misunderstand you and think that you are doing this for some other purposes.

Medical professional participants shared the opinion that service users have high expectations of medical services and medical doctors, and failure to meet the expectation can result in frustration and anger. Table 32 also gives signs of patients' high expectations as noted by medical professional participants.

Conversely, medical staff, hospital deans, and service users alike, believed service users' lack of basic health literacy is a major barrier in doctor-patient communication. Health literacy could mean having informed understanding towards health conditions, prognosis, and realistic affordable treatment options. Lack of basic

health literacy can hinder communication in many ways, including how service users view the treatment process and outcomes, knowing limits of medical sciences, and understanding risks and uncertainties in medical services. Participants believed promoting health literacy and health literacy education can be a way to overcome communication barriers and dispel the many reasons for service users' misunderstanding and resentment, as well as avoid conflicts with medical staff. For example, Participant A felt patients were unreasonable and blamed medical doctors for everything that happened, expecting a cure every time they go to hospitals. Participants M and J noted that service users may have misunderstandings about treatment outcomes, complexity of treatment process, and not understand and accept limits of medical services. Service user participants, such as Participant E, demonstrated reasonable health literacy in that they acknowledged the limit of medical sciences, knowing that patients also need to take responsibility of managing their own health rather than leaving everything to doctors. Thus, non-medical professional participants shared similar views about communication barriers between doctor and patient as summarised in Table 32.

### 8.2.3 Prescription and diagnosis in the medical service provision

Getting a diagnosis and prescription are among the most important reasons for patients to seek medical services. Perception of doctors' prescription and diagnosis decision-making, however, differed significantly between service user and service provider participants, which could result in misunderstanding.

#### 8.2.3.1 Prescription and diagnosis perceived by medical doctors

According to medical doctor participants, factors that they considered in making decisions for treatment and diagnosis include patient's medical conditions, insurance, and financial situation. Decisions were made in discussion with service users. Medical doctor participants reported giving no consideration to personal gains and financial interests. Lab tests and examinations were prescribed to reach clear diagnosis by ruling out other possible illnesses, confirm diagnosis, or to detect contagious diseases before surgery for medical security reasons. It seemed that medical doctors were committed to helping patients solve their problems and were cautious in prescribing.

> We need to try our best and get to know about the reason (behind the symptom). (Participant M)

> (We) discuss with colleagues. For better medical services (Participant O).

> When we encountered some very tricky symptom, we would discuss with our colleagues from our department. We would reach a diagnosis after we reached an agreement. (Participant N)

> If patients have done the same examinations and lab tests, we wouldn't repeat the examination unless it was necessary. (Participant L)

> I feel I can't do that, prescribing something that is unnecessary for personal gains. I can't. (Participant M)

Listening to the doctor participants, I could feel how medical doctors take their jobs seriously and how they take extra care in reaching a diagnosis. None of them reported to prescribe with any consideration given to their financial gains, but purely based on diagnosis need and patients' medical conditions. However, as evidenced in Participant M's words, when it comes to medical ethics, it is still largely medical doctors' personal decision whether to adhere to medical ethics or put personal interest in their practice, which reflects an absence of effective performance management criteria and quality assurance measures.

#### 8.2.3.2 Prescription and examination perceived in service users' eyes

A significant gap could be identified between the actual situation and what was perceived by service users in general. The care that doctors take in prescribing and reaching a diagnosis was not normally known and observed by general service users. Even though most service user participants reported to have either family member(s) or friends who were medical staff, still they tended to view prescription of laboratory tests and examinations as medical doctors' ways for personal financial gains. For example, service user Participants B, C, and F believed that not every examination was necessary. The link between doctors' prescription and their income was explicitly identified with the following remark:

> Without such examinations and lab tests, how can the cost go up? How can doctors survive? (Participant F)

Non-medical professional participants, including medical dispute mediators, demonstrated doubts in doctors' prescription for having examinations and laboratory

tests as the first decision the doctor made soon after the consultation began. For example:

> Doctors would only ask you briefly before they prescribed examination and lab tests. It was the first step no matter what your situation was. Even with children who had a cold or a fever, they would ask you to have a blood test first. (Participant C)

The wide-spread concerns from service users, their inability to comprehend doctors' diagnosis and treatment decisions, and their tendency to perceive negatively medical doctors' prescription were easy to notice (see Table 33).

Table 33. Prescription perceived by service users

| Factor | Category | Sub-categories | Perception by Service Users | Quotes |
|---|---|---|---|---|
| Problems with doctor's yide | Over-prescription | Unwillingness to take trouble | Prescribing regardless of the medical conditions | When you go to hospital, doctors would always say "have a blood test", even when you were having a cold or a fever, even with matters that they can tell directly. (C) |
| | Performance management need or unwillingness to take trouble | Medical doctors avoiding troubles from patients | Unwilling-ness to take trouble and not being responsible | Sometimes maybe it was for their performance management. I reckon if you didn't know the doctor in person, then he/she would try to use all possible diagnosis means. He/she would not examine you that carefully. (C)<br>Why the doctor prescribed a lot of medicine that didn't make sense to me. (G) |
| | Over prescription for financial gain | Doctors try to prescribe more examinations and lab tests regardless of the need | It has something to do with their income<br>It is a way for their survival | The doctor will get you to get more examinations and lab tests. No matter whether the result will change or not. (F)<br>Of course, they need to rely on lab tests and examinations so that cost can go up. Otherwise, how can they survive? (F) |
| Self-protection caution | | A way for medical doctors' self-protection | A way for medical doctors' self-protection | Perhaps they do this out of self-protection. They could also tell without the examination. But they could make mistake. Now that with the examination, they have evidence so that they won't be held accountable if they make mistakes. (A) |

### 8.2.4 Informed consent during the medical encounter

Advising service users of possible risks in receiving medical services is an important topic of communication between service users and medical staff. Medical doctors, medical dispute mediators, and lawyer participants, who know about the possible risks of medical disputes, believed it important for medical doctors to have adequate communication with service users, and to properly advise service users of possible risks. In medical doctor participants' experience, even after adequately advising service users of possible risks of skipping certain examinations advised by doctors, service users may still deny having been properly advised of the risk. Therefore, they believed getting service users to sign the informed consent form was a necessary precaution to protect themselves in case of medical disputes. Service users, however, perceived signing the informed consent form differently from other stakeholders. Even service users who had medical doctors as their friends still reported a negative interpretation of the informed consent:

> No matter what happened to the patient, it is rare for a doctor to be held accountable. Why? Before operation, they ask the patient's family to sign the informed consent. (Participant E)

> Informed consent means whatever happened to the patient, the doctor is not held accountable. It was very rare for doctors to be held accountable if anything happened. They shift the responsibility to ordinary people. (Participant F)

Although medical doctors understood the importance of informed consent, due to practical constraints, doctors may not be able to adequately advise service users of the potential risks. Sometimes, according to medical dispute mediators, it happened that the informed consent process was taken for granted with adequate communication largely being ignored and reduced to only asking service users to sign the documents. As a result, service users were under the impression that doctors were simply asking them to sign the documents to shift their responsibilities, which indicates the need for adequate communication with service users before getting them to sign the informed consent. The way general service users perceived informed consent reflected their mistrust towards medical staff, and how lack of understanding and information gap can contribute to the mistrust.

Medical dispute mediators' words echo the message that most medical disputes were typically caused by inadequate communication:

> We have handled a lot of dispute cases, in which the medical service provider was found not accountable for the outcome and the dispute. Many of the disputes were mainly due to inadequate communication and informed consent. We had quite a lot of such cases in our city. (R)

The same message was echoed in Participant U, a lawyer's words:

> There should be adequate informed consent and adequate communication over medical conditions to avoid medical disputes. There should be detailed enquiry about patients' medical conditions.

While the lawyer and medical dispute mediators all emphasised the importance of adequate communication with patients, service users tended to have negative perceptions of informed consent. They believed that under the circumstance, it was something they are asked to do without an option.

> As service users we feel that we would just passively take whatever happened if nothing went wrong. They would show you so many documents and you only have a chance to briefly look through before you sign. You could only glance at the document briefly, knowing that all the possible risks can be listed there. You wouldn't have your operation if you were fussy about those things (Participant A)

Despite its importance, informed consent in practice was noted by participants to be usually taken for granted and not handled properly. Inadequate communication meant not properly advising service users of the possible risks, which were identified as one risk of medical disputes. These findings are consistent with literature (Gong et al., 2018). The way service users perceived informed consent reveals their mistrust towards medical staff, and how lack of understanding and information gap can contribute to the mistrust.

### 8.2.5 Problems observed for the service provision and advice for improvement

The importance of quality service was recognised by medical doctor participants:

> Service provided can affect patients' experience. I feel it is quite important. (Participant L)

> Service plays an important role. …That means quality of the medical service provision matters. When there is good medical service, patients may have a good mood and can recover sooner. But if the service is poor, the patient who only had very minor issue originally may end up with more serious matters. Therefore, service provided during the medical service provision can directly affect treatment results. (Participant K)

Despite the importance of quality service, the present service provided in public hospitals was not viewed as being quality, as reflected in Participant L's words:

> Service provided in public hospitals? No, they should not be termed as service in service's sense. To see a doctor in public hospitals, patients have to learn how to serve themselves. That is, services provided in public hospitals are not good enough to be called service, because they are simply not up to service standard yet.

The number of patients waiting to be attended leaves little room for addressing the quality of services and becomes an impossible task:

> We are simply too busy. You can see here in our hospital, no matter it is the consultation room or wards, there are so many things to take care. It is almost impossible to expect very good service. That is the objective fact that too many things need to be done. We want to do better, but really, we have got no time. (Participant L)

Medical doctor Participants M, N, and O all echoed the above message—they were simply too busy to spend more time with each individual patient. The volume of visiting patients made it impossible to take care of the service aspect of medical services. The large number of patients meant only a brief time was available for each patient, as observed by service user, Participant C:

> They were very busy. They handled patients just like the assembly line. After they finished what they wanted to say, it was over. Even though you would like to ask something else, they wouldn't bother to respond.

Participant H believed that given its public welfare nature, public hospitals should not be expected to focus on the service aspect as well as meeting essential health care needs, as it is hard to address both aspects within the limited time available for consultation; there should be a difference between what people can expect from VIP service and essential healthcare services provided by a public hospital to fulfil its welfare nature. Public welfare is aimed to serve as many people as possible, and the focus is on addressing essential medical needs. Service users of public hospitals need to be honestly advised of this practice.

Participants believed procedures and management of service provision could affect quality of the service provision and service users' perception, as explained by the following participants:

> Details are important. It is because of neglect of details and some loopholes in management that cause the problem. There should be clearly defined management regulations, rules, and specify everyone's job responsibility, and such problems will not arise. (Participant F)

> Hospital's management mode, perhaps everyone's responsibility should be clearly defined. Sometimes if your responsibility is not clear and you try to do this and that, then you can put yourself into a terrible work state, and it can impact negatively into consultation and medical services. (Participant V)

> Kanbing nan may have something to do with the low efficiency of hospitals. Simplifying procedures and reducing burden may help. (Participant G)

Improving service delivery management, including human resource management, simplifying provision procedures, and improving hospital efficiency were identified as ways to improve medical services. Cutting the volume of patients was also identified as a necessary step to upgrade services provided in public hospitals.

> The volume of patients must be reduced, then the process should be made smooth and be improved, which I think it is hard to achieve at the present stage. (Participant L)

> There should be clear service procedures and help available for service users, the minute they arrive at hospital. For example, the procedure that

> we receive service users. There should be staff advising patients of what procedures to be expected for the different examinations. Some noticeable posters, someone to show them around etc, so that a lot of time can be saved. Patients normally are not familiar with the examination procedure, and not knowing the way around, which can waste them a lot of time. If you have someone to guide them, and they can understand and there wouldn't have been that many complaints. (Participant N)

Problems with service provision process were believed to cause service users' negative experience. Staffing problems, such as no medical staff specifically being assigned to provide proper reception and help for service users, including preparing service users for what to expect during service provision, were identified to cause negative perception of service experience.

Participants were asked to share their experience or ideas to improve service delivery and patient experience. Participants' responses are summarised in Table 34, which contributed to the development of the prevention intervention framework discussed in Chapter 9.

Table 34. Efforts and advice to improve service provision

| Measures Taken | Target Areas |
|---|---|
| Patient satisfaction survey (I) | Service quality assurance |
| Staff training (I) | Improving medical staff's yishu; improving staff communication with communication template provided based on departments and patient types; improving medical staff's yide |
| Reminding medical staff to pay attention to attitude (K, L, M) Communication with patients Training provided to new staff on communication with patients, medical disputes prevention (J) | Health and safety training; improve communication; avoid medical disputes |
| Application of technology (E, F) | Reduce waiting time and improving efficiency of medical resources |
| Medical liability insurance (K) | Covering hospitals' risks in medical service provision to Protect both parties |
| Patient education: Workshops provided to patients to promote health literacy and health education (I, J) | Improve patient health literacy and improve communication |
| Hospital environmental design (N) | Hospital environment designs sending clear message of zero-tolerance to violence |
| AI application in medical service (F) | Service provision efficiency; medical staff shortage |
| Improving procedures (L, M, G) Improving job designs (M, V) | Service users' negative experience in using medical services: efficiency, reasonable procedures, help available |
| Health reform: strengthening primary healthcare providing facilities implementing tiered service provision | Improving efficiency of medical resources by promoting tiered service provision |

### 8.2.6 Summary

This section presented findings from analysis of service users' experience in using medical services. Specifically, findings from this section help understand the reasons behind service users' negative perceptions of their experience using medical services and sources of service users' mistrust towards medical staff. Consultation

communication, prescription, and informed consent were identified as key areas in the service provision process that may result in misunderstanding and mistrust. Medical staff's communication, service provision environment, and service delivery management were found to determine service users' perception of experience. Consulting doctors' yishu and yide, particularly, were critical in determining service users' experience of using medical services. Significant gaps between service users' and medical staff' perceptions on these key areas of the medical encounter were identified, which could become barriers to effective communication and cause misunderstanding between service users and medical staff.

It was found that service users typically experienced service provision and communication that worked adversely against effective communication and positive perception of medical staff and experience of using medical services. Specifically, brief consultation time, long waiting time, an unpleasant service provision environment, and service delivery, in which assistance was not readily available, were identified to cause negative perceptions of the experience. Main areas where gaps between what service users expected and what they typically experienced that could result in negative perception are summarised in Figure 23.

Mistrust towards medical doctors was widely observed among service users, which was found be related to information gaps and discrepancies of perception. Long waiting time versus brief consultation time, communication problems, problems with medical service provision procedures, and the possibility of being victim of doctors' over-prescription were identified to cause negative perception of experience in using medical services. Service users either experienced just the opposite of what they would expect and desire, with almost all key determinants of experience, or significant gaps exist between what is desired/expected and what was experienced. Consequently, service users' negative perception and experiences was no surprise. This section uncovers a service provision that is not expected by service users, what the gap is, and source of the gaps. The gaps between what is expected and what happens, sometimes unknown by service users, are an important reason behind the mistrust and negative perception towards medical staff, which highlights the need to bridge service users' information gap by making information more transparent.

| Expectation | | Experience/Facts | | Perception/Consequence |
|---|---|---|---|---|
| **Communication:** Adequate communication; humanistic care | Gap | Brief consultation; absence of humanistic care | Gap | Frustration and negative perception; mistrust |
| **Diagnosis:** Clear diagnosis; diagnosis reached with efficiency and low cost | Gap | Diagnosis can be complex and unable to rely on doctors' experience alone: lab tests and examinations are important means to reach accurate and reliable diagnosis | Gap | Frustration and negative perception; mistrust |
| | Gap | | Gap | |
| **Informed consent:** Medical conditions and treatment plans being communicated adequately and honestly | Gap | Being asked to sign informed consent without adequate communication | Gap | Medical staff are shifting responsibility to protect themselves being held accountable |
| | Gap | | Gap | |
| **Service provision** | | Help not readily available to enable proceeding of service provision; relying on service users' self-service | | Medical staff are cold and indifferent |
| **Service environment** | | Unpleasant service provision environment | | Frustration and negative perception |

Figure 23. Key areas identified with gap between service user expectation and perception experience, and their impact

## 8.3 Understanding medical staff and the associated risks

This section presents findings that enable a better understanding of medical staff's work and life balance, and how it can impact on the outcome of the medical encounter. It focuses on risks that are associated with medical staff, especially what happens inside hospitals as a workplace that can both directly and indirectly impact

medical staff's performance at work and their interaction with service users. This section answers the following questions: 1) What are the possible risks associated with medical staff? 2) Where are the risks from?

Phase 1 and the literature review suggest answers may come from a better understanding of the following: 1) the general state of medical staff's work and life, and how it impacts their health and work state 2) general service users' knowledge and understanding of medical staff's work and life; 3) whether gaps exist between service users' and medical staff' perception; 4) impact of information gaps on the doctor-patient communication during the medical encounter and on the doctor-patient relationship; 5) known and unknown aspects of medical staff that impact general service users' perception of medical staff.

### 8.3.1 Medical staff's work and life and their voices

All participants shared the same opinion of medical staff's work and life: medical staff were very xinku (a Chinese expression, meaning having a very uneasy life because of the heavy workload). Medical staff were observed to normally work long hours, night shifts, and work under great stress, having not enough time to rest. On top of their busy work schedule, medical staff were reported to have pressure for on-going professional development to meet demands in their job as mentioned by several participants including medical staff and service users alike. Participants O, M, L, and G reported that most medical staff were unable to take care of family as their job consumed much of their energy and time.

It was observed that even among service user participants who reported to know medical staff were very xinku, it was still hard for them to imagine the actual work state of medical staff. For example, Participant D's parents were both medical doctors, and she believed she knew about medical staff' work and life well. She attributed problems noted in medical service provision process to the fact that medical staff were overloaded. In her understanding, a super busy doctor may need to see up to 50 patients in a day. However, participants H, L, and M reported a doctor may typically need to see up to 100 patients in a day. There appears a huge gap between what service users perceive and the reality. Perhaps, as Participant G, a former nurse, noted:

> Yes, they know we are very xinku, but they will never know how xinku it can be, because you will never really know it if you are not working there.

Even for participants who reported to know medical staff personally, it was still difficult for them to exactly know the work state of medical staff. Could it be more difficult for people who have little contact with medical staff and know nothing about their work and life to understand what kind of sacrifice medical staff are making in choosing the profession? It was observed that no non-medical professional participants had ever questioned whether it was fair that medical staff were only able to have one day off every week while legally there should be two days off a week for employees.

Heavy workload and unhealthy work arrangements could negatively impact medical staff's personal health as noted by Participants O and G. Participant O shared how, after working as a medical doctor for over a decade, her health was affected:

> Irregular meals due to busy work schedules, disturbance of biological clocks resulted from working on night shifts. More than 10 years ago when I first began my job, I was still young, and it was easier to recover from working night shifts. However, after working several years, I found it getting more and more difficult to recover, and later I suffer from insomnia.

Participant O talked about how their state at work could be affected by their wellbeing:

> Sometimes, we are so tired, and we may also become impatient. Patients may then make a complaint out of that. But we are not iron man.

It appears that medical staff's unhealthy work arrangement could negatively impact their life and health, which consequently affects their performance and doctor-patient relationship. A vicious circle is created.

According to medical staff, although they were generally busy, some specialities were busier than others. For example, ED, internal physician department, and paediatric department were generally the busiest across hospitals. According to Participant N, internal physicians often need to work extra hours to complete the medical history notes for all patients who visited the hospital that day. High numbers of patients also meant that doctors who were scheduled to be off at 5pm may work until 9 or 10pm to complete notes and comply with hospital medical history management rules.

In addition, to cope with the challenge of their job, medical doctors reported spending a lot of time on professional development after work to keep updating their knowledge and awareness of developments in medical science. Hospital dean participants also reported there were a lot of professional training that staff were expected to attend on top of their busy work schedule. Further, they also faced pressure to publish journal articles if they wanted to progress with their professional title.

Medical staff are either portrayed as "angles in white" or as irresponsible people whose faults caused the suffering, and even death, of victims. However, what was the true voice of medical staff? Medical staff participants, when asked about their source of job satisfaction, shared one commonality: they sincerely wanted to work for the best interest of their patients and felt happy to see their patients getting well (Table 35). Saving lives and helping patients, even simply seeing patients recover, having good communication, and gaining acceptance from patients and their family were reported to give medical staff a real sense of pride and fulfilment. Not having medical incidents and reaching accurate diagnosis could also bring job satisfaction. Learning about this side of medical staff, reveals they are caring and responsible human beings, not the money-making machines as portrayed by some media and believed by the public.

Table 35. Source of job satisfaction perceived by medical staff participants

| Categories | Sub-categories | Quotes |
|---|---|---|
| Being able to help patients by doing a good job | Providing cure and saving lives | Saving lives (M)<br>Have very successful operation for patients and seeing patients being happily discharged from hospital (K)<br>Reaching clear diagnosis for tricky cases after Overcoming difficulties (N)<br>Seeing patients getting well (O) |
| | Fulfilling job responsibility successfully | Not having any medical accidents (N) |
| Having service users' acceptance | | Patients and their family's acceptance and acknowledgement of us (G)<br>When I have good communication and relationship with patients (M)<br>You'll have many fans and friends from your patients after working as a medical doctor for years (L) |

Different levels of devotion, even among the limited number of medical doctor participants, could be identified. Some (e.g., Participant K) were very dedicated; however, the majority (e.g., Participants L, M, N, O) may have loved being a doctor and helping others, but still saw it as a job. They would love to enjoy life and take care of family outside their work. Even though they are ordinary doctors, still, they try their best to help their patients and do a good job. It is a pity that service users rarely have a chance to get to know this side of medical staff—the tender side, which makes them real human beings and approachable, not that of cold and indifferent stereotypes.

When asked how they would like to improve their work for better doctor-patient relationship, all medical doctor participants expressed their hope that there can be fewer patients and their workload can be reduced, so that they can have more time to communicate with individual patients. Lack of time and heavy workload were again identified as the biggest constraints to improve job performance and communication with patients.

Medical staff were asked to talk about the ideal state of work for them. Table 36 gives what medical staff desire, which is something very basic. For example, Participant K talked about how, as a dean of the department, he had to worry about promoting their services to have enough patients and revenue. Participant L talked about being hassled by problems in their internal administration and management bureaucracy that did not make sense to her but wasted time for nothing. What these participants really wanted was to be able to focus on being a doctor and not have to worry about things outside being a doctor. Feeling exhausted after working for about 20 years, Participant O hoped to be able to have two days off as a start. "*I really want to quit now if I don't need to worry about money*." Medical staff participants wanted nothing more than a healthy and pleasant work environment that could enable them to better help their patients. With what participants shared, some issues with their state of work were found to have negative impact on their wellbeing and their job performance.

In this section, medical staff's work and life was possibly one area that service users had the best knowledge; still, a significant gap was found between the reality of medical staff's work and life and what service users perceived. It is very difficult for general service users to understand the kind the sacrifice medical staff make in doing their job. Medical staff's work was identified to be very unhealthy and

could negatively impact on their health and subsequent work state. However, this issue was not getting attention from hospital management.

Table 36. Ideal work state in medical staff's eyes

| Categories | Quotes |
|---|---|
| Free from disturbance and distraction | Free from disturbance that is irrelevant to simply being a doctor, not so many bureaucratic tasks, no pressure to get journal article published (L); being able to focus on serving patients, providing treatment to patients only (K) |
| Work environment organisation culture | Work in environment with harmonious relationship and great teamwork (G)<br>Have more pleasant working environment (N) |
| Better external medical service provision environment | Without tensed doctor-patient relationship (N) |
| Rest time | Have two-days off a week (legal entitlement) (O) |
| Manageable workload | Work in a hospital with a smaller number of patients to cope with (M) |

Participants' responses confirm the following learning about medical staff's work and life as summarised in Figure 24.

- Most medical staff have a very busy schedule, heavy workload, work long hours, which can compromise their wellbeing and performance
- Medical staff perceived great pressure from multiple sources
- Most medical staff participants are unable to have two-day off a week from work

Figure 24. Summary of medical staff's work and life

### 8.3.2 Medical staff's income, prescription, hospital revenue, and medical ethics

Hospital dean participants reported significant improvement in medical staff's income when looking at the absolute figure. However, they admitted that there was medical staff shortage in their hospitals, subsequently impacting medical staff's workload:

> Some of them are not satisfied because of their heavy workload. Now we have big volume of patients but not enough medical staff, which results in their heavy workload. (Participant I)

Medical staff believed their income is low:

> Given our workload and working time, our income is relatively low. (Participant N)

> [Compared to other profession] the same education level and same workload, medical staff's income is relatively low. (Participant M)

All medical staff participants shared Participant L's opinion: "*Our work and income have never been in proportion*", which she believed "*is why now many people have quitted practicing medicine*". Similarly, Participant K explicitly stated, "*Doctors' income is not good. The overall level of the whole system is very low*". Participant G talked about their income and expense as a nurse in her city, commenting, "*Really with the salary we earn, after paying food and accommodation, there is little left. There is not much you can do with that income*".

Participant J acknowledged the reason for the overall low income of medical staff in China:

> One reason for our current medical services remain affordable is medical staff's low cost of labour. If you want to give medical staff the same income and daiyu (a Chinese term to mean the combination of compensation and remuneration and benefits provided to an employee) as what they have overseas, how can ordinary Chinese folks afford to see a doctor?

It was a widely known fact among service user participants that medical staff's income consisted of low proportion of basic salary and high proportion of bonus based on performance. Medical staff's bonus was known to be provided by hospitals' revenue generated from service provision fees and drug sales from pharmacies affiliated to hospitals since the marketisation reform, widely known as yi yao yang yi (a Chinese expression meaning to provide for medical services with drug sales. Yi yao yang yi was once a government initiative as noted in Chapter 2 to encourage hospitals to be self-sufficient and cope with national fiscal difficulty).

However, it was not known to the public that hospitals and medical staff are struggling to survive and that without the profit generated, it would be impossible to sustain medical resources. A perceived conflict of interest, therefore, arose between doctor and patient. Reduced affordability and accessibility of medical services following marketisation of the healthcare sector was also found to be wrongly attributed to medical staff by service users, according to participants.

The perceived conflict of interest may make it easy for service users to suspect doctors, whom they do not personally know, of over prescribing for personal financial interest, which is the reason behind the general mistrust towards medical doctors uncovered in Section 8.2.3. That is, the funding model of public hospitals, a factor at the societal level of the socio-ecological model resulted in the possibilities of over-prescription and perceived over prescription, which can undermine doctor-patient trust and hinder doctor-patient communication. Over-prescription is an instance of a societal level risk factor that is impacting on the service user and medical staff. From non-medical professional participants' remarks, it was not hard to sense the resentment by service users over medical doctors' prescriptions being linked directly to their personal interest. No participants talked about how hospitals can otherwise make money to enable a decent income for medical staff.

Participant K talked about how the public's over-simplified interpretation of medical ethics has prevented medical staff from talking about fair compensation:

> Doctors in China have for a long time been burdened by medical ethics. It was subject to the monitoring of public opinion. Our income is low, it has something to do with public opinions. Medical doctors are not supposed to talk about money. For a long time, we doctors are supposed to talk about contribution and not to ask for things. Once you talk about money, they think that you have no medical ethics.

It was noted that no service user participants talked about how hospitals should make enough money to enable a decent income for medical staff. In any other service, it is normal that people pay for the service they use. It was commonly observed that people were willing to pay several hundred RMB to get their hair done or get their pet dog a dress. Then what is wrong with medical staff making money out of their practice? Why was it so hard for the public to accept that medical staff and public hospitals need to make money to feed themselves? Perhaps it is related to

the public's opinions on medical service provision and funding of public hospitals (see Section 8.5.2).

### 8.3.3 Workplace violence and medical staff's health and safety perceived

This section focuses on participants' experience and perception of workplace violence against medical staff and medical staff's safety at work. It presents answers to the following questions: What is the workplace violence situation that medical staff face? How are medical staff's health and safety perceived? What can cause threats to medical staff's health and safety?

#### 8.3.3.1 Experience of workplace violence against medical staff

All participants knew about yinao, and several participants shared yinao incidents that they were either directly involved in, witnessed, or heard of from someone related to them. One main trigger of the yinao incidents, shared by participants, was that the service user, most of the time the patient's family, could not comprehend and accept the outcome of treatment and they turned up at the hospital to demand a shuofa.

Disturbance resulting from the yinao incident varied depending on the individual involved. One typical feature mentioned by both hospital dean and medical dispute mediator participants was described as "da nao and xiao nao" (a Chinese expression to describe serious disturbance and minor disturbance). Typical forms of yinao included hanging up banners, turning the victim hospital into a mourning hall, and severely disrupting hospital operations. Massive crowds of people may gather with over 70 offenders. The worst incident experience was reported to last up to several months, according to Participant J. Table 37 summaries the yinao incidents shared by participants.

Table 37. Summary of yinao incidents shared by participants

| Trigger of Yinao | Violence Details | Outcomes |
|---|---|---|
| Patient sent to hospital for emergent rescue passed away and family could not understand | Patient's family gathered around hospital management and demanded shuofa | Settled through communication with patient's family with help from the police and local government officials (I) |
| Unborn baby died in the process of labour | Patient's family took the coffin to hospital | Not given (T) |
| Details not given | Burning spiritual paper money and turning hospital into a mourning hall | Last for several months (J) |
| Patient died despite emergent rescue efforts, long hours of surgery and the family could not take the outcome | Physical violence and disturbance | Not given (K) |
| A child patient died after being sent to hospital and medical staff worked very hard for rescue. The family could not take the treatment outcome | Disruption of hospital operation by blocking entry into hospital | Resolved after mediation (N) |

Even with the small number of violent incidents shared by participants, significant impacts of yinao incidents could be identified. Most of the violent incidents shared by participants were not reported; and they were not physical violent incidents that caused injuries, which were quite different from the violent incidents reported in Phase 1. The sad story of a medical doctor who committed suicide after falling victim to a yinao incident revealed the psychological damage inflicted by yinao incidents. The violent incident indicates that psychological harm, although difficult to assess and notice, should be taken seriously. The harm caused by a violence incident should not be taken for granted and measured by the subsequent physical harm. Participants were in a good position to observe and describe the psychological impact of violent incidents on the victim as shown in Table 38.

Table 38. Summary of violence impact on medical staff victim shared by participants

| Categories | Sub-Categories | Quotes |
|---|---|---|
| Psychological impact | Scared | Too scared to go to work (O) |
| | Painful | Feeling very painful (K) |
| | Disappointed | Very disappointed (N) |
| Consequence | Quitting | She would cry bitterly before going to work. She later quitted practicing medicine (M) |
| | Committed suicide | Became depressed and committed suicide (H) |
| | Disturbance of operation | Disturbance of hospital operation and doctors dare not go to work for days (O) |
| | No significant impact noted | Complain among friends and associates and then be more alert at work (L) |

#### 8.3.3.2 Violence situation and medical staff's perceived health and safety

Most medical staff perceived themselves to be safe at work and reported not feeling worried about personal safety. Participant L believed "*If there was any serious medical dispute, it would be settled through legal channels*." Participants M and N felt that they should be alright thanks to the fact that they live in Shanghai, where people are normally reasonable. Participant O, although had personally witnessed violence, also reported not feeling worried about her own safety at work because violent incidents were not frequent; and even if there was violence, medical doctors would be relatively safe.

As a hospital dean, Participants J and I both expressed satisfaction with the workplace violence situation in their hospitals. Participant I was positive about workplace violence situation in her hospital because serious violence, as reported in other places, had never happened. Furthermore, the local community in which her hospital was located was relatively safe.

Service user participants echoed the same message that they had never personally experienced or witnessed physical violence against medical staff, although they had learned about it from friends or news reports. Participant D shared her observation of violence against medical staff, saying that the occurrence of violence was still a small probability and medical staff were basically very safe. The situation of violence was believed to depend on the specific local community of the hospital.

Participants personally involved in handling yinao and violent incidents at work, such as medical dispute mediators and hospital deans, were observed to have a more realistic understanding of the violence situation. There was a shared opinion among participants that yinao, which was once widespread, was now under control thanks to improvement made in laws. As regards other physical violence, most medical staff reported not feeling worried about their own safety, as they had not personally experienced physical violence. As a researcher, I believe that being worried and not being worried were genuine perceptions of participants. Perception is largely a result of people's experience and their way of thinking. Violence against medical staff is a realistic problem. The change noted with the yinao situation in China itself is evidence of how violence can be addressed effectively with changes initiated at the macro level.

Overall, all participants did not report having concern for medical staff safety at work. Although they had knowledge of or personally witnessed violence, participants shared the view that doctor-patient relationship had improved. Although it was still tense, it was no longer at its worst. Most medical doctor participants believed that while it was wise to be alert to possible danger and cautious at work, violence against medical staff should not be over amplified. Verbal violence was believed to be wide-spread and normal (see Table 39).

Table 39. Violence situation perceived by participants

| Categories | Quotes |
|---|---|
| Violence is of low probability occurrence | Violence is of low probability occurrence and medical staff are safe. The topic has drawn attention was because it has become sensitive, not because it is serious (D) |
| Caution of over amplify violence situation by mixing verbal violence and physical violence | Verbal violence happens anywhere and shouldn't be over amplified (K)<br>Verbal violence in our context is too often and too much. Given our cultural context, I think we have done a good job to tackle violence (J) |

#### 8.3.3.3 Security measures taken and medical staff's perception of personal security at work

Based on information gained from medical professional participants, hospitals normally have security guards on site and security cameras as regular security measures. Some hospitals were reported to have local police stationed

onsite. However, specific security facilities in different hospitals were found to differ, with some hospitals better equipped than others. For example, according to hospital dean Participants, J and I, current security measures taken inside their hospitals include multiple security cameras at places where the medical encounter takes place with 24 hours real time monitoring, panic buttons within consultation room, and security guards who would be notified first if there is any conflict.

Phase 2 revealed some positive signs of improvement about the traditional pattern of resource distribution thanks to an initiative by the central government to strengthen lower-level hospitals since late 2016. Participant I's hospital was a secondary hospital; yet, as the biggest comprehensive hospital in the county, it was reported to benefit a lot from the new initiative of strengthening primary and township levels of hospitals. The county hospital was also fully equipped in terms of its security measures.

By contrast, Participant L worked at a tertiary hospital and Participant M at a secondary comprehensive hospital, both in a metropolitan city. Neither of the two reported to have panic buttons in doctors' consultation rooms. Some participants (L & N) expressed their concern about current security measures taken in their hospitals, saying that should anything happen, it would be very hard for them to stay safe as there was no emergency exit inside the doctor consultation room. Meanwhile, they acknowledged not feeling worried about their safety at work given the current workplace violence situation in their hospitals.

On the whole, medical professional participants reported the current security measures taken were enough to cope with the kind of violence that they normally encountered. and there was not much concern about their safety at work. If there was any aggressive act against medical staff, they would call hospital security guards and report to hospital leaders, while avoiding entering direct conflict with patients. If security determined the violence was serious, they would call the police. Local government officials may also get involved when necessary.

Participants were divided on their views of security checks at hospital entry. Some participants (A, B) believed it acceptable if such measure was required to reduce possible harm, feeling that security checks in hospitals was the same as security checks in other public places. But some participants (D, N) cautioned about the inconvenience it may cause for service users or create unnecessary sense of distance between service users and medical staff (I, J). They also questioned whether

entry security checks can prevent a person from hurting another if the person really wants to do so, and that violence can also happen outside the hospital.

However, Phase 1 findings (Sections 6.3.4.1 and 6.5.1) identified that the absence of security checks at entry to check for weapons such as knives contributed significantly to violent incidents with serious consequences, including serious injuries and even death of victims. In my view, security and prevention measures are about preparing for the worst, not just to cope with things that normally happen. This section reveals participants' seemingly self-contradicting statements: not feeling worried for personal safety based on previous violence records but having concerns for the inadequacy of the security measures taken, which are not prepared for the worse scenarios.

#### 8.3.3.4 Perceived health and safety

An absence of health and safety culture inside hospitals as a workplace was identified. Health and safety are of critical importance for every medical staff member. However, Phase 2 analyses revealed that most medical staff participants, possibly due to their heavy workload, tended to take the government's building of safety hospitals for granted. The way hospitals handled the matter, suggested an absence of awareness to consistently build a safe culture and the part everyone can play in this effort. What was observed from medical staff participants' response was that the initiative of building safe hospitals had been taken for granted, and that it was something that remained largely a slogan. It meant extra work for them, an administrative task that need to be undertaken, more forms to fill, and more reports to be completed. However, that surely was not the intention of the government initiative. Participants' responses revealed huge gap between what was desirable and what happened in a hospital's effort to create a safe environment.

Weak awareness of medical staff's health and safety from hospital management was identified. Their narrow interpretation of health and safety was limited to violence prevention, enhancing security measures taken, and reminding medical staff to pay more attention to their attitude and communication with servicer users. According to medical staff, violent incidents were perceived as only one type of threat to their health and safety. Risk of occupational exposure and unhealthy work shift arrangements, including working night shifts and stress from work, especially heavy workload, were also considered threats to their health and safety. In

fact, medical staff seemed to have more concern about threats that come from their heavy workload and unhealthy work arrangements than from violent incidents. The present work arrangement itself was found unhealthy, typically great stress from work was identified as an important factor that adversely affected medical staff's wellbeing and subsequent performance at work. As medical staff Participant O put it:

> If medical staff can have more time to rest, have at least two-day off a week, and without so much stress, we can spend more time to improve our professional knowledge and we can have better attitude towards patients.

However, it was noted that hospital senior management did not seem to pay much attention to the risk from an unhealthy work arrangement. In fact, both hospital dean participants responded to the question "what efforts have hospital made to help medical staff to better balance their work and family" with efforts their hospital made to care for their medical staff but nothing about how to make the unhealthy work arrangement healthier. It is not clear the reason behind them failing to mention the unhealthy work arrangement and the impact on medical staff wellbeing. The similar responses of the two hospital dean participants suggest that medical staff's unhealthy work arrangement, and the consequent impact on health, were largely ignored by hospital senior management.

Inadequacy in training provided to medical staff was identified. For example, there was reported to be professional training to help medical staff improve their yishu and communication in hospitals. However, training provided may not be designed specifically for medical staff to be effective and helpful. There is seldom consistent/systematic health and safety training for medical staff, besides reminding them to pay attention to their attitude when communicating with service users and avoid entering direct conflict with service users (Participants M, O). Some hospitals were reported to provide training that focused on improving communication over specific communication scenarios; for example, communicating with patients over a specific medical condition (Participant I). However, most participants reported having no such specific training in their hospitals. There was no training reported to help medical staff on how to respond properly to certain aggressive behaviours from a service user to stay safe (Participant N). There were reported to be some mechanisms within hospitals to respond to violence; however, most of them were to cope with the aftermath, not systematic violence response mechanisms that aim at

minimising harm. For example, if there is verbal violence, what should be the proper response; what precaution should be taken to cope with different forms of violence and, what kind of behaviours can trigger a higher level of security alert?

Overall, a health-and-safety culture was absent from hospitals, and there lacked consistent health and safety practice within hospitals. How to make effective communication between service users and medical staff possible, how to equip medical staff with the communication skills and provide a context that makes positive communication between service users and medical staff possible, remains a blind spot in hospital management. Problems in health and safety management of hospitals identified by participants were summarised in Figure 25. Such findings were consistent with those from Phase 1 (Section 6.4).

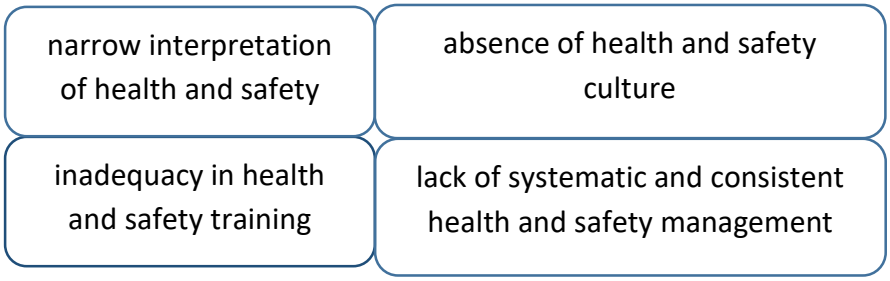


Figure 25. Problems in health and safety management of hospitals

### 8.3.4 Summary

In this section, the work and life state of medical staff, was identified as unhealthy and could negatively affect their work performance, communication, and dynamics with service users. Medical staff income structure and source of income were found to result in a perceived conflict of interest, causing mistrust from service users.

A relatively unknown side of medical staff was uncovered in Phase 2. Service users were found to lack chances to get to know medical staff as real human beings. The workplace violence situation, once very bad, had been noted to significantly improve. Although not satisfied, medical staff participants reported not being worried about their personal safety at work. However, participants expressed concerns over threats related to their working conditions, unhealthy work arrangements, and the tension in doctor-patient relationship.

This section uncovers what is behind medical staff job performance

problems, service users' mistrust, and the information gap that result in service users' misunderstanding and mistrust. It gives a better understanding of how medical staff were perceived and reasons for service users' negative perception of medical staff. Findings in this section reveal the importance of bridging information gaps between service users and medical staff to enable service users to know medical staff better as ordinary people who are dedicated to their profession and are willing to sacrifice and overcome difficulties to help their patients. Enabling service users to have a more realistic understanding and expectation towards medical staff and medical ethics seems to be a way to rid barriers to trust and effective communication.

Furthermore, findings identify the absence of health and safety culture from hospitals as a workplace. Findings also suggest that unhealthy work arrangements with negative impact on medical staff wellbeing and job performance, are not getting attention from hospital management and being encompassed as part of health and safety management in the hospital. However, the impact of unhealthy work arrangements on medical staff wellbeing and job performance is real, which makes it a risk to medical staff health and safety. Several information gaps can be identified that need to be addressed to remove obstacles of effective communication and trust building between service users and medical staff as summarised in Table 40.

Table 40. Information gaps and their impact identified

| What is Known/Perceived | What is Unknown/Ignored |
|---|---|
| Medical staff income is closely related to their prescription | Medical staff are ordinary human beings; they have emotions, weakness, and can make mistakes; medical staff also need to worry about income and making a living |
| Medical staff should be angels who serve patients without thinking about earning money | Medical staff do not need to be angels to be good medical staff |
| Medical staff only work for money | Medical staff take genuine pride and satisfaction out of helping patients; medical staff do care about patients |
| Medical staff do not care about patients | |
| Medical staff are expected to meet patients' needs anytime | Medical staff are not ironmen |
| | Medical staff wellbeing is compromised due to unhealthy work arrangements |
| Erosion of medical ethics | Earning their living is not necessarily erosion of medical ethics |

## 8.4 Understanding service users and the associated risks

Guided by the socio-ecological theory, Phase 1 revealed service users' characteristics, such as personality, health literacy, expectation, and pre-assumptions, could be important factors that affect the outcome of the medical encounter. Specifically, Phase 1 findings highlight limited health literacy, high expectation, and mistrust can pose risks to violence. This section tries to clarify understanding of the risk associated with service users by answering the following questions: 1) What are service users' expectations? 2) What is their health literacy like? 3) How is service users' mistrust manifested? How does their high expectation, limited health literacy and mistrust impact on their perception of their experience and the outcome of the medical encounter respectively?

### 8.4.1 Service users' expectation

Service user participants' expectation in using medical service has been briefly covered in Section 8.2. This current section gives more details. Service users' expectations fall into three categories: good consultation doctor, efficiency and quality of service provision, and convenient access to facilities (see Table 40). Consultation doctors' yishu and yide were the two top concerns for medical service user participants. Efficiency in terms of time and money, convenience, and easy access to quality medical resources were also desirable. What is more, adequate and honest communication over medical conditions and treatment plans were expected. Consultation doctors' having good attitude and patience with patients in communication, and being committed, were all viewed as manifestations of good medical ethics.

Compared what service users expect from medical services (Table 41) and the key elements in determining service users' experience (Table 30), they appear highly consistent with each other. What service users expect in using medical services fits well into what can lead to positive experiences and perceptions in using medical services. Absence of the desirable factors could lead to negative experiences and perceptions.

All service user participants in Phase 2 demonstrated reasonable expectation towards medical staff and medical services, knowing the limit of medical science and medical services, as can be seen from Table 41.

Table 41. Summary of service users' expectation in using medical services

| Expectation Target | Categories | Sub-Categories | Quotes |
|---|---|---|---|
| Consultation doctors | Good consultation doctors | Adequate communication | Adequate communication on medical conditions and best possible treatment options (C) |
| | Doctors' medical ethics; humanistic care | Responsible; considerate | Doctors being responsible and can examine carefully, efficiently (B)<br>Doctors being considerate for me and help me to save money when making prescription and treatment plan (A)<br>Good doctors who can examine carefully (F) |
| | | Doctors being committed | Doctors can try their best to provide treatment within the capability of present medical science and technology (A) |
| Service provision | Efficiency in terms of time and money | More efficiency, less cost of service | With more speed, spend less money (F)<br>[Doctors] help me to save money when making prescription and treatment plan (A)<br>[Doctors] can examine carefully, efficiently (B) |
| | Quality in service | Medical staff awareness to serve | Better service with better awareness to serve (D) |
| Facilities | More and better facilities with easy access | Increased medical resources and updating medical facilities | Updating medical facilities (C)<br>Strengthening community hospitals with more medical resources (C) |
| | | Improved access | Convenience in access to medical services (A, B)<br>Promoting health literacy to enable better use of medical resources (C) |

Participants were invited to define a good doctor; Table 42 summarises the key elements of a good doctor which included: being patient, knowledgeable, and treating patients consistently; being committed; being considerate for patients; being professional and having good service attitude. All these were regarded as different

manifestations of yide, which can be easily observed by service users and used to judge whether a doctor is good. The best way to evaluate a medical doctor's yishu is through the treatment outcome, which is difficult to do during a brief medical encounter. Therefore, service users may pay more attention to a doctor's attitude and the way the doctor communicates, which was possibly the reason for Participant E to say:

> If it were something about a medical doctor's poor attitude, I might make a complaint, but I wouldn't do that if it had something to do with yishu.

Table 42. Summary of key good doctor elements by participants

| Categories | Sub-Categories | Quotes |
|---|---|---|
| Yishu | Yishu | Yishu, high level of yishu (A, B, C, D, E, F) |
| | Professional knowledge | Knowledgeable (C) |
| | Commitment to the profession | Keeping updating professional knowledge (E) |
| Yide | Commitment to the profession | Yide (A)<br>Being committed to being a good doctor (M)<br>Focusing being a good doctor and nothing else (L)<br>Being professional (D)<br>Treating patients the same without making discretion based on acquaintances (C)<br>Keeping updating professional knowledge (E) |
| | Good attitude | Be patient and with good temper<br>Having very good attitude |
| | Humanistic care | Caring with empathy (C)<br>Being considerate for patients (A, B)<br>Being responsible, having sense of responsibility (F) |

A service user may find it harder to endure a bad attitude than to endure poor yishu of a consultation doctor due to difficulty in assessing the latter. The findings highlight the importance of good communication with service users and partly explains why poor attitude from medical staff easily triggered service users' anger. However, service users' experience (see Section 8.2.1) revealed that if the consultation doctor was not someone they knew personally, subject to the brief consultation time, absence of humanistic care would make it more difficult for the doctor to be perceived positively.

Effect of treatment and efficiency in terms of time and money were key elements that service users cared about, as consistently shown from service user participants' responses. Good attitude and relaxing service provision environment were also desirable elements but seemed to be things that service users were willing to compromise on the condition that the doctor's yishu could effectively solve their problem. Medical staff participants felt helplessly frustrated in noting how some service users' expectation exceeded what current medical human resources could offer; yet service users may not know or choose to ignore how medical staff struggle to meet their needs.

### 8.4.2 Service users' health literacy, knowledge about medical staff and public hospitals, and the associated risks

This section presents findings concerning service users' health literacy and its impact on doctor-patient communication and the medical encounter. It answers the following questions: What is the state of health literacy of general service users? How can service users' health literacy affect their expectation and perception in using medical services? How can service users' health literacy affect the doctor-patient communication and the outcome of the medical encounter?

Almost all participants, medical staff, hospital deans, and service users alike, mentioned the lack of basic health literacy as a major barrier for service users to understand communication during the medical encounter. Limited health literacy could hinder communication in many ways and affect how they viewed the treatment process and treatment outcomes. These findings are consistent with those from Phase 1 (Section 6.4).

Most participants believed it necessary to promote health education and health literacy among the population, to improve doctor-patient communication and doctor-patient relationship and reduce risks of medical disputes and violence. In Chinese healthcare setting, brief consultation normally means that it is almost impossible to cover health education as well as get to know medical history, medical conditions, and make prescriptions for outpatients. Patients were observed to not comprehend what medical staff tried to communicate, which hindered their ability to understand the complexity of treatment process. As a result, patients found it hard to accept treatment outcomes of medical services. As Participant J commented:

> There should be more health education among the public. Once they have the right understanding, they won't get it wrong. (J)

Strengthening health literacy education and promoting health literacy among the public were believed by participants to help overcome communication barriers and reduce the many reasons that cause service users' misunderstanding, resentment, and even conflicts with medical staff. For example, Participant A stated:

> Some patients were just being unreasonable, blaming medical doctors for everything that happened to them. …They expected cure every time they went to hospitals. How was that possible? How could you expect doctors to bring the dead back to life again? It has something to do with their lack the minimum knowledge about medical sciences to know about the limit of medical science.

All service user participants demonstrated reasonable health literacy, knowing the limit of medical science, and knowing that patients also need to take responsibility of their own health:

> Patients need to know that they need to follow doctors' instruction. Taking medicine and receiving treatment is one thing, taking doctors' advice, and paying attention to own diet and daily routines is another to achieve the best treatment outcome. If the doctor asked you to do this, you wouldn't listen, and your condition become more serious, then you shouldn't blame the doctor. It was not the doctor's fault. (Participant F)

However, what can be worrying was the kind of confidence that some service users may have over their own ability to judge medical doctors' diagnosis, prescription, and treatment plans. This kind of overconfidence was the reason for some patients to question and challenge doctors' prescription and treatment plans as experienced by most of medical doctor participants. This sense of over confidence comes through in Participant C's remarks:

> Sometimes we also have some knowledge about that, and we can also research online about the symptoms. We also look at the treatment result. Anyway, we can tell the treatment plan. We can tell.

Such over confidence reflected service users' possible underestimate of the complexity of medical services. Participants K, L and N, has all experienced being

personally challenged and questioned by patients. Questioning and challenging doctors could escalate to violence as reported in Phase 1. The kind of over confidence was the same confidence behind the service user's anger that resulted in violence in VI2 (see Chapter 6).

Analysis showed that even among service users, participants in Phase 2, who generally demonstrated reasonable health literacy and expectation and had some knowledge about the work of medical staff, there could be times that they may not properly comprehend the complexities involved for medical doctors to reach clear diagnosis, as reflected in the words of Participants B: "*Doctors should have been able to make judgement without running the test. They should be able to use their experience*".

With the kind of reasonable health literacy demonstrated by service user participants in the study, it was not difficult for them to accept the limit of medical services and the worse outcome of medical services: "So long as the doctor had tried the best, I would have no problem to accept the inevitable outcome" (Participant A). However, with the general population, lower average health literacy could be expected, making it more difficult for them to comprehend the risk carried in medical service provision and to accept adverse treatment outcomes.

### 8.4.3 Service users' overall impression of medical staff

Overall, most service user participants reported having positive impression of medical staff. Participants F and E, for example, reported that despite some aspects not being satisfactory, they had an overall positive impression of medical staff, including doctors acting responsibly for patients regardless of whether they know each other or not. Similarly, Participant D expressed her respect towards medical staff with the following words and attributed shortcoming of medical services to the fact that medical staff are overloaded:

> I really respect their work. Doctors, nurses, and healthcare workers alike. I feel they are all very dedicated. If there is anything that they fail to meet the expectation, it was just because they are overloaded.

It was noted that all Phase 2 service user participants reported to have medical staff friends or family members, so it could be possible they had greater opportunity to know about medical staff and thus had more positive comments. All service user

participants shared the same preference of turning to medical doctors who are related to them for medical services, as Participant F noted:

> There would still be waiting, but I can be more assured with the doctor I know personally.

Knowing the doctor personally seemed an important factor to support service users' trust and confidence in the medical encounter. Service users, in general, hope to communicate with medical staff if they have chance (see Section 8.2.2).

However, it was worth noting that despite service user participants' positive comments on medical staff, they could still show mistrust and negative perceptions regarding key elements of their experience in using medical service. It highlights how service users' perception could be overshadowed by the overall mistrust and tension in doctor-patient relationship in the community. The overall positive impression was also not necessarily contradictory with their negative impression of using medical services noted in Section 8.2.1. Service users' overall impression was not necessarily related to any specific visit. It could be based on their impression of any aspect of their visit: service environment, service provision procedures, or medical staff. Service users could experience a good consulting doctor for their medical visit; however, it is still difficult to change the reality of hospitals as being crowded, noisy, and the whole process being time-consuming and xinku due to the volume of patients.

### 8.4.4 Service users' knowledge in making complaints and resolving medical disputes

Service users were asked about their knowledge of making complaints and resolving medical disputes. Service user participants reported knowing little details about making complaints or resolving medical disputes. Most reported having vague ideas of ways to make a complaint about the medical service received. They stated, however, that if needed, they would go through legal channels to protect their rights and interests. Such response may be related to the study participants' generally high level of education. However, participants reported that knowing little about making a complaint and resolving medical disputes deterred them from making a formal complaint:

> I always feel it would be a very torturing process, thinking about the task of gathering evidence. I am not even sure whether it was worthy of the time and energy. (Participant B)

> So long as it was not too much, I would just let it go. Last time I didn't make a complaint because I really didn't have the time and energy for it, since I was carrying my baby. But as I reflected on it, perhaps it was because I didn't have the awareness to protect my own interest. But if it happens now, I will make a complaint. (Participant A)

> I would like to have some assistance concerning the legal issues in making a complaint or resolving the medical dispute. My job is customer service, and we usually would take the initiate to communicate with our clients. I hope hospitals they can also take the initiate to reach out to us. (Participant B)

Participants' responses gave a picture of service users generally lacking knowledge in resolving medical disputes, with relevant information not readily available in the community. Lack of knowledge can put service users off from making a complaint or resolving medical disputes through legal channels.

### 8.4.5 Summary of risks associated with service users

In this section, it was noted that there could still be high and unreasonable expectation towards medical staff even among service user participants who generally demonstrated reasonable expectation towards medical staff and medical services. Participants' expectation was found to be both reasonable and unreasonable. Reasonable expectations, when unable to be met, could result in negative perception of experience. Service users' unreasonable expectation, unmet reasonable expectation, and limited health literacy, coupled with mistrust towards medical staff, could pose risks of misunderstanding, friction, and violence. This finding suggests the need to promote health literacy among the population, manage service users' expectation to be practically reasonable, and meet their expectation. Findings about service users' knowledge gaps in resolving medical disputes also indicate the need to improve service users' access to information and assistance in the community to go through legal procedures to resolve medical disputes.

## 8.5 Understanding hospitals as the context of the medical encounter

This section presents findings that can help to gain a better understanding of what happens to and within hospitals that shape the context for the medical encounter between service users and medical staff, and impact how they interact with each other. Specifically, it presents answers to the following questions: 1) What problems do hospitals generally face in terms of human resources management? How do hospitals' human resource problems affect medical staff's job performance and the service provision? 2) What is the general financial situation that public hospitals face? How is that relevant to hospitals management, medical staff's job performance and doctor-patient relationship?

### 8.5.1 Human resources problems and their impact

Hospital dean participants (I & J) both acknowledged having medical staff shortage in their hospitals, resulting in a heavy workload for medical staff. Some medical staff were reported to spend almost day and night, seven days a week in hospital without having enough time to go home to rest. Participants noted the difficulty in recruitment and retaining human resources: "*Some specialties have extreme shortage of medical doctors, especially in ED, paediatric, and ENT*" (Participant I); "*Sometimes, even when our hospital wanted to recruit more staff, they couldn't always find someone*" (Participant O); and "*We have difficulty in recruitment. It could happen that we planned to recruit 20 to 30 but we usually can only get around 10 doctors*" (Participant I).

Meanwhile, there seemed to be a brain drain for the medical profession. Participant H, a former medical student, recalled how half of his classmates decided not to practice medicine upon graduation, including himself. Among those who chose to practise medicine upon graduation, some eventually quit.

Non-medical participants also noted staff shortages, "*Some hospitals in townships, they couldn't manage to pay their medical staff, so it was difficult for them to recruit medical doctors even when they wanted to*" (Participant R). Lower-level hospitals find it hard to compete against tertiary hospitals for doctors and survive in the job market, "It is understandable that once they have their professional practice registration, some of our doctors will leave and seek jobs in cities like Nanning" (Participant I).

Staff shortage caused a series of problems, as noted by almost all participants, including long waiting time for patients, frustrated patients, and medical staff working under stress. As previously noted in Section 8.3.1, over worked medical staff may have poor attitude and working state that could seriously impact on doctor-patient communication and medical service quality.

What is more, difficulty in recruitment and retaining medical staff made it hard for lower-level hospitals to implement performance management and quality assurance practice, "*Small hospitals, they are very afraid (to discipline medical staff) because their remuneration is very poor and have difficulty to retain medical staff*" (Participant R). As a result, it was difficult to improve service provision, "*We also wanted to improve service procedures, but possibly due to medical staff shortage, it was not possible*" (Participant N).

### 8.5.2 Public hospitals' funding and welfare nature roles perceived

Hospital dean participants identified medical service fees and government subsidy as the two main sources of hospital income. According to these participants, government subsidy was mainly in the form of providing basic salary for hospital staff, which only made up about 10 or 20% of medical staff's total income. The remaining income, about 80% used to come from revenue generated from service and drug sales by the hospital. With the implementation of zero mark-up drugs policy in late 2015, hospitals can no longer make profits by selling drugs. Since then, revenue generated from service provision has become the main income. There was supposed to be an extra government subsidy to make up for the lost income due to zero mark-up drugs. However, the subsidy was observed to be not enough to cover the loss; and sometimes the promised allocated fund from the local government was not received. Major expenses of the hospital included medical staff bonuses, infrastructure, and facilities investment.

According to Participant I, public hospitals got involved in large scale provision of emergency medical aids to victims of accidents and disasters to fulfil their welfare role. Hospitals usually bear the major cost of such emergency medical aid provision with emergency funds allocated by the local government to cover a small part of the cost. However, most of the time, hospitals are left to cover the cost for debts owed by patients who have received medical treatment but have no

financial means to pay the costs and have no family to help. Participant K commented on the survival pressure of hospitals:

> All doctors and hospitals are now pushed to the market, then your (medical staff's) income is directly linked to your patients. If you have more patients, you can have more income. The same is true with hospitals.

Although hospitals were pushed to the market for survival, they were not given the same autonomy of a business entity:

> Yes, they don't provide for hospitals, and they are in control of public hospitals. (Participant K)

A tight budget also made hospital senior management hesitate in recruiting more staff:

> Sometimes, our dean also wanted to recruit more people, but if more people are hired, then, there can be worries about cut of our bonus based on performance. (Participant O)

While many participants spoke of the survival pressure, the two hospital dean participants said things were getting better in their hospitals and they were both very positive about the future development for public hospitals. They reported increased government input for their hospitals, mainly to improve hospital infrastructure.

All service user participants strongly believed public hospitals should serve public welfare functions, rather than being profit-generating organisations. For example, participant H explicitly put it as: "*Public welfare nature should be emphasised. Public hospitals should serve public welfare functions*." Similarly, Participant A stated:

> Hospitals should not become money-making organisations. They should maintain their public welfare nature, or at least not-for-profit organisations. They shouldn't make money out of medical services provision. Hospitals should be changed back to serving public welfare function. That is the most important thing.

Service users' remarks convey strong negative opinion on hospitals becoming money-making machines, and medical staff talking about money or making money out of their practice. However, the way hospitals are funded, meaning hospitals rely

on medical service fees and volume of patients to generate revenue to pay their medical staff, has resulted in a health system that can surely disappoint general service users, and a conflict of interest that can lead to mistrust from service users.

Hospital involvement in public welfare functions may often go unnoticed by the public, as reflected in service user participants' responses. As a person who had previously lived in in China for almost 30 years, such information was also known to me for the first time. Had I not been the researcher, I would have taken it for granted that public hospitals were named public because they were fully funded by the government. What the general service users did not know was that most of the time it was the hospital involved that covered the cost of the medical services provided to victims of accidents and disasters; and that cost may subsequently take away part of the hospital revenue, which would then virtually take away what otherwise would be medical staff bonuses and their personal income. It would be helpful to make such information transparent to the general service users, as it could help hospitals being perceived as delivering a service closer to what has been expected by service users.

As I was listening to participants, I could not help thinking, had people known about how public hospitals and medical staff serve welfare nature functions, would it help change their perception of hospitals and medical staff as being money-making machines to something more positive? Would that benefit trust-building between service users and medical staff?

The perceived conflict of interest makes it hard for service users, in general, to believe that medical doctors do not consider their personal gains in making treatment and diagnosis decisions, as evidenced in participants' perception of doctors' prescription and medical staff income (Section 8.2.3). Participant A's remark reflects the possible gap in what service users expect and what they experience with the health system. Previous reviews of health reforms in China (Chapter 2) can possibly help interpret the disappointment and agony accompanying such a gap. Literature provides evidence of how service users' satisfaction with the health system can impact on their satisfaction in using medical services (Bleich, Ozaltin, & Murray, 2009).

Participant M believed that public hospitals' welfare function should be fully funded by the government:

> [Public welfare nature] it is a matter of money. If it is not funded by the government, how can it be termed as public welfare nature? If the

> government invests no money, but makes the medical doctors and nurses to cover the cost with their own income and bonus, is that public welfare nature?

Participants agreed that more funding is key:

> Hospitals, patients, and the government in this is like playing a game of Majio. If they are all in the game to play together, then there must be someone to lose and someone to win. The game is impossible that everyone can win, and no one loses money in the game. (Participant J)

### 8.5.3 Hospitals' handling of patient complaints

Phase 1 findings revealed problems in handling patient complaints and medical disputes, which could result in resentment from service users and even escalate to violence. Phase 2 findings enable a better understanding in this respect. Hospitals were reported to pay close attention to monitor patient complaints. According to Participant J, their hospital was trying its best to resolve patients' discontent at the earliest stage possible to avoid escalation. The specific department to handle patient complaints and medical disputes was found to come under different names in different hospitals. For example, medical ethics office, yiwuke (medical affair department), and doctor-patient relationship office are all possible names for the department. Yiwuke is responsible for handling complaints and medical disputes. Whenever there is a complaint, yiwuke will communicate with the dean of the department involved to investigate.

Participant P was the only participant working in a doctor-patient relationship office. According to her, whenever there was a patient complaint, they would choose to respect the service users' perception and feeling and would apologise first. They would investigate and double check with the medical staff involved and try to restore the facts based on information given by both parties. Normally, complaints were handled according to procedure and strived to remain neutral. If the complaint was due to a patient's misunderstanding or inability to understand medial staff's work, then the coordinator would apologise and communicate with the patient to help them understand the situation. Hospital deans echoed the same message. If there was a medical dispute, they would also communicate with the patient's family about

treatment process and plans, and work situation, to help them understand and accept risks in medical services provision.

However, some medical participants expressed their concern over overemphasising patients' perception, yet not showing enough support and trust towards medical staff from hospital senior management:

> When there was any complaint from patients. You, as the medical staff, you would be the one who was wrong no matter what happened. (Participant O)

> If yiwuke were not good enough, they normally wouldn't help you. You as the doctor, would have to face the patient yourself and cope with everything. (Participant M)

The finding is consistent with findings from Nie et al., (2018a)'s study that not all hospital management offered the same support and understanding towards their medical staff, and medical staff could be punished regardless of whether the patient complaint was valid. Fear of patient complaints and medical disputes, and the need for self-protection, rather than financial gains alone, are reasons behind the mistrust shown towards service users and the seemingly over-prescription observed with medical doctors (Bourne et al., 2017; Nie et al., 2018a).

Information given by hospital management (Participants I, J, & P) provided a positive picture of handling patient complaints. It is noted that they all came from hospitals whose violent incident records were either not so bad, or where things had been improved, as in Participant J's case. Their ways of handling patient complaints may explain why their hospital's situation is better.

Typically observed from many of the Phase 1 violent incidents was that hospitals failed to handle patients' complaints properly at an early stage and unable to eliminate misunderstanding from service users that medical staff should be held accountable. As a result, patients' discontent and frustration escalated to violence. Due to the sequential design of the study, violent incidents included were reported during 2015 and December 2017. Phase 2 interviews took place in late 2017, by which time, participants reported the situation had improved. It was understandable that participants reported positive changes during that period. However, the situation varied depending on the specific hospital as identified from Phase 2. The change

noted over the period indicates that handling patients' discontent in time to avoid escalation can be effective in preventing medical disputes and violence.

### 8.5.4 Summary

This section presents findings on key risks associated with major problems observed inside hospitals that impact on doctor-patient relationship and the medical encounter— directly and indirectly. Problems were identified in the following areas: hospital survival pressure, hospital human resource management, service delivery management, public relationship management, and health and safety management (see Figure 27). Medical staff shortage is a key human resource problem and could result in medical staff being overloaded, compromising their wellbeing, and problems that could consequently undermine effective doctor-patient communication and doctor-patient relation. A direct impact of medical staff shortage is long waiting time for service users and negative perception of service experiences.

Consistent with literature (Bao, Fan, Zou, Wang, & Xue, 2017; He & Qian 2016), Phase 2 identified medical staff shortage could cause a series of other problems in staffing and job designs for service provision, and medical staff performance management, which can impact communication between service users and medical staff, and how medical staff are perceived by service users (Figure 26) on the following page.

Survival problems faced by hospitals were identified as the reason behind medical staff shortage, as it impacts their ability to offer competitive income and compensation packages to attract and retain medical human resources. It is, therefore, fair to say that it was the problems identified in hospital management that result in a context of the medical encounter that puts the health and safety of medical staff at risk. However, many of the problems hospitals face can find their underlying reasons with things that happen in the community and the health policy. These problems are presented in the following section.

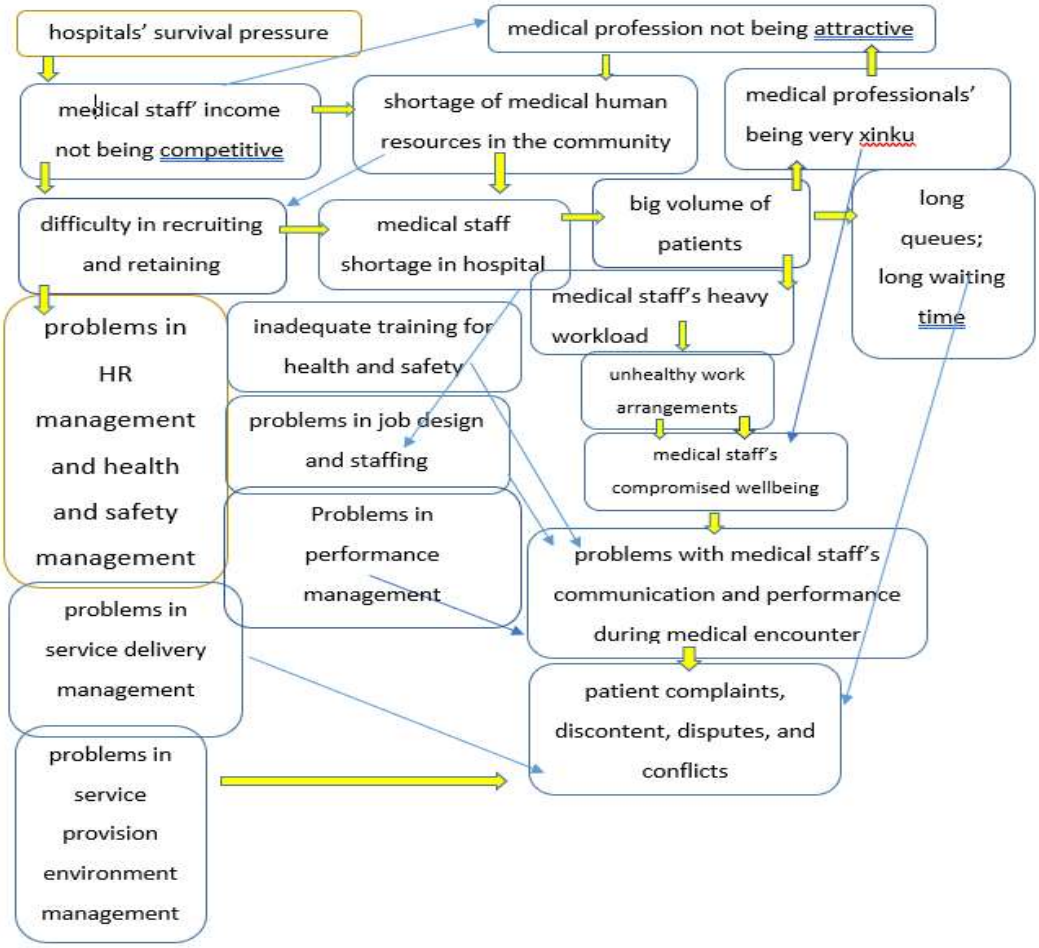


Figure 26. Key hospital management problems and their impact

## 8.6 Understanding the community context

This section presents findings that enable a better understanding of the wider community wherein medical service provision and medical encounters are situated. Factors in the wider community, including general service users' health literacy, mistrust between doctor and patient in the community, issues of kanbing nan and kanbing gui, tiered service provision implementation, and general service users' expectation were identified as influencing doctor-patient communication during the medical encounter.

### 8.6.1 Issues of kanbing nan, kanbing gui and underlying reasons perceived

Kanbing nan (a Chinese expression meaning being difficult to see a doctor) and kanbing gui (a Chinese expression meaning being expensive to see a doctor) are

widely believed to be among the major issues that ordinary Chinese people face. However, participants did not seem to share the same opinion. The term "kanbing" itself can be misleading, as in China, kanbing typically includes the following in a single visit: seeing a doctor for consultation, getting laboratory tests and examinations, getting prescribed medication from the affiliated pharmacy located within the hospital. Therefore, kanbing could mean many different things; more than is implied in the English translation "see a doctor". Participant H noted how the kanbing gui (expensive to see a doctor) was a misleading statement: "w*hen people said kangbing gui, they meant the total cost for the visit was expensive, which typically included cost of consultation, cost of medicines, and cost of examinations, rather than the cost for doctor's consultation only. When people mixed up cost of kanbing (seeing a doctor) with cost of purchasing medicines and examination, they would have the illusion of kanbing gui* .

Most participants believed kanbing nan is true, in that there are "*always big crowds of people in hospitals*" (Participants A, B), and true "*when you want to find specialist, experts*" and "*when you want to seek help for some acute medical conditions*". However, it was "not difficult" to get a general consultation with a doctor without senior professional title (Participants E, F).

Kanbing nan can be true when critical medical conditions are involved; it can be associated with the lack of guanxi (meaning relationship, connection), "*without guanxi, it is almost impossible to have access to beds in tertiary hospitals... there are always long queues and long waiting unless you find your guanxi*" (Participants H). It was perhaps for these reasons that participants preferred to finding a doctor to whom they may be related, whether it was just to avoid long queues (Participants C, H) or peace of mind (Participant E). Some participants were aware that using guanxi can mean jumping in queue or squeezing away other service users' chance, which is not fair to others. Participant B believed, comparatively speaking, that kanbing nan was more serious than kanbinggui: "*It is difficult to find a doctor whom I can trust, and I have nowhere to find the right doctor*."

However, some still believed kangbing gui is true when they included the cost of purchasing medicines as part of the total cost of the hospital visit. It is hard for most people to separate cost of examinations and medication from the consultation fee, the real cost of kanbing. Service users were observed to become frustrated over the burden of the medical cost. Participant R, a medical dispute

mediator who had handled a lot of medical disputes and witnessed service users who lived in poverty in the rural areas struggling to pay their medical costs, believed kanbing gui was still true given their income. After all, it makes no difference for people who are struggling to pay their medical bills whether the money goes to hospitals or the pharmacy.

Participant D believed kanbing gui was not true: "c*onsidering the time cost of medical doctors for the service provided, kanbing cost was not expensive*". She gave her mother's medical bill as an example. Her mother, a retired senior doctor, had medical insurance to cover all medical costs and she was surprised to find that no there was almost no out-of-pocket payment for her mother's medical bill. Being financially better off, and fully covered by medical insurance, she believed kanbing gui was not true.

Participant J, a hospital dean, believed kanbing nan was not true:

> People say kanbing nan because you'll have to queue. But in China, the so-called emergency consultation is usually not for emergent situations. You can still have a chance to see the doctor, but in other countries, even if you queue, you may still have no chance to see the doctor.

Participant J's perception may have something to do with his position; he used to persuade his parents that he is a medical doctor, and he has many friends who are medical doctors, not to mention he is the dean of a tertiary hospital. Even if he and his family decided to go to see a doctor without relying on guanxi, it would still be easier for them to find a doctor that they can trust and who will try their best to provide services to him and his family. Not knowing which hospitals to go, and which doctor to trust, and how to find out the information to decide, was the reason for Participant B to say that kanbing nan is true. After all, for ordinary people, seeing the doctor is not the purpose—getting needed help and fixing their problems is. As the researcher, I am also a service user. In my experience, turning to a doctor whom you know nothing about for help is like trying your luck.

In addition to the conflict between the supply and demand of quality medical resources, some participants believed there are other reasons behind the observed kangbing nan:

> kanbing nan is the result of the big population we have here in China. Even with our medical doctor friends, we still find kangbing nan. (Participant U)

> kanbing nan may have something to do with the low efficiency of hospitals. Simpliying procedures and reducing burden may help. (Participant G)

The perceived issue of kanbing nan and kanbing gui reflect people's concern over the conflict between supply and demand, accessibility, and availability of quality medical resources. It highlights the anxiety associated with difficulty for people without guanxi to get access to quality medical resources and medical services, a key issue in the health care system.

### 8.6.2 Tiered service provision, medical resource efficiency and distribution

Most participants, service users and medical doctors alike, believed that implementing tiered service provision system was a necessary step to improve the efficiency of available resources:

> Tiered service provision is indispensable for improving medical service provision environment. Real implementation of it can be beneficial. (Participant K)

> Indeed, most of the patients were coming back only for repeated prescriptions or follow-up. Such services could be provided in primary health care facilities rather than a tertiary hospital. It was a waste of medical resources. (Participant L)

While medical professional participants all agreed that implementing tiered service provision may help reduce patient volume in tertiary hospitals, and improve medical resources efficiency, most participants reported not yet being aware of implementation of a tiered service provision system, as patients were still free to choose which hospital to go to for medical services. Only Participant I reported that tiered services were being implemented in her hospital; but perhaps, as Participant H noted, tiered service provision applies more to in-patients than out-patients. Both Participants K and J explained that the reason for not implementing compulsory tiered service provision was because patients had the right to choose the hospital to which they wanted to go given the current imbalanced distribution of medial resources.

Participants believed the reason that tertiary hospitals are being overloaded is failure to effectively implement the tiered service provision system:

> Tertiary hospitals are serving all patients, serving all the functions including that of community hospitals, VIP hospitals. It is reason for its being overloaded without effective diffusion of patients. There should be effective diffusion of patients, to increase efficiency of medical resources and all levels of hospitals focus on different functions. (Participant D)

Participants agreed that unsuccessful implementation of tiered service provision was one of the reasons for overcrowding of tertiary hospitals and under use of secondary hospitals and primary health care facilities; specially, hospitals in townships and rural areas. Some participants explained the difficulty in implementing tiered service provision with the uneven distribution of medical resources in different levels of hospitals and the health seeking culture.

In Section 8.2.1, it was found that service users generally believed primary health care facilities are only good for minor illnesses and tertiary hospitals do a better job when acute medical conditions are involved, as they normally have better medical human resources and facilities. Participant H explained the connection between the level of hospital and quality of medical resources, which was consistent with literature that indicates traditionally there has been uneven distribution of medical resources (Pan et al., 2015b), giving rise to the subsequent health seeking culture of preference of tertiary hospital. These two factors contributed to the observed difficulty in implementing tiered service provision and the low efficiency of existing medical resources. Figure 27 summarises key problems identified with medical resources and their impact based on findings. Low efficiency for the available medical resources, in turn, intensified the conflict of supply and demand of medical resources with kanbing nan being perceived as a problem that increase risks of friction and conflicts as identified by participants.

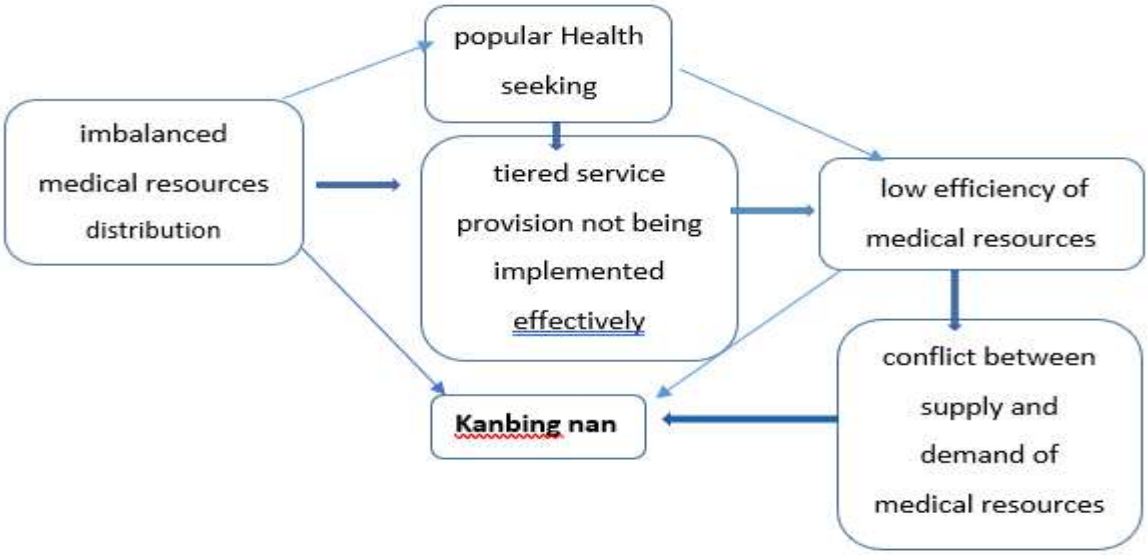


Figure 27. Key problems with medical resources and their impact

### 8.6.3 Media reports, public opinion, and doctor-patient mistrust

Medical doctor participants agreed that there was generally negative perception about medical doctors resulting from the media coverage:

> Media tend to report medical disputes with prejudice against medical doctors. It is very wide-spread practice to report a medical dispute with medical staff being held accountable regardless of the truth. There have been very negative public opinions of medical doctors due to such practice for a long time. (Participant K)

Other medical doctor participants noted the irresponsible media reports over medical disputes and how they had damaged doctor-patient relationship:

> Those reporters particularly, they never care about the truth. They just think that they are doing justice for the patients. (Participant O)

> Some news reporters really meant to create turmoil and disturbance simply to draw attention from the public without any bottom line of work ethics. (Participant M)

Mediator participants (P, Q, & R) echoed the message that there had been some very irresponsible and biased media coverage of medical disputes. Participant R gave an example of how media did not bother to make sure the information about the specific parties reported to be involved was accurate:

> Some media reports are simply to attract attention. There should have been thorough investigation prior to reporting the dispute and there should have been follow-up reports to let the public know about how the dispute was settled eventually.

Participant, H, a service user, cited the notorious example of the report of a medical dispute, once widely known as "shabumen[1]", to highlight the irresponsible media reporting of medical disputes that misleads the public: *Some typical cases included the shabumen, I feel it was a total lie from the media just to mislead the public and to trigger conflicts*. Participant R, a medical dispute mediator, perhaps best explained the damage to the medical profession and doctor-patient trust:

> Everyone wanted to know how the dispute was settled eventually. Without follow-up reports on the final settlement, it was difficult to know what had caused the damage to the service user and whether the hospital should be held accountable for the damage or not. With the previous reports, people would normally take it for granted that the service provider must be responsible for the damage and should be blamed. Because the damage on the service user's side was real. If I hadn't been working as a mediator and got involved in medical disputes myself, I would have thought the same.

Other perceived impacts of negative media reports included damaging the reputation of the hospital and the medical doctors involved. Participant T was the only reporter participant in the study. She talked about principles in news reports:

> News reports must be in time, effective and be based on objective facts. It shouldn't be partial and deliberately distorted. That is not what we call news reports. We usually have two or three colleagues to make investigation to verify facts.

[1] shabumen, a widely known news report in China about a medical dispute. The reporter deliberately distorted the story and ignited anger from the public, who did know the truth, towards the innocent doctor and hospital who were made victims. The truth was eventually restored by China's biggest national TV channel. The incident turned out to be a typical case of a patient who had been saved by medical staff but wanted to portray herself as the victim of malpractice and demanded substantial financial compensation to escape paying the bill for medical treatment. The report turned out to be biased toward the patient, lacked investigation, and deliberately distorted facts to mislead the public and ignite conflicts. It violated the code of conduct for journalists.

Media reports cited by participants violated such principles described in the above quote. However, all participants noted that negative media reports about medical staff were once widespread and there had been positive changes in the last two years (during time of the interview). Participants agreed that negative media reports could mislead public perception, create barriers for effective communication, and result in misunderstanding towards medical staff, which as a result could undermine doctor-patient trust and doctor-patient relationship.

Medical doctor participants believed there was a negative stereotype of medical staff amongst service users, which made communication very difficult with patients who were under that impression:

> There is a perception in the society that doctors are only thinking of money when they are providing medical services. With that perception, so when you asked them to go through some necessary examinations, they would think you do that just for money. When you prescribe, they would think you only thinking of making money. They tended to misunderstand you. (Participant K)

> Most of the media reports were negative. Really very negative remarks. Most comments, not only not showing sympathy and mercy, but also there to attack us, saying how bad we were with medical ethics, taking red pockets, or black-hearted doctors. Perhaps, they feel that we work just for money. I suspect that because of this kind of mentality, they don't trust us doctors. I think it is the main reason. (Participant N)

Such mistrust usually made communication and working with patients difficult, as explained by Participant L: "*With that kind of mistrust about medical staff, it is hard to have patients' compliance to implement diagnosis plans and treatment plans*."

Service users' mistrust towards medical staff, particularly medical doctors, was identified as stemming from multiple sources including lack of knowledge about medical staff and their work. The public, outside the medical profession, rarely have a chance to understand medical staff as human beings, the efforts and sacrifice medical staff make, and their dedication to the job. Irresponsible reporting in media, over medical disputes and stories of medical staff's over-prescription and taking bribes, can significantly damage the overall image of medical staff among the public.

As noted in Section 8.5.2, service user participants were found to have strong resentment towards hospitals becoming money-making organisations and medical doctors making money or taking their (medical doctors') personal interest into consideration when making prescription and diagnosis decisions. However, the present income structure for medical staff makes it difficult to rule out such possibility; and, therefore, harder for service users to trust medical staff. Further, it goes against service users' expectation of medical staff and public hospitals. Findings noted in Section 8.3.2 are consistent with literature that institutional conflict of interest can be an important source of mistrust (Chan, 2018; Nie et al., 2018a; Nie et al., 2018b). The gap between what is expected and what is perceived of medical staff seemed to add to the negative perception of medical staff. Sources of perceived mistrust are represented in Figure 28.

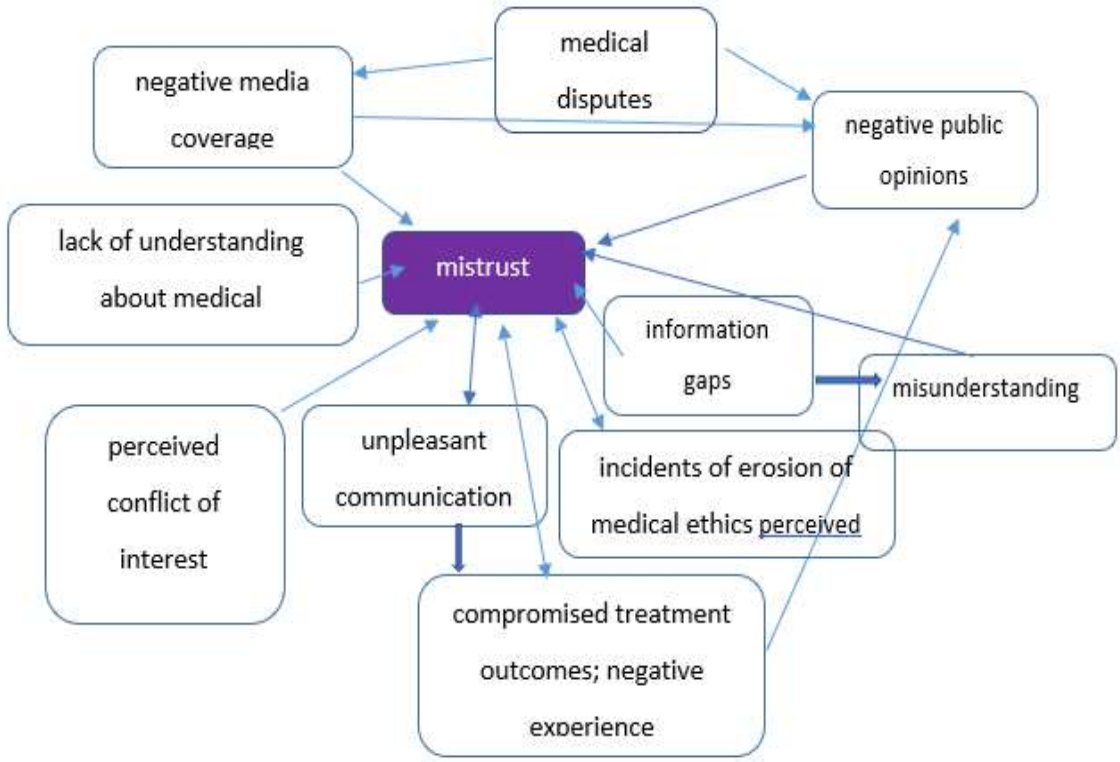


Figure 28. Sources of mistrust perceived

### 8.6.4 Service users' high expectation in the community perceived, discontent, complaints, medical disputes, and conflicts

All participants shared the opinion that doctor-patient conflicts had something to do with the high expectation that service users may have towards medical doctors and medical services. Service users' expectation has been covered previously in

Section 8.4.1 as a relevant factor on the individual level. High expectation was widely observed in the community and not limited to specific individuals as noted by Participant J: "*Chinese folks have very high expectation. They all have some very high expectation*."

Different manifestations of service users' high expectations are summarised in Table 43. These expectations ranged from unreasonable, such as expecting cure every time; to unrealistic, such as attention and response speed that is beyond what was realistic of the medical resources available. Medical staff believed high expectation can come from service users' limited health literacy and lack of knowledge about their work (as noted previously in Section 8.4.2). However, expectations can be modified by doctors' communication:

> Doctors' failing to adequately inform patients' risks in the treatment provided is one reason of patients' high expectation and cause of medical dispute. (Participant R)

Medical dispute mediator Participant P echoed the message that some doctors' failure to properly conduct informed consent and adequately advise service users of the possible risks carried in the treatment could result in service users not being adequately prepared for the unexpected and unfortunate outcome; thus, later easily resulting in medical disputes if anything happened.

Table 43. Summary of patients' manifestation of high expectation noted by participants

| Categories | Sub-Categories | Quotes/Abstraction |
|---|---|---|
| High expectation for service delivery | Efficiency in service | Requests being met immediately (O) |
| | Expectation for quality in service provision | They paid the money and then expected to be treated as God (N) |
| Expectation towards service environment | Expectation for service environment | Patients have high expectation for medical service provision environment, but the environment fails to meet patients' expectation (O) |
| | | Higher expectation with higher fees charged and better service environment (P) |
| Expectation towards consultation doctors | Expectation for treatment outcomes | Expect to get cured every time to see a doctor (J) |
| | Expectation for medical doctors' yishu and efficiency | Reaching specific diagnosis immediately (O) |

Sometimes, even though the service user's expectation is reasonable, it is simply beyond what current medical service provision facilities and environments are available. For example, Participant D, a service user, and Participant O, a medical doctor, both believed that the fact that existing medical services and facilities fail to meet people's expectation when using medical services is an important reason for patients' discontent and conflicts between service users and medical staff.

Participant V, a doctor-patient relationship coordinator within the hospital, talked about how patients' complaints were closely related to service users' expectation:

> Our hospital can offer better service and more comfortable service environments. However, it is like living in a big house does not necessarily make people happier. Our service users accordingly have higher expectation towards the service provided. Sometimes, some complaints were about very minor issues and without any real substance. Most of the time, it was the result of high expectation.

A hospital dean believed the so-called dissatisfaction with treatment outcomes has to do with a misperception about medical services:

> Patients always expect cure from medical services and treatments, and they forget that it is not always possible to have cure for any patients and any medical conditions. There is in fact a misconception underlying the complaints… For some diseases, it is not one injection alone that can fix the problem. Medical doctors are not gods. Some complaints were made for such reason. (Participant J)

Participant O noted the high expectation some patients may have towards medical doctors' professional knowledge, skills, and experience:

> Some patients were difficult to communicate. They came to ask for an examination, then immediately they expected to know what was wrong and where was wrong with them. …we normally only prescribe examinations in our gymnastics although we also need to take account of issues involved in other specialities, and it may require very extensive knowledge to reach a specific diagnosis.

The above quote reveals an important reason behind patients' seemingly unreasonable expectation; that is, as laymen, they do not know that diagnosis can be complex, and it is not as simple and direct as it appears to be.

Participant N, a medical doctor, believed patients who transfer their expectation regarding commercial consumption to pay money for medical services was another reason:

> The tense doctor-patient relationship may have something to do with the fact that doctor-patient relationship has turned into something like consumption in other business as it makes it easy for patients to think that now that I spent the money, I should be the God. (Participant N)

> I (Patient) paid to get cured. You medical doctors need to get me cured. (Participant A)

Here, medical services were taken for granted as being one such type of service. However, considering medical staff shortage, medical staff workload, and the current pricing of medical services (some services are priced below labour cost), current conflicts between supply and demand of medical resources, along with the uncertainties of medical service, mean it was impossible to meet high expectations. All these factors mean that transferring the same expectation of business consumption to medical services in public hospitals in the Chinese context is simply not realistic.

Service users' high expectation is identified as an important reason behind patient complaints and dissatisfaction. However, findings in this this section show that service users should not be blamed for their high expectation. Figure 30 depicts sources of service users' high expectation and their impact. Individuals' high expectation is found to stem from their limited health literacy, and the high expectation shared in the community, which has been shaped by tradition and culture, and is the result of an information gap between service users and medical staff. Subject to the existing supply of medical resources, reasonable expectation could become unreasonable. Service users' expectation can be modified in various ways, including doctors' communication and hospital service provision environment.

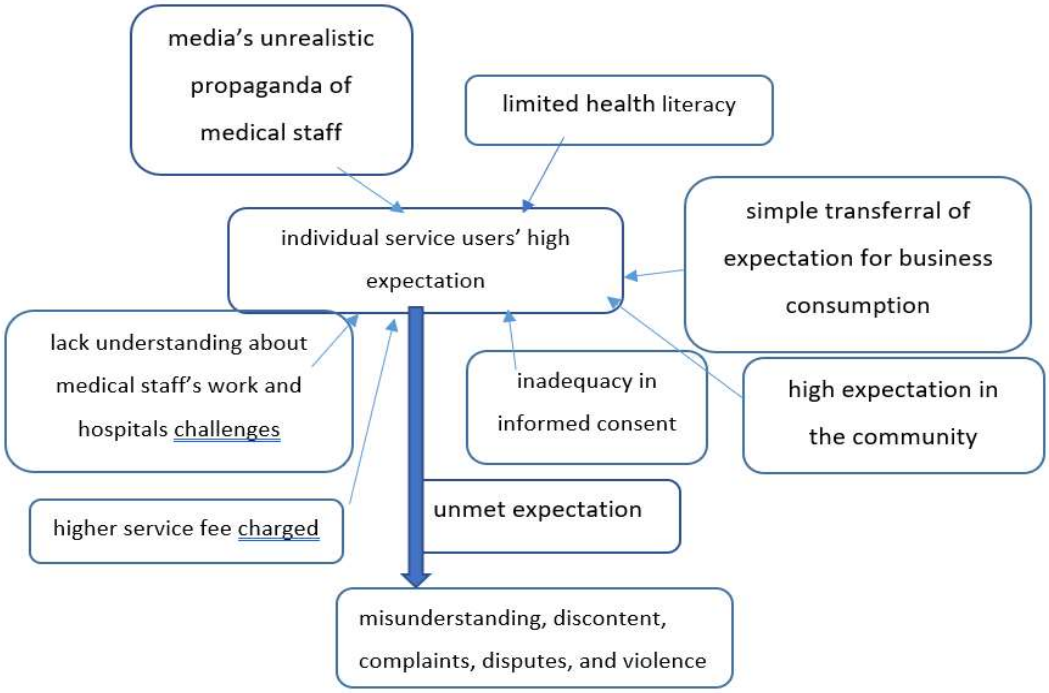


Figure 29. Sources of service users' high expectation and the impact identified in Phase 2

### 8.6.5 Doctor-patient relationship and cause of violence perceived

Given its impact on the context of the medical encounter between service users and medical staff, doctor-patient relationship is an important aspect of the wider community where medical service provision is situated.

#### 8.6.5.1 Overall impression of doctor-patient relationship

Participants were asked to share their comments on doctor-patient relationship and the change they had noticed. Almost all participants noted a similar pattern of change for doctor- patient relationship: it used to be good, deteriorated in the year 2000, and since 2015 has improved. For example, Participant J, a hospital dean, who has worked in the same hospital for 20 years, described himself as a witness of the ups and downs of doctor-patient relationship.

Participant D, whose parents were both medical doctors, also identified the same change pattern:

> Doctor-patient relationship used to be in harmony when I was a child (she's in her 40s), and the relationship between my parents and their patients had been very good. Patients being cured by my parents still felt very grateful towards my parents for curing them, and still visit them during festivals even years after my parents retired.

Almost all participants believed that although current doctor-patient relationship (at the time of interview in late 2017) was not as good as it used to be, it had improved in recent years. The occurrence of yinao and medical disputes was frequently mentioned as an indicator of tension in doctor-patient relationship by all participants. Reports of violent incidents in media were reported by participants to affect personal perception of doctor-patient relationship.

#### 8.6.5.2 Patients' complaints viewed from different perspectives

Patients' complaints were perceived as an important indicator of their discontent. Patient complaints were observed by medical staff participants to fall into several categories (see Table 43). Among the things patients complained about were negative perception, long waiting time, medical staff not being responsive, treatment outcomes, and technical reasons. Misunderstanding, according to medical staff participants (medical doctors and hospital deans), was caused by multiple reasons: service users' limited health literacy and the resulted unreasonable expectation; information gaps, such as service users' not knowing how medical staff work; the complexity of medical service provision process; and the practical constraints hospitals face, which all lead to expectation beyond what medical staff can meet.

As noted in Section 8.2.1, service users normally do not want to make a complaint due to the perceived trouble, even though they have negative experiences. Therefore, when no complaint is made, it does not necessarily mean that service users are happy and satisfied. However, if a service user decided to make a complaint, it was deemed valid:

> Even after investigation turned out that our medical staff had done nothing wrong, we still viewed patients' complaint as valid. Because even though they made a complaint just because of their negative perception, but there is no right or wrong about perception. If they had negative perception because of our service, that means that there must be something that made the patient not happy, so we would first apologise to the patient and then communicate with the patient to bridge the gap and let him/her understand the situation. (Participant V)

Table 44. Reasons for patient complaints perceived

| Reason Behind Complaint from Medical Staff perspective | Reason for Complaint from Service Users | Quote |
|---|---|---|
| Medical staff's reason | Poor attitude | Medical staff attitude (J, I, O) |
| Misunderstanding due to high expectation | Patient discontent on treatment outcome | Treatment effect/outcome, or quality of medical treatment received (J, K, I, O) |
| | Waiting | Waiting time (J, N, I, O) |
| Misunderstanding, specialised knowledge | Technical reasons | Technical reasons (I, J) |
| Misunderstanding, patients not knowing how medical staff work | Medical staff perceived not being responsive in time in saving the patient (I) | They didn't know that there were a lot of preparation required before a surgery (I) |
| Patients' personal reasons; discontent due to minute matters | Discontent | Minute matters, nothing concrete (M, V, O) |

For medical staff, it was difficult to accept complaints purely based on service users' perception as valid:

> Most of the time, patients' complaints are nothing of concrete, but some minute things. (Participant M)

The information gap and different perceptions due to different perspectives are significant. Misunderstanding could come from both service users and medical staff. The above remark clearly showed that medical doctors feel it hard to understand patients' frustration and concerns as they themselves are struggling to cope with the heavy workload. When both parties are obsessed with their own stress and concerns, it is hard to expect empathy towards one another. The findings highlight the need to bridge the information gap, enhance mutual communication between service users and medical staff, and enable empathy and understanding to make positive communication between the two parties possible.

When a patient decides to make a complaint, there must be something that upset the patient. When there is no complaint, however, we cannot assume that the

patient is satisfied with the service provided. As noted in Section 8.4.4, service users may decide not to make a complaint even after having a very bad experience for various reasons. Therefore, while all patient complaints should be taken seriously, no complaint made by patients should be interpreted with caution. As Participants J and P noted, complaints are normal and unavoidable for hospitals, which is a way to help hospitals to improve their services. However, based on medical participants' responses, not all hospital management can view patients' complaints constructively.

#### 8.6.5.3 Cause of conflicts and disputes perceived

Phase 1 findings revealed that most conflicts between service users and medical staff occurred during the medical encounter. Phase 1 findings indicate that conflicts and disputes resulted from communication problems primarily. Phase 2 data analysis led to the same conclusion. However, conflicts and disputes may involve more than communication, and factors beyond communication could also result in dissatisfaction, complaints, disputes, and conflicts. Table 45 summarises cause of conflicts and disputes perceived by participants.

Table 45. Cause of conflicts and disputes perceived by participants

| Categories/ Source | Sub-Categories | Quotes |
|---|---|---|
| Communication problems | Inadequate communication | Communication problems resulted from heavy workload, including inadequate communication (P)<br>Medical staff are not able to have adequate communication with service users due to their heavy workload (R) |
| | Communication attitude not good due to stress | Some doctors' attitude was not good when they were too busy (R, H) |
| | Specialised knowledge involved difficult for layman to understand | Human errors or side effects, uncertainties, and complexity that patients could not understand (M) |
| Issues with medical dispute resolution channels | Time consuming; low credibility of medical assessment | It takes a long time to settle disputes which can cause in service users' dissatisfaction (W)<br>Some of our clients were reluctant to have the medical assessment. Why? It was because of the time it takes for the process. In the case I mentioned previously, if I were in his shoes, that |

| | | |
|---|---|---|
| | | required me to wait for another three years to deal with it, I might also (get very frustrated) (R) |
| Community culture | Dispute resolution culture | People are under the impression that if you nao, then your issues can be settled quickly. If you don't nao, then, you can't expect things to be solved (E) |
| Problems with law and law enforcement | | law is not that complete and there may be some loopholes (E) |
| conflicts between supply and demand of medical resources | Medical resource shortage: staff shortage and medical facilities | Kanbing nan, kanbing gui are still issues that haven't been solved, which can be one reason behind the conflicts (R) |
| Patient reasons | Individual factors | Patients in bad mood and wanted to find someone to let go off anger and the medical staff victim happened to be the target of patients' anger (H)<br>Patients were not reasonable (A)<br>It can happen that everyone has his/her personality. Some doctors may decide that I don't care who you are, and the patient with some social status may expect to be treated as VIP and was disappointed as not treated in the way he/she had expected (H)<br>Lack health literacy (A) |
| Medical staff reason | | Medical staff conduct (E)<br>Some medical staff may also decide they need to fight back (H) |
| Medical sciences' uncertainties and risks | | Human errors or side effects, uncertainties, and complexity that patients could not understand (M) |

Data analysis identified the same causes of conflicts and disputes perceived by participants, as those in the literature: communication problems, issues with medical dispute resolution channels, community culture, law and law enforcement, and supply and demand of medical resources. Risk can also come from service users and medical staff. Violence against medical staff often occurred after service users

perceived they had fallen victims of medical malpractice and refused to go through legal channels to resolve the dispute.

### 8.6.6 Summary

Multiple aspects of the community were found to affect the medical encounter between service users and medical staff. The uneven distribution of medical resources, conflict between supply and demand of quality medical resources, and the subsequent issues of kanbing nan, together with kangbing gui, were found to prevail and work against good doctor-patient communication and relationship. This could increase chance of friction and conflicts between service users and medical staff. Irresponsible negative media reports were perceived to be at least partially responsible for the tension between doctor-patient relationship. Service users' mistrust towards medical staff was widely observed and could be fuelled by various reasons. Figure 30 summaries the interplays of supply of medical resource, media coverage, mistrust, and doctor patient relationship, including occurrence of violence.

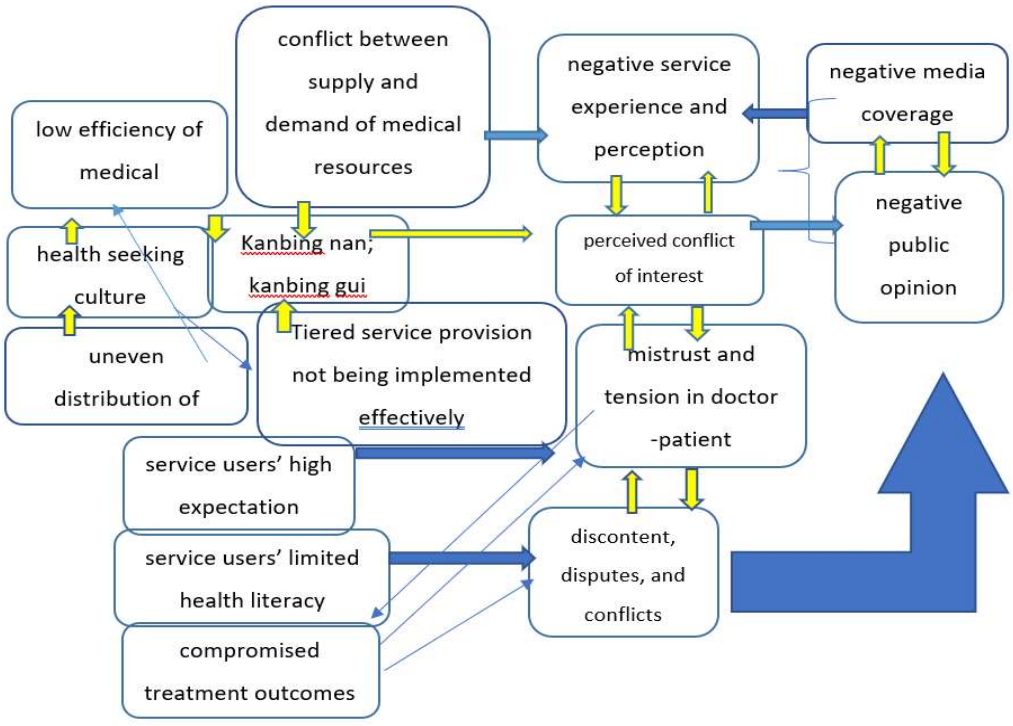


Figure 30. Interplays of problems with medical resources supply, media coverage, mistrust, and violence

## 8.7 Understanding the external context for medical service provision

This section clarifies findings from Phase 1 about the unfavourable external environment for medical service provision, with problems in resolving medical

disputes and handling violence against medical staff. It answers the following question: what is the external legal environment for medical service provision? Specifically, what problems in resolving medical disputes are perceived to prevent people from turning to legal channels? What can hinder strict law enforcement in handling violence against medical staff? How was the unfavourable macro ecological system created and how has been it improved for medical service provision?

### 8.7.1 Problems perceived in resolving medical disputes through legal channels

The section presents findings on problems perceived in resolving medical disputes and what could prevent people from turning to legal channels to settle medical disputes. Participants believed low credibility of medical evaluation in resolving medical disputes was one important reason for service users' hesitation or reluctance to resolve medical disputes through legal channels. For example, Participants S and J believed the close link between hospitals and medical evaluation agencies to be an important reason for the low credibility of existing medical evaluation agencies and medical evaluation among service users, as it is hard for the public to believe that the evaluation team can remain impartial in their judgement (see Table 46).

Table 46. Reasons of medical evaluation's low credibility perceived

| **Reasons for Low Credibility of Medical Evaluation Authority** | **Quotes** |
|---|---|
| Close connection between hospitals and the medical evaluation agency | Nowadays the organisation is set within the health authority, and the health authority puts it within hospitals. For the public, of course they will find it hard to trust the evaluation outcomes. (S)<br>If it the evaluation agencies are still related to the hospital, it is hard for them to be a fair judge. (S)<br>There has always been a third-party channel, but the medical association (being too closely related to hospitals), which the public didn't trust. As it looked like the father was doing the evaluation for the son, right? (J) |
| Credibility of medical evaluation being undermined by service users' limited health literacy | People don't trust the medical evaluation, as it involves too much medical specialised knowledge, and ordinary people can't comprehend the medical analysis. (S) |

Furthermore, the specialised knowledge involved in medical assessment reports is usually beyond ordinary people's comprehension; thus, it is hard for them to believe the assessment result. Participants shared the same opinion about how to ensure the credibility of medical malpractice evaluation: medical dispute evaluation should be independent, by a third party, free from influence or manipulation of any other factors, and mutually accepted by both parties involved.

Participant R, commented on service users' reluctance to go through medical assessment:

> Some of our clients were reluctant to have the medical assessment. Why? It was because of the time it takes for the process. In the case I mentioned with cerebral palsy, if I were in his shoes, that required me to wait for another three years to deal with it, I might also (get very frustrated).

For some service users, who may have financial difficulty, the cost of medical evaluation may create barriers for accessing legal channels to resolve medical disputes. According to Participant U, a lawyer, service users need to pay the fee first when applying for medical dispute assessment.

Low credibility of medical assessment agencies among the public, along with the time and money required for the medical assessment, can be obstacles for service users going through legal channels when possible medical disputes arise. It was revealed that inadequate efforts have been made to help service users resolve medical disputes fairly, timely, and fiscally.

Although a medical dispute mediation committee (MDMC) has been long established and handled many medical dispute mediations, few service user participants reported knowing about this committee. However, I was surprised to find that even the lawyer reported to not know much about the MDMC and whether it can handle the mediation fairly. This reflects how legal channels were not widely known by public.

### 8.7.2 Handling of yinao incidents and law enforcement by police

An expression once widely known in China, and frequently mentioned by participants (J, P), to sum up the outcome of yinao was "da nao da pei (big disturbance, big compensation); zhong nao zhong pei (medium disturbance, medium compensation) and small disturbance, no compensation". This expression gives a

picture of very unfavourable external legal environment for medical service provision. Hospitals were forced to settle yinao by paying substantial financial compensation, the amount depending on the scale of disturbance of the yinao incident without clear legal reference and criteria (consistent with Phase 1 findings, Section 6.5.2). The following remark describes such a situation and how the hospitals used to settle yinao with paying compensation regardless the reason:

> In most cases, it was the hospital that gave in and paid compensation. All the tertiary hospitals, not just our hospital, no matter for what reason, so long as something went wrong with a patient, then once they nao, the hospital would pay the compensation. (Participant K)

The way yinao incidents were settled unexpectedly created a vicious cycle, making things more difficult for hospitals as Participant J noted. The following remarks from a medical dispute mediator explained how a vicious cycle was created:

> At the beginning, most of the time the local government was thinking of settling the dispute quickly by paying compensation. However, such handling of yinao created a side effect, once widely known as da nao da pei (big disturbance, big compensation); zhong nao zhong pei. Hospitals were even forced by local government officials to pay money to perpetrators as soon as possible. The situation was getting more and more serious. (Participant P)

During the worst period, there seemed to be very weak law enforcement with police showing little initiative to act proactively:

> Our hospital would also call the police to come. Yet, it was of no use. The police wouldn't arrest anyone, and those people would continue to nao. (Participant K)

Participants M and N echoed the above message. Similarly, a government official, Participant S, shared his experience in seeking help from the local police to handle a dispute in which he was involved:

> The local police advised them to obtain some evidence first, saying that they could take action to resolve the dispute after that. However even after evidence was obtained, the police still did not dare to act …They waited for the instruction from their superior before they arrested anyone. In fact, they could have acted to stop the disturbance according to the law. The

> whole thing could have been very simple. They could have directly arrested the person as there has been evidence with pictures taken and records and all the things had been documented.

The example above showed the police did not respond in time, despite having solid evidence and specific legal reference to support the action. The police were observed to act more on administration orders rather than according to law. Such practice is not rare and was described as very typical in the local context. Phase 2 results were consistent with findings from analysis of handling of yinao incidents reported in Phase 1 wherein police response was largely decided by the local government officials. Participants believed it may have something to do with loopholes in laws and regulations. For example, a hospital dean, talked about reasons why yinao was so widespread in the past:

> In fact, in the past, we also had medical assessment. But I (service user) thought it too troublesome, so I wouldn't do it, and I believed it was your hospital's fault and you should give me money. That was what happened before. There were a big crowd of people coming to nao, even the party secretary in the village would come and tried to persuade us to "settle the internal conflicts among the people with people's money" (RMB). Otherwise, there would be more people coming to the hospital. Such things happened, which shows that a country if is not ruled by law, especially a big country, if your laws have loopholes, it can undermine social stability. (Participant J)

In the cited example, the village communist party secretary, who was supposed to know more about the law and advise folks from the village to abide by laws, turned out to support the yinao people and demanded the hospital settle the case with money. The quote gives a picture of the wider community, where there was low awareness of settling disputes within a legal framework. Medical doctor participants also noted the weak law enforcement in handling yinao:

> Police wouldn't do anything unless there was physical violence involved. (Participant N)

> Yinao continued even after police arrived. Police may not be able to interfere. (Participant K)

Participant E's remark summarises such a vicious circle of violence and a culture of resolving disputes through nao:

> It is not just medical disputes, but also disputes in other aspects. People have very low awareness of solving disputes in a legal channel. All involves nao. That is also because there has been little punishment for those offenders. Because when it came to law enforcement, it normally happened like "Ok, there was a reason for their nao, right, so there would be no consequence for that".

The weakness and inconsistences in law enforcement over the years has left the public with the impression that nao could help them quickly resolve their disputes. By nao, people aimed at creating disturbance and attracting media attention, through which they could force the other party involved in the dispute to sit down and talk, and to accept their terms and conditions and settle the dispute. Phase 2 participants' observation was consistent with literature (Libman, 2013).

Luckily, thanks to new laws and regulations made to specifically tackle yinao and violence in healthcare facilities, all participants noted violent situations have improved significantly. Participants, including medical staff, hospital management, and medical dispute mediators, shared the same view that improved laws and regulations benefit law enforcement, which reversed the vicious cycle, and turned it to a beneficial cycle of resolving disputes and law enforcement within a legal framework.

Perhaps one important lesson learned from comparing yinao situation and handling of yinao in the past and present, is that it is not enough to have some laws written on certain matters. It is more important to have clearly defined rules and regulations that can be easily implemented without ambiguity; thereby ridding the temptation to break rules and hopes of getting away without consequence. It was noted by participants that previously, during the worse period of yinao situation, some local government officials were too eager to settle the yinao incidents quietly and they forgot the principle of ruling by laws. In acquiescing to yinao perpetrators, and paying money to them, it created a vicious cycle of encouraging more yinao incidents (Figure 31). Ruling by law is of utmost importance and should not be compromised.

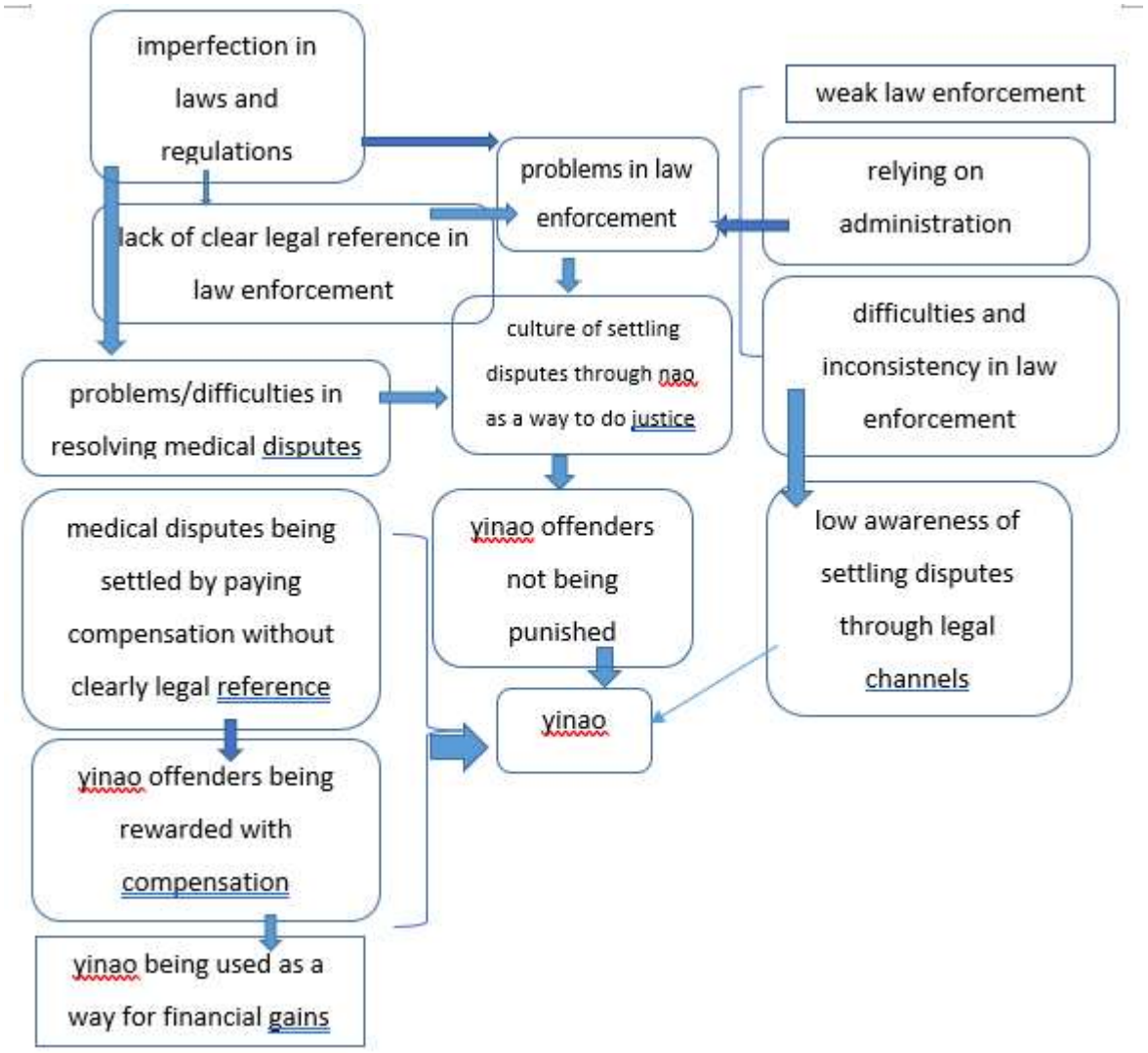


Figure 31. Cycle of medical disputes resolution, community culture and yinao during the worse period from 2000s to 2015

### 8.7.3 Local government officials' response to yinao

Phase 1 findings revealed that some local government officials may push hospitals to settle yinao through paying compensation. What was behind the once observed eagerness from local government officials to settle medical disputes quietly with money, without medical assessment and legal reference? Participant S' information about local government officials' performance management provided important insights. According to Participant S, a key evaluation criterion used for local government officials' performance is their ability to maintain harmonious relationship in the local community. One-ticket-veto-practice was applied in performance evaluation, which ruled that no matter how well an official may perform in other areas, if the official failed in maintaining harmonious relationship with the

local community or social stability, then the official would fail the performance evaluation in all other areas. This rule highlights the critical role of maintaining harmonious relationship and social stability.

However, in implementation, some local government officials may misinterpret the concept of maintaining social stability and harmonious relationship with the local community. Some local government officials oversimplified social stability as having no disputes and collective incidents (see Figure 32). Collective incidents were once very sensitive to local government officials. Incidents that involved disputes and large numbers of local people were viewed as collective incidents. In eagerness to settle the yinao incident and make quickly quieten the people involved, some local government officials may compromise laws and justice. When there was virtually no consequence for those people who nao, and substantial financial gains, a culture of yinao was created as noted by participants in Section 8.7.2. Luckily, things have been changed positively (see Section 8.7.1).

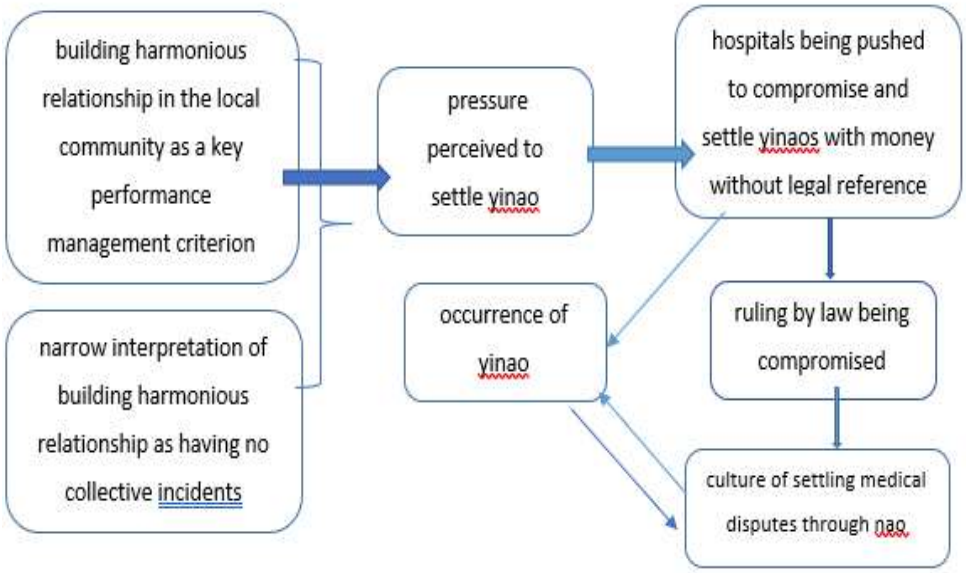


Figure 32. Local government officials' response to yinao and impacts

### 8.7.4 Summary

In this section, loopholes in laws and regulations concerning handling medical disputes and violence against medical staff were found to give rise to the weak law enforcement in handling yinao and other forms of workplace violence against medical staff. The local government was found to play a key role in determining police response to yinao. Clearly defined laws and regulations were

identified to facilitate effective law enforcement, which makes it key in addressing violence against medical staff. Problems with the existing legal channels to resolve medical disputes, such as being time-consuming and lack of credibility among the public, were found to hinder service users to resolve medical disputes through legal channels (see Figure 33). What is more, limited resources and information available to help service users claim justice prevent them from turning to legal channels to resolve medical disputes.

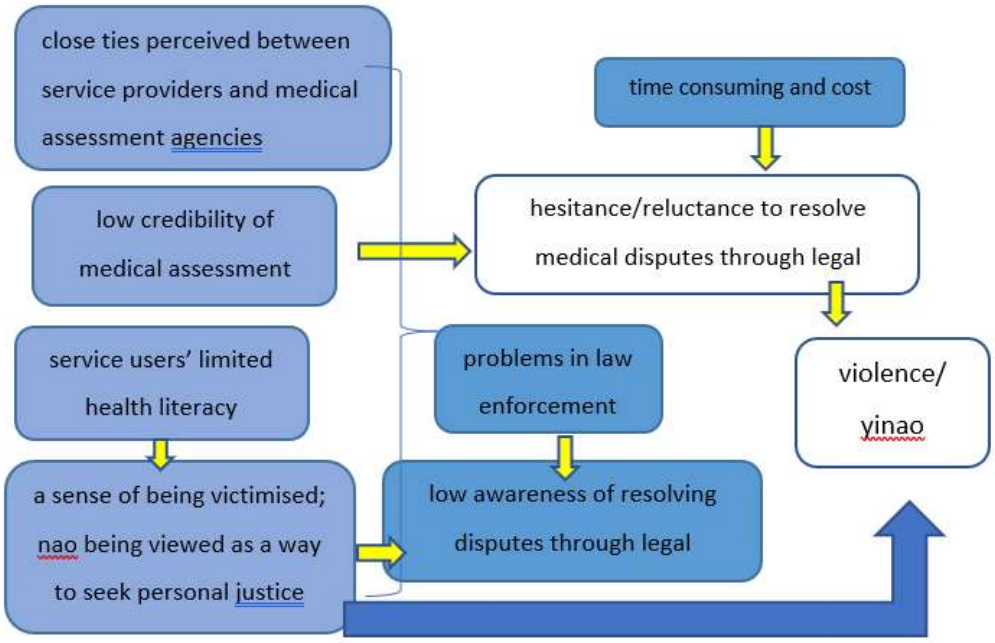


Figure 33. Reasons behind service users' reluctance to resolve medical disputes through legal channels perceived

## 8.8 Summary of findings

This chapter has presented findings from Phase 2 data analysis guided with the socio-ecological model, investigating participants' perception, experience, understanding, and observations to gain a better understanding of the risks involved in the medical encounter. Key risk factors associated with service users and medical staff, in the context of the medical encounter, were identified as shown in Table 47.

Table 47. Key risk factors perceived for violence against medial staff at all levels of the socio-ecological model based on Phase 2 data analysis

| |
|---|
| **individual level** |
| Service users: mistrust, limited health literacy, information gaps, high expectation<br>Medical staff: communication problems; compromised wellbeing; behaviours and attitude being inductive of negative perception; |
| **situational level** |
| Large number of patients; long waiting time; unpleasant and stressful service provision environment; individuals with compromised wellbeing |
| **organisational level** |
| Hospitals' survival pressure (funding model and problems)<br>Problems in human resource management: medical staff shortage, staffing and job design problems, training and health and safety management; financial incentive in performance management criteria<br>Problems in service delivery management: absence of patient-centredness<br>Problems in service provision environment management with absence of patient-centredness<br>problems in health and safety management: job designs, staffing and training not oriented towards medical staff's health and safety |
| **community and societal levels**:<br>Problems with the healthcare system, including funding model of public hospitals, problems with medical resources; conflict between supply and demand of medical resources manifested as kanbing nan; low efficiency, uneven distribution of medical resources; erosion of medical ethics<br>Negative media coverage; negative public opinions<br>Mistrust and tension in doctor-patient relationship<br>High expectation and limited health literacy in the public<br>Information gaps between service users and medical staff<br>Problems in laws and regulations<br>Problems/difficulties in resolving medical disputes fairly and timely<br>Low credibility of medical assessment agencies<br>Problems in law enforcement |

Investigating the underlying reasons for the problems manifested with the individuals involved in the context further uncovered problems in hospital management, and investigation of hospital problems further uncovered problems in the community contexts and national policy factors. For example, medical doctors' over-prescription was found to relate to hospitals' performance management criteria that based on revenue generated, which was found rooted in the funding model of hospitals, a factor at the societal level of the socio-ecological model. The connection between the funding model of public hospitals and medical doctors' over-

prescription is a good example of how factors at the societal level of the socio-ecological model can impact on factors at individual level through factors at organisational level, such as aspects of hospital management.

Findings in this chapter consistently revealed several gaps involved in medical service provision: gaps between service users and medical staff in terms of perception and knowledge subject to their unique stakeholder perspective; gaps between what happened and what is perceived by service users, gaps between what is experienced by service users and what is expected/desirable leading to service users' frustration, misunderstanding, and mistrust towards medical staff. Findings revealed that the service delivery process, service environment, medical staff performance and communication, can disappoint service users, with significant gaps between what is expected and what is perceived by them constituting risks to medical staff.

An overriding problem associated with the medical encounter is the service provision context that does not facilitate and enable effective communication, positive perception, and trusting relationship building between service users and medical staff. Rather, the context works against them, inducing negative perception of medical staff and negative service user experience that results in misunderstanding, conflict, and even violence.

Problems in hospitals management were identified as playing a key role in creating such a context. Specifically, unpleasant service environment, problems in service delivery management, staffing and job design for service provision result in a context that consistently fails to meet the demand of service provision and disappoints service users. Lack of consideration for service users with unreasonable rules and regulations, plus help not being readily available to facilitate effective proceeding of service provision, increases chance of friction, misunderstanding, and conflict.

Medical staff shortage was found to result in unhealthy work arrangements that negatively impact medical staff wellbeing and performance. Unhealthy work arrangements, coupled with problems in service administration and management, staffing and job design, tend to result in service users' negative perception of medical staff.

In the wider community, problems in resolving medical disputes, problems with media coverage and information sharing, along with information gaps, damage the image of medical staff, undermine trust between service users and medical staff,

and hinder effective communication between service users and medical staff. Most significantly, the funding model of public hospitals resulted in perceived conflict of interest between service users and medical staff, may induce over-prescription from medical staff, and undermined doctor-patient trust. The interplay of risk factors, particularly their manifestations, underlying cause, and impacts on the medical encounter are depicted in Figure 34 on the following page. Understanding the interplay of risk factors of the medical encounter, particularly their manifestations, underlying causes, and impacts on the medical encounter, helped identify the key risk factors and intervention strategies to remove these risk factors for violence prevention. In the present study, a risk factor is viewed as key if addressing the factor can help remove other risk factors.

To sum up, many of the problems observed with individuals cannot be fixed with individual efforts alone, as their causes are with hospital management problems and factors in the community context. Similarly, many of the problems observed with hospitals can only be addressed by resolving their root problems within the community and national policy.

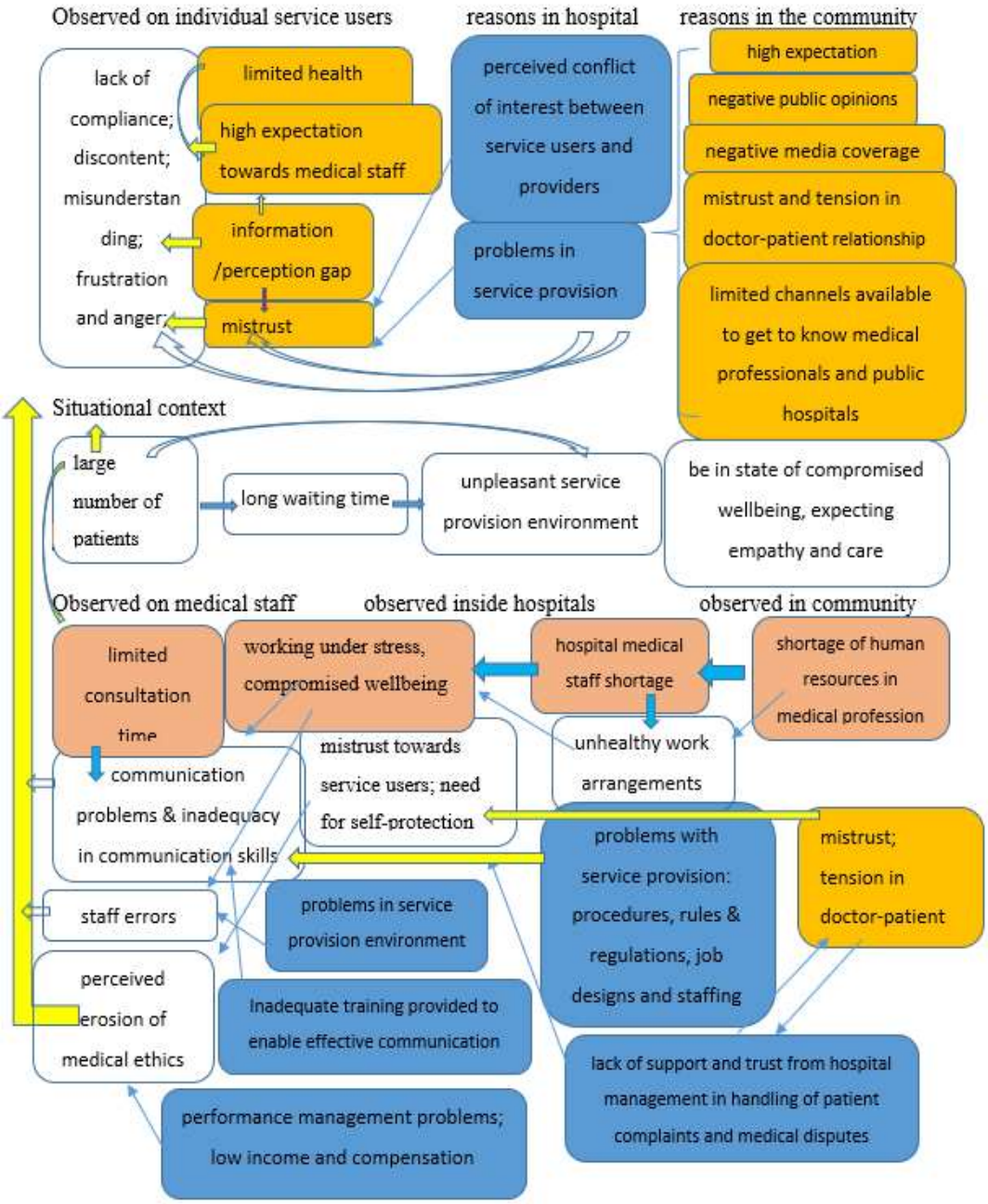


Figure 34. Risks with the medical encounter, manifestations, and underlying reasons

# Chapter 9 A Preliminary Intervention Framework for Prevention of Workplace Violence against Medical Staff

In this chapter I first present my proposed preliminary evidence-based intervention framework guided with the socio-ecological model and underpinned with a system approach. The proposed framework emerged from synthesis of findings from Phases 1 and 2, and the available literature. The framework is comprehensive in that it emphasises coordination, and collaboration of intervention efforts; it systematically addresses risks manifested at different levels of the socio-ecological model from different stakeholders to achieve synergy. After presenting the framework, I explicate six key prevention interventions that emerged in analysing the data and developing the prevention framework. I then address risk factors and offer intervention strategies to tackle the identified risks. Key findings that are regarded unique to the Chinese context and the present research will be highlighted in the discussion that follows (Section 9.3). Literature that emerged after 2017, and is not covered in Sections 9.2 and 9.3, on the topic of workplace violence against medical staff in the healthcare sector and the latest development of health reform are presented in Section 9.4.

## 9.1 Introducing the preliminary prevention intervention framework

There can be three key focal points for violence prevention intervention: individual, organisational, and the macro environment—community and societal levels, as depicted in Figure 35. As evidenced in many of Phase 1 reported violent incidents and Phase 2 participants' experiences, individuals' communication and behaviour during the medical encounter can result in misunderstanding, frustration, and even violence. Interventions, therefore, are needed to enable individuals involved to have the skills, attitudes, expectation, and behaviours for effective communication and positive experience during the medical encounter. As noted in the previous chapter, Sections 8.4, 8.5, and 8.6, and illustrated in Figure 35, enhancing trust, improving health literacy, and bridging information gaps require more intervention efforts and collaboration from hospitals and the community that focus on individuals, rather than on individuals' efforts alone (Chan, 2018; He & Qian 2016; Mechanic, 1996; Nie et al., 2018c).

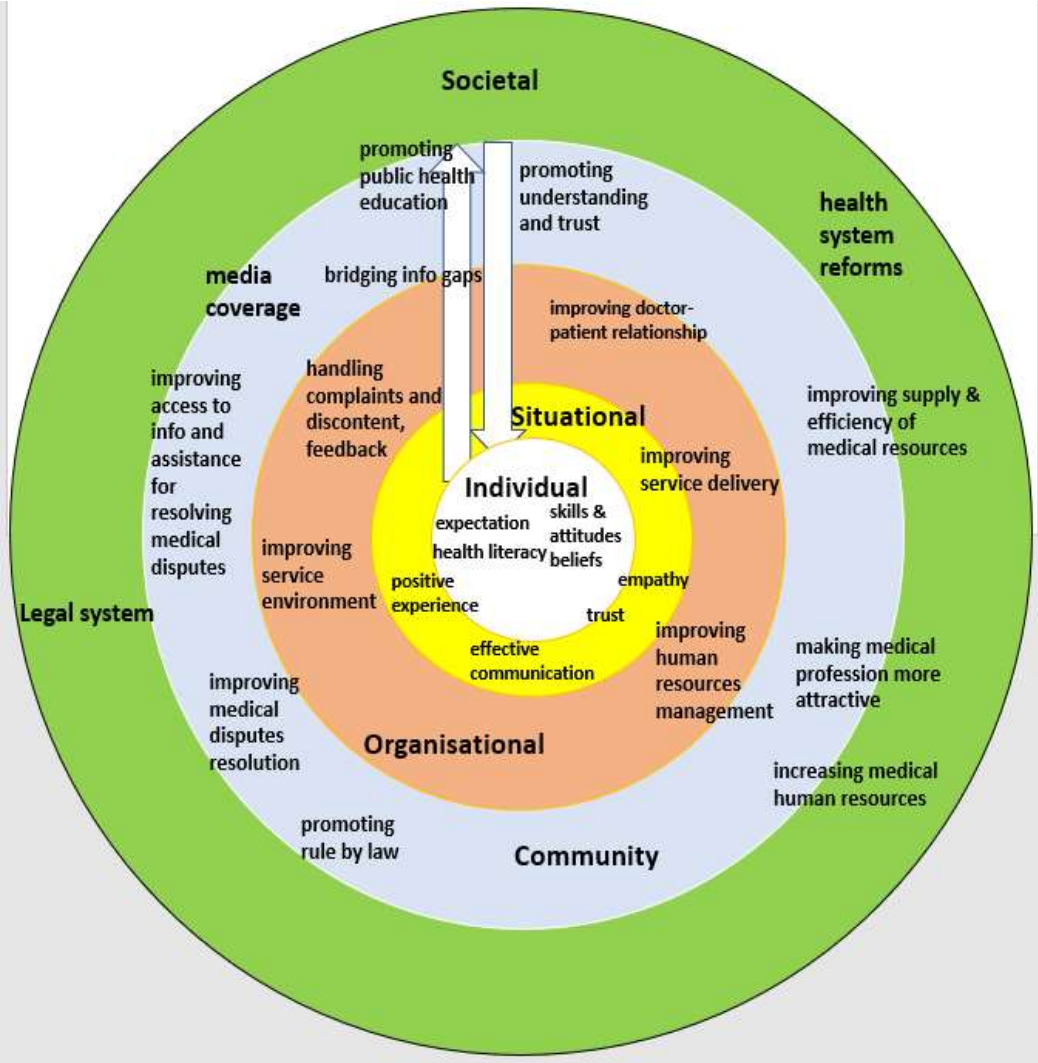


Figure 35. The proposed comprehensive violence prevention intervention framework

Similarly, Phase 1 and Phase 2 findings indicate that improving individual medical staff communication and behaviours for a positive service user experience relies more on hospital management efforts to improve job designs, staffing, procedures for service delivery, and provide resources to make things happen, rather than individual medical staff's effort alone. Such findings are consistent with literature (Nielsen, Nielsen, Ogbonnaya, Känsälä, Saari, & Isaksson, 2017; Spelten, Thomas, O'Meara, Maguire, FitzGerald, & Begg, 2020).

The second focus of intervention is to address problems during service provision (as noted in section 8.5) via improving hospital management to address problems manifested with individuals and the situational contexts for the medical encounter. The third focus of intervention is to address problems at the macro level; that is, the community context and policy levels to address problems fundamentally

manifested at individuals, situational, and organisational levels in hospitals. As shown in Figure 35, the two arrows across levels of the model indicate the bilateral direction of impact. Key elements of prevention intervention efforts are as depicted in Figure 35. The interplay and direction of impact are evidenced in the following synthesis, explicating six prevention interventions.

### 9.1.1 Promoting understanding and trust between service users and medical staff

The first key element of prevention intervention is to promote understanding and trust by bridging information gaps identified in Chapter 8, and enable information about hospitals and healthcare service provision, rules, and regulations of service management to be more transparent and accessible to service users; thereby enabling collaboration and partnership building between service users and medical staff**.** This intervention serves to mitigate the risks of misunderstanding and unrealistic expectation that constitute risks. For example, as noted in Section 8.3.1, service users in general know little about the extended services and going beyond "the call of duty" that medical staff undertake, their intrinsic satisfaction and concerns. Bridging such information gaps can be helpful in reshaping the image of medical staff and public hospitals among the public and contribute to trust building.

As evidenced from Participant A's experience (Section 8.2.1) a negative experience of using medical services can destroy trust in medical doctors; therefore, building trusting relationships rely on positive experience in using services. Findings about the perceived connection between doctors' prescription and medical staff income, and the mistrust participants manifested towards medical doctors whom they do not know personally (Sections 8.2.3 & 8.2.4) indicate that addressing the perceived conflict of interest between service users and medical staff, and promoting medical professionalism and medical ethics, is of fundamental importance in building trust between service users and medical staff, a finding that is also consistent with literature (Chan, 2018; He & Qian 2016; Nie et al., 2018a; Nie et al., 2018c; G. Sun et al., 2017; Tucker et al., 2016; L. Wang et al., 2019).

Phase 1 data results revealed that patient family members are the main source of violence, which indicates that service users, including close and extended family members, should be included in efforts towards effective communication and trust building. As can be seen from Figure 35, promoting understanding and trust requires

systematic intervention efforts on organisational, community, and even policy levels. Again, such findings are consistent with literature (Chan, 2018; Chen et al., 2014; Gille, Smith, & Mays, 2015; He & Qian, 2016; Mechanic, 1996; Nie et al., 2018c; Rathert, Ishqaidef, & May, 2009; Rathert & May, 2007; Reid Pont & Perterson, 2008; Rushton & Brooks-Brunn, 1997).

### 9.1.2 Improving health literacy

The second key element of prevention intervention is improving service users' health literacy by enhancing public health education, which is also advocated by many researchers (Hu & Zhang, 2015; Lyu, Wu, Cai, & Guan, 2016; Tucker et al., 2015; Wang, 2017; Zeng, Zhang, Yao, & Fang, 2018). As noted in Chapter 8, the interplays of risk factors such as limited health literacy, high expectation, mistrust, and misunderstanding, indicate that improved health literacy can help service users have more realistic expectations toward medical services and medical staff, which can benefit doctor-patient communication and doctor-patient trust. This finding was consistent with literature (McNeil & Arena, 2017).

Further, improved health literacy can help the population to better manage their own health (Bains & Egede, 2011; Schulz & Nakamoto, 2013) for disease prevention which, in turn, can reduce the demand for medical services as evidenced from empirical studies (Lorig, et al., 1999; MacLeod, et al., 2017; Netemeyer, Dobolyi, Abbasi, Clifford, & Taylor, 2020; White, Osborn, Gebretsadik, Kripalani, & Rothman, 2013), and help ease the imbalance between demand and supply of quality medical resources, one of the key risks identified in the community and also consistent with literature (G. Liu et al., 2017). Hopefully, improved health literacy can also contribute to improving the service provision environment by reducing demand for medical service (Bains & Egede, 2011; Lorig et al., 1999).

Further, findings from Phases 1 and 2 revealed that limited health literacy can be an important communication barrier to service users' understanding the uncertainty and risk carried in health services, and to accept adverse treatment outcomes. Empirical evidence from literature supports that improved health literacy can improve communication and patient satisfaction in using medical services (MacLeod et al., 2017; McIntyre. 2018; Örsal, Duru, Örsal, Tırpan, & Çulhacı, 2019).

### 9.1.3 Improving service delivery management by improving hospital management

The third element is enhancing service user experience by improving management of hospital service delivery systems. As noted in Section 8.5, risks manifested on individual medical staff and in the situational context can find their roots in hospital management. Intervention may address, for example, problems with human resource management, service delivery management, and the service provision environment. Specifically, hospital human resource management should aim to enable healthier and happier medical staff as indicated in literature (Wright & Cropanzano, 2004) by improving medical staff's daiyu and work environment. Poor daiyu and a demanding job contribute to medical staff shortage and gives rise to risks identified in service provision. Such a finding is consistent with literature (He & Qian, 2016; Millar et al., 2017; Zhao & Zhang, 2018). Also noted in Phases 1 and 2, was that problems with service provision processes, procedures, staffing, rules, and regulations led to service users' frustration and anger, which created more chances of friction and put medical staff in danger.

Findings from Phases 1 and 2 also showed that an unpleasant service provision environment and service delivery management that is not user-friendly could result in more risks for medical staff. Consistent with literature, many of the violent incidents reported in Phase 1 repeatedly show that improving service provision management and making the service environment user-friendly can enhance safety for medical staff (Zeng et al., 2018; Zhao, Rao, & Zhang, 2016). Empirical evidence shows that improving medical staff work/service provision environment can improve patient satisfaction and outcomes, as well as medical staff job satisfaction (Rathert et al., 2009; Rathert & May, 2007, 2008).

Both Phase 1 and Phase 2 showed that "minute things" in the eyes of medical staff, such as negative perception, can be big enough for service users as to result in their complaints, frustration, anger, and even violence, which is consistent with literature (Bao et al., 2017; He & Qian, 2016; J. Pan et al., 2015; J. Sun et al., 2017). Phase 1findings revealed a lack of consideration and respect shown towards service users as individuals; failing to respect their emotions and needs can result in anger, resentment, and even violence from service users. Findings also highlighted the importance of ensuring medical staff are equipped with the skills required to cope

with challenging situations that they may encounter (Barrow, 2013; Branch, 2014; Dimovska, Sharma, & Trebble, 2016).

Findings from Phases 1 and 2, specifically findings on risks associated with medical staff job tasks (Section 6.3.1), service users' perspective—explicit and referent (Section 6.3.3), and findings on trigger of violence (Section 6.2.8) lead to the intervention strategy of improving hospital management to improve service delivery. Specifically, hospital management should focus on enabling and facilitating positive and effective doctor-patient communication, i.e., job design, staffing, and performance management criteria should enable medical staff to consistently foster trusting relationship and partnership during the medical encounter (Dang, Westbrook, Niue, & Giordano, 2017; Daniels et al., 2017; Deng et al., 2018; Mrayyan, 2006; Nielsen et al., 2017; Okello & Gilson, 2015; Oppel, Winter, & Schreyögg, 2017). Findings from Phases 1 and 2 consistently showed that positive service user experience and medical staff's health and safety should both be integrated into all aspects of hospital management. This is consistent with empirical evidence from literature (Rather & May, 2008).

Findings in Phase 1 (Section 6.4.3) and Phase 2 (Section 8.2) on the inadequacy of medical staff communication resulted in the intervention strategy of offering effective training to help medical staff handle challenging communication situations and stay safe. Such an intervention has been advocated by other researchers and is supported in the literature (Deng et al., 2018; X. Liu, et a., 2015). Additionally, making work arrangements healthier for medical staff by ensuring a reasonable workload to help achieve work-life balance (Deng et al., 2018; Nielsen et al., 2017; Wright & Cropanzano, 2004), reducing unnecessary bureaucratic burden, and helping medical staff become more professionally competent are important aspects of empowering medial staff in the Chinese context, as indicated by Phase 2 findings and literature (J. Sun et al., 2017; J. Wang et al., 2019; X. Wang et al., 2019).

Furthermore, as noted in Sections 8.2.1 and 8.4.1, service users' perception of medical professionalism, humanistic care, and medical professional knowledge of staff during healthcare service provision, can contribute to service users' positive experience and building trusting relationships. Findings indicate that promoting medical professionalism and humanistic care should be emphasised, alongside medical techniques, which is consistent with literature that reports the technical

aspects and humanistic care should be equally emphasised in medical staff performance management (Anderson, Wescom, & Carlos 2016; Nie et al., 2018a; Tucker et al., 2016).

### 9.1.4 Continuing health reforms to address problems rooted on system level

Health reforms are the fourth element of the intervention framework. As noted in Section 8.5 and the literature, several hospital management problems are fundamentally expected to rely on health reforms to be resolved: medical staff shortage, public hospital funding shortage, perceived institutional conflict of interests between service users and medical staff, and conflict between supply and demand of medical resource (Chan, 2018; Nie, et al., 2018a). Furthermore, resolving these risks associated with medical resources and other risks in the community rely on health reforms and government policy efforts at the societal level.

Specifically, improving medical staff's income and overall daiyu has been identified as a key to resolve medical human resource shortage and increase medical resource supply. Phase 2 findings suggested that fundamentally addressing these problems relies on intervention efforts from policy at societal level (Section 8.5) and can be achieved by government policy intervention to attract more human resources to increase medical human resources supply. It can also be achieved with government policy intervention to rid the traditional imbalance of medical distribution (He & Qian, 2016; Liu et al., 2017; Zhou, Li, & Hesketh, 2014). Meanwhile, strengthening primary healthcare facilities to change the popular health seeking culture of preference for tertiary hospitals, is needed to enable effective implementing tiered service provision and improve health service provision environment (J. Pan et al., 2015); an intervention consistent with the direction of China's new round of health reform (Liu et al., 2017; Zhao & Zhang, 2018).

Policy intervention is needed to shift focus of healthcare providing services from cure to prevention, by promoting public health education on prevention rather than only cure. Research on Chinese health reforms show that solely increasing government funding cannot address problems related to inappropriate incentives such as doctors' prescription (Zhao & Zhang, 2018). An effective government funding policy is needed to improve efficiency of government funding in the healthcare sector. Research on Chinese health reforms and their impact provides empirical

evidence that health policies have great impact on hospital management and doctor-patient relationship (Zhou et al., 2017).

Furthermore, Phase 1 findings (Section 6.4.1) and Phase 2 findings (Sections 8.3.1, 8.3.3) consistently show that hospital management lack either the awareness or motivation to implement strategic OHS within hospital, which is consistent with literature that reports the key motive for hospital management commitment to strategic OHS is compliance (Bluff, 2003; Zanko & Dawson, 2012). Therefore, it is necessary to improve laws to make health and safety management mandatory. New evaluation index systems for hospital senior management and medical staff in public hospitals are required to address public hospital management and medical performance problems (Zanko & Dawson, 2012; Zhao & Zhang, 2018).

### 9.1.5 Improving handling of patient complaints and medical disputes

The fifth element for the intervention framework is improving handling of patient complaints and medical disputes, an intervention strategy derived from synthesising Phase 1 and Phase 2 findings on problems in resolving medical dispute through legal channels. Phase 1 findings (Section 6.4.2) suggested that for service users who resorted to violence, violence may be the only option known and available to them. Absence of an established medical dispute resolution mechanism and credible medical evaluation authority were also identified; as were inconsistences in handling violent incidents against medical staff from external stakeholders—local police, the LHA, and local government officials. These findings indicate a lack of clear legal reference in handling violence and violence in the healthcare setting, which when coupled with mistrust towards medical staff, can encourage service users' irrational responses to possible malpractice.

The frequency count results shown in Table 20 (Section 6.3.3.2) point to problems in hospitals handling of patient discontent and medical disputes. Phase 2 findings (Section 8.4.4) on service users' knowledge in making complaints and resolving medical disputes suggest that service users generally lack knowledge in resolving medical disputes, which can prevent them from making a formal complaint or resolving medical disputes through legal channels. Further, problems noted previously in Section 8.7.1 regarding resolving medical disputes, including low credibility of medical evaluation authorities, along with the time and money required

for medical assessment, can explain service users' reluctance to resolve medical disputes through legal channels.

Both Phase 1 and Phase 2 findings indicate a need to improve laws and regulations for resolving medical disputes. Making legal channels known and accessible to the public by improving access to information and advice on resolving medical disputes, improving credibility of medical dispute evaluation and mechanisms, and efficiency of handling patient complaints and medical disputes seem to be a logical way to address risks associated with handling service users' discontent and medical disputes.

The positive changes noted by almost all participants in Phase 2 (Section 8.7.2), suggest that improving law and law enforcement in resolving medical disputes and handling violence related to medical disputes is the right direction for violence prevention. Additionally, promoting law education among the public, including local government officials, to raise awareness of rule by law to avoid uninvited involvement in resolving medical disputes, is found to be important. Many of the violent incidents reported in Phase 1 (Section 6.4.2) show that it was not just ordinary service users but also government officials (who are supposed to have better knowledge) who lack awareness of ruling by law, which is consistent with Phase 2 findings (Section 8.7). Furthermore, researchers argue for implementing no-fault-compensation scheme for adverse outcomes to fix the possible negative impact on doctor-patient relationship to enable trust, collaboration, and partnership between service users and medical staff (Harris & Wu, 2005; Mor & Einy, 2012; Tucker et al., 2015).

### 9.1.6 Partnering with media to promote public health education and public trust towards medical staff

The last, but not the least, element of the intervention framework is working collaboratively with media, including internet websites. Based on Phase 2 findings, promoting understanding and trust between service users and medical staff, and as noted previously in Section 9.1.1, it may be necessary to address the different types of information gaps between service users and medical staff identified in Chapter 8. Furthermore, while collaborating with schools and community in promoting health education can help improve service users' health literacy, working collaboratively

with media, including internet websites, can help promote health education (Kim & Willis, 2007; WHO, 2017).

Phase 2 findings revealed various information gaps that need to be addressed in the community. For example, risks associated with service users (Sections 8.4, 8.6.4, 8.6.6) and medical staff (Section 8.5), and findings on medical staff (Section 8.3) and medical service experience, especially the different perceptions of prescription, diagnosis, and informed consent (Sections 8.2.3, 8.2.4) reveal different information gaps that need to be addressed in the community to enable understanding and trust-building between service users and medical staff.

Furthermore, findings on risks from the external context for medical service provision (Sections 8.6.3, 8.6.4, 8.6.6) show that media coverage can shape public's opinions and perceptions, and thus impact the medical encounter outcome. Media coverage, therefore, should aim at promoting understanding between service users and medical staff by unbiased coverage of medical profession and medical disputes. Findings from Phases 1 and 2 on risks associated with the external context for service provision (Sections 6.5.2 and 8.7) show a need to promote awareness of rule of law among the public by working collaboratively with media, to promote legal education and resolve medical disputes through legal channels. Literature also provides evidence of how media, including internet, can play an important role in promoting public health education, help modify service users' expectations by making problems and challenges faced by public hospitals transparent, and promote rule by law (Langdridge et al., 2021; WHO, 2017).

### 9.1.7 Summary of key prevention interventions

In the present study, hospital management has been identified as a key pivot between health policy and medical service provision. It can impact on the medical encounter between service users and providers, directly and indirectly. The intervention framework as depicted in Figure 36 reflects such a pivot role for hospital management.

It should be noted that all the different focuses of intervention, different levels, and elements of the intervention framework, should not be viewed separately due to the complex interplays of factors. For the same reason, addressing a key risk may require employing several intervention strategies, and success of the intervention strategies requires collaboration and coordination of intervention efforts

from across different levels and sectors. Likewise, an intervention strategy can be useful for addressing multiple risk factors on multiple levels. An intervention strategy suggested may not appear to directly target violence occurrence; however, each strategy can help address the identified risks and contribute to violence prevention in different ways. Therefore, although all intervention strategies can stand alone, it is more effective to implement them systematically.

It should be noted that the proposed framework is only a preliminary conceptual framework, based on synthesising literature and findings from Phases 1 and 2. Some intervention strategies may be directly derived from data, and their effectiveness needs to be tested in practice. Some intervention strategies may only be general concepts and guidelines, and further refinement is expected.

## 9.2 Key risk factors and corresponding intervention strategies

In this section I present key risk factors and the proposed prevention strategies. Some prevention intervention strategies can be useful to address multiple risks, and therefore may be mentioned multiple times. However, supporting references for the prevention strategies will only be detailed once and the second time will be marked with "literature".

In this section I synthesise findings from Phase 1, Phase 2, and literature, to show how the proposed intervention strategies are derived. Key risk factors identified in Phases 1 and 2, with their possible intervention strategies, are summarised in Tables 48, 49, and 50, along with supporting literature. All risk factors and corresponding intervention strategies detailed in these three tables can fit into the violence prevention intervention framework as illustrated by Figure 36.

I have grouped all the risks identified based on levels of the socio-ecological model: individual, organisational, and community and policy. However, some risk factors manifested across individual and community levels, and some corresponding intervention strategies requiring efforts made in the community and focusing on individual will be grouped together to avoid repetition. References that help establish a risk factor as a key notion, are presented under "previous research". References that help establish an intervention strategy are presented immediately after the intervention strategy. Risk factors and intervention strategy that are not yet evident in literature are marked by a star sign along with source of data. Risk factors that are consistent with literature and intervention strategies that are evident in the literature

are presented with their supporting literature. References that support both risk factors and the intervention strategy are presented only once under “previous research”. Effectiveness of the proposed intervention strategies included in the framework still need further empirical evidence to verify.

Table 48. Key risk factors, supporting literature and proposed prevention strategies (Part 1)

| Key Risk Factors Identified | Previous Research | Potential Intervention Strategies (with supporting literature and data source) |
|---|---|---|
| **Across Individual and Community Levels** | | |
| Mistrust towards medical staff | Chan, 2018; Gille et al., 2015; He, 2014; He & Qian, 2016; Liu et al., 2017; Mechanic, 1996; Mor & Einy, 2012; Nie et al., 2018a, 2018b, 2018c; Su, 2013; Tucker et al., 2018; Zhao, Rao & Zhang, 2016; Zhao & Zhang 2018; C. Zhou et al., 2017) | Rebuilding trust by intervention efforts on organisational and community/policy levels but focusing on individuals by<br>1) health reforms to improve public hospital funding and medical staff income structure (Phase 2, Chan, 2018; Gille et al., 2015; Nie et al., 2018a; Nie et al., 2018b; Sun et al., 2017)<br>2) promoting medical professionalism, medical ethics, and humanistic care (Hsiao, 2008; Markakis et al., 2000; Nie et al., 2018a; Nie et al., 2018; Tucker et al., 2016)<br>3) *promoting patient/service user-centric service delivery for positive patient experience in using medical services (Phases 1 & 2; Nie et al., 2018; Susila, 2017)<br>4) *improving performance management criteria with yishu and yide being given the same weighting, both technical aspects and humanistic care in medical services being equally emphasised and rewarded (Phase 2; Meng et al., 2004; Nie et al., 2018; Nie et al., 2018; Tucker et al., 2015)<br>5) effective training to help medical staff become effective communicators for positive communication and user experience (Geoffrion, Hills, Ross, Pich, Hill, Dalsbø, et al., 2020; Institute of Picker, 2020; Jagosh, Boudreau, Steinert, MacDonald, & Ingram, 2011; Lundeby, Jacobsen, Lundeby, & Loge, 2017; Markakis et al., 2000; Riess, Kelley, Bailey, Dunn, & Phillips, 2012; Tavakoly Sany, Behzhad, Ferns, & Peyman, 2020)<br>6) public health education to improve health literacy (Phases 1 & 2; Lyu et al., 2016)<br>7) *enhancing understanding with proactive information sharing and positive public relationship of medical profession and public hospitals (Phase 2; Catalán-Matamoros & Peñafiel-Saiz, 2019; Su, 2013: Terkildsen & Schnell 1997)<br>8) improving risk covering and compensation in medical service provision with insurance schemes or other no-fault compensation schemes in medical disputes resolution to cover risks in medical service provision and to rid of the negative implication of medical disputes laws on doctor-patient relationship, making partnership between doctor and patient possible (Phases 1 & 2; Mor & Einy, 2012) |

| Key Risk Factors Identified | Previous Research | Potential Intervention Strategies (with supporting literature and data source) |
|---|---|---|
| **Across Individual and Community Levels** | | |
| Service users' limited health literacy | Lyu et al., 2016; MacLeod et al., 2017; Schulz & Nakamoto, 2013 | 1) *promoting public health education via collaboration with media and other sectors of the community to help service users understand limits of medical science, complexity of diagnosis and treatment processes, and risks carried in medical services (Phase 2; Castro, Van Regenmortel, Vanhaecht, Sermeus, & Van Hecke, 2016; Gabay, 2015; Hu & Zhang, 2015; Lyu et al., 2016; Tucker et al., 2016)<br>2) *training provided to medical staff to raise their awareness and to improve skills to tailor communication with language that service users can understand (Phase 2; Brooks, Ballinger, Nutbeam, & Adams, 2017; Schulz & Nakamoto, 2013; Wittink & Oosterhaven, 2018) |
| Information asymmetry/information gap on service user side: *service users' knowing little about medical service provision and medical staff; *service users having narrow interpretation of medical ethics and erosion medical ethics<br><br>Poor quality of informed consent | X. Wang et al., 2019; Zeng et al., 2018<br><br>Gong, Zhou, Cheng, Chen, Li, Wang et al., 2018; Krupat, Fancey, & Cleary, 2000; Santos, 2014; Smith, 2005 | 1) *improving information sharing and information transparency to service users to help them understand medical staff work, hospitals service provision process, rules and regulations; help them understand how public hospitals fulfilling public welfare role (Phases 1 & 2)<br>2) *public hospitals and medical profession association can be more proactive in reaching to the public in information sharing, public relationship, repositioning, and reshaping the image of medical profession, enhancing understanding and trust by establishing effective channels for direct communication with service users and hearing feedback for service improvement (Phase 2)<br>3) *collaboration with mass media and websites to portray medical staff as real human beings to gain empathy and understanding from service users, and to enable a realistic understanding of medical staff, to remind service users medical staff are also ordinary people who also have family responsibilities but are willing to stick to their professional ethics, make sacrifice for the good of patients. This is for partnership and trust building with service users (Phases1 & 2; Su, 2013)<br>4) information transparency in diagnosis and treatment decision-making (Tucker et al., 2016; X. Wang et al., 2019) |

| Key Risk Factors Identified | Previous Research | Potential Intervention Strategies (with supporting literature and data source) |
|---|---|---|
| **Across Individual and Community Levels** | | |
| High expectation towards medical staff and service from legacy of pre-marketisation of health sector; rise of patients' consumerist attitudes toward health care and the resultant higher expectation | Hamilton, Lane, Gaston, Patton, MacDonald, Simpson et al., 2013; He & Qian, 2016; Palazzo, Jourdan, Descamps, et al., 2014; Poiraudeau, 2014; D. Wu et al., 2014; Wu, Lam, Lam, Zhou, & Sun, 2017 | Manage service users' expectation to be realistic by:<br>1) *more honest information sharing by on challenges that hospitals and medical staff face, including staff shortage (collaborating with media) (Phase 2)<br>2) improving public's health literacy via promoting health education (collaborating with media and schools)<br>3) *honest information sharing the challenge of existing health system and medical resources face, the conflict between demand of supply of medical resources (collaborating with media)<br>4) information transparency about service process and key decision making about diagnosis and treatment (Phases 1 & 2)<br>5) *providing stratified medical services to meet different needs (Phase 2) |

Table 49. Key risk factors, supporting literature and proposed intervention strategies (Part 2)

| Key Risk Factors Identified | Previous Research | Potential Intervention Strategies (with supporting literature and data source) |
|---|---|---|
| **Community and policy level** Problems rooted in health system: | | |
| Mistrust stems from funding of public hospitals and medical staff's income structure; perceived conflict of interest | Bluff, 2003; Chan, 2018; Chen, 2007; He, 2014; He & Qian, 2016; Liu et al., 2017; Nie et al., 2018a; Wang & Zhang 2016; Zhang, Stone, & Zhang, 2017 | Health reforms to address problems rooted in health system, key areas as detailed below:<br>1) increase government funding to public hospitals, also caution in funding policy<br>2) public hospital reforms to improve hospital autonomy towards improved service delivery and efficiency of medical resources<br>3) implementing new evaluation index systems for senior hospital management to motivate and enable them to improve hospital management towards better service, and better population health index<br>(Literature same as mentioned above under mistrust) |
| Human resource management problems: shortage of medical human resource supplies, and difficulty in retaining; medical staff's poor daiyu; inappropriate incentives in medical staff performance management; challenges of medical professionalism and medical ethics; problems in medical education | Bao et al., 2017; He & Qian, 2016; Rushton & Brooks-Brunn, 1997; Wang & Zhang, 2016; Zeng et al., 2018; Zhao et al, 2018; Zhou et al., 2017<br><br>X. Liu et al., 2015; Millar et al., 2017 | 1) *health reform to change medical staff s income structure and improve daiyu to ensure medical profession's competitiveness in the job market for the sustainable supplies of human resources in medical profession (Phase 2)<br>2) reforms to enable hospitals to improve medical staff performance management, making it better aligned with quality service delivery and better health index (Millar et al., 2017) |

| Key Risk Factors Identified | Previous Research | Potential Intervention Strategies (with supporting literature and data source) |
|---|---|---|
| inaccurate inflammatory media coverage of medical disputes and medical profession fuel mistrust (Phase 2 and literature); *unrealistic sided propaganda of medical staff as angels in white (Phase 2) | He & Qian, 2016; Holland & Stocks, 2017; Tucker et al., 2018; Zeng et al., 2018; Zhou & Moy, 2007 | 1) enhancing monitoring professional code of ethics in media coverage; *collaborating with hospitals and medical staff with reports aiming at providing facts, promoting understanding between service users and medical staff (Phase 2)<br>2) *helping service users to know about how public hospitals are serving their public welfare functions; collaboration with media to project a positive partnership with service users in the fight for health and life (Phase 2) |
| *Obstacles and problems in resolving medical disputes: low credibility of medical dispute evaluation mechanism; culture of resolving disputes through nao | Harris & Wu, 2005; He & Qian, 2016; Howard 1996; Jiang et al., 2014; Liebman, 2013; Tucker et al., 2016 | 1) *improving credibility of medical disputes evaluation by improving procedures to ensure justice, fairness, consistency, and transparency with a third-party medical evaluation mechanism<br>2) *improving efficiency in medical dispute resolution<br>3) *improving access to legal advice and assistance in resolving medical disputes and make info readily available to general service users<br>4) *improving laws and regulations relevant to disputes resolution to give clear legal reference in resolving medical disputes (Phases1 & 2; literature; Barish, 2001; Jiang et al., 2014)<br>5) *improving disputes resolution and law enforcement to consistently send a message of ruling-by-law (Phases 1 & 2)<br>6) *promoting relevant law education among the public (Phases 1 & 2 data) |

| Key Risk Factors Identified | Previous Research | Potential Intervention Strategies (with supporting literature and data source) |
|---|---|---|
| Conflict between supply and demand of quality medical resources/ kanbing nan (Chinese expression meaning being difficult to seek medical services) | Liu et al., 2017; Zhao et al., 2018; Zeng et al., 2018 | 1) increase government input to increase supply of quality medical resources<br>2) *attract more talent into the medical profession by improving medical staff income and other daiyu, improving doctor-patient relationship (Phase 2; Sun & Luo, 2017)<br>3) *reducing demand for medical services by shifting focus from cure to prevention (Phase 2)<br>4) promoting public health education<br>5) effective implement of tiered service provision to improve efficiency in using the existing medical resources<br>6) change the uneven distribution of medical resources and the popular health seeking culture |
| Kanbing gui (Chinese expression meaning being expensive to seek medical services and medication) | Fu, Zhao, Zhang, Chai, & Goss, 2018; Powell-Jac, Yip, & Han, 2015 | Health reform to improve accessibility and equity of medical services, including health service payment system, health insurance system |
| Discontent associated with change brought by health reforms and changes in the society | Hsiao & Liu 1996; Hsiao 2008; G. Liu et al., 2017; Wang & Zhang, 2016; M. Zhou et al., 2017 | Continue health reforms to address problems associated with health system designs |

Table 50. Key risk factors, supporting literature and proposed intervention strategies (Part 3)

| Key Risk Factors Identified | Previous Research | Potential Intervention Strategies (with supporting literature and data source) |
|---|---|---|
| **Risks associated with problems in hospital management** | | |
| Medical staff's compromised wellbeing due to overload and unhealthy work arrangement | CMDA, 2015, 2017; Deng et al., 2018; Fu, Schwebel, & Hu, 2018; He & Qian, 2016; Howard & Wech, 2012; Liu, Song, Hou, Zhang, & Zhang, 2018; Shan, Yang et al., 2017; Shen, Hao, & Guo, 2018; Wen et al., 2016<br><br>Bakker & Demerouti, 2007, 2017; Bakotić, 2016; Daniels, Gedikli, Watson, Semkina, & Vaughn, 2017; ILO et al., 2002; Lin, Yuan, Zhang, Jing, Zhang et al., 2015; Limoge & Zuppa 2007; Luchman & Gonzalez Moreales, 2013; Nielsen et al., 2017; Snape, Meads, Bagnall, Tregaskis, & Mansfield, 2016; Wright & Cropanzano, 2004 | 1) *making medical staff job less demanding and with more resources (Phases 1 & 2)<br>2) *resolving medical staff shortage (Phases 1 & 2)<br>3) *improving work arrangements, with job design and staffing being oriented towards medical staff's health and safety; *more supports provided and making it possible for medical staff to balance work and life (Phase 2; Carvalho & Chamber 2017; Fu, Sun, Wang, Y., Yang, X., & Wang, 2013; Y. Fu et al., 2018)<br>4) *ensuring medical staff's two days off and ensuring adequate time of rest for medical staff (Phase 2; CMDA, 2017)<br>5) *application of AI and high tech in reducing demands for medical human resources (Phase 2) |

| Key Risk Factors Identified | Previous Research | Potential Intervention Strategies (with supporting literature and data source) |
|---|---|---|
| **Risks associated with problems in hospital management** | | |
| Medical staff shortage and the subsequent work overload, low morale, compromised wellbeing; lack of support provided to victim of workplace violence; | Arnetz et al., 2014; Daniels et al., 2017; He, 2014; He & Qian, 2016; Jackson, Schuler &Jiang, 2014; Kong et al, 2020; Shi, Wang Jia, 2017; Wu, 2013, 2014 | 1) *improving medical staff income and daiyu by improving public hospital funding and medical staff income structure; improve medical staff job satisfaction<br>2) *improving medical staff workplace environment by making workload manageable for medical staff, improving doctor-patient relationship and promoting doctor-patient trust<br>3) *reducing violence against medical staff<br>4) *hospital management be more supportive for medical staff being involved in medical disputes and violence (Shi et al., 2017<br>5) help medical staff balance work and life and improve quality of life |
| *Problems in service provision and procedures, service provision environment; absence of patient/service-centredness | Bao et al., 2017; Bloom & Farragher, 2011; Bowie, 2011; Curbow 2002<br><br>Bakker & Demerouti, 2007, 2017; Bakotić, 2016; Daniels et al., 2017; De Oliveira Matias & Coelho, 2002; Flott, Darzi &Mayer, 2018; Luchman & Gonzalez Moreales, 2013; Hariadi, Parashakti, & Nashar, 2016; Hoel, Sparks & Cooper, 2000; Howard & Wech, 2012; Institute of Picker, 2020; Lin et al., 2015; Limoge & Zuppa, 2007; Mead & Bower, 2000 | Creating healthy workplace environment (Bowen et al., 2011)<br><br>*implementing patient centric/centeredness in service delivery and environment management to achieve positive perception of user experience in the following:<br>1) service provision and management to improve service provision procedure designs, rules, and regulations within hospital regarding patient admin & management, oriented towards positive user experience<br>2) service user-centeredness in staffing and job design, making them oriented towards positive service user experience; enable medical staff to continuously improve professional competence (Crandall, Marion, 2009; Davies, 2008)<br>3) service user-centeredness in service provision environment design, making it user-friendly and oriented towards positive user experience (Rathert, Ishqaidef & May, 2009; Rathert & May, 2007, 2008) |

| | | |
|---|---|---|
| | Nielsen et al., 2017; Rathert et al., 2008; Rathert & May, 2007, 2008; Safran, Miller, & Beckman, 2006; Wolf, Lehman, Quinlin, Zullo & Hoffman, 2008; J. Wang et al., 2019; X. Wang et al., 2019 | |
| *Problems in hospital health and safety management: absence of strategic health and safety management; lack of mechanism to encourage violence reporting; lack of support | Bluff, 2003; Daniels et al., 2016; De Oliveira Matias & Coelho, 2002; Hariadi et al., 2016; He & Qian, 2016; Reid Ponte & Peterson, 2008; Robinson, Callister, Berry, & Dearing, 2008; P. Sun et al., 2017; Yorio, Willmer, & Moore, 2015; Wolf et al., 2008; Zanko & Dawson, 2012 | Implementing person-centred strategic health and safety management with health and safety being integrated into every aspect of hospital operation and management, particularly integrated into human resource management and service provision<br><br>Resolving medical staff shortage to avoid unhealth work arrangements that compromise medical staff's wellbeing<br><br>*improving staffing, service provision admin & management to make medical staff's job less demanding, oriented towards medical staff's uncompromised wellbeing for quality service delivery and eventually towards medical staff's health and safety (De Oliveira & Coelho, 2002; T. Sun et al., 2017)<br><br>effective training oriented towards positive service user experience and medical staff's health and safety (Phases 1 & 2; Branch, 2014; Erp, Gevers, Rispens, & Demerouti, 2018) |

| | | |
|---|---|---|
| | | *enhanced security measures in hospitals, including entry security check for weapons (Phases 1& 2)<br><br>*implement systematic violent incident reports for insights to improve security and environment designs (Phase 1; Hariadi et al., 2016)<br><br>Policy and regulatory to give senior management motivation for compliance (Bluff, 2003; Zanko & Dawson, 2012)<br><br>*encouraging violent incident reporting inside hospital |
| *Medical staff communication and behaviour problems, including absence humanistic care, inadequacy in communication skills and low awareness of risks and disputes; inadequate communication training for medical staff (Phases 1 & 2) | Dimovska, Sharma & Trebble, 2016; Grayson-Sneed, Dwamena, Smith, Laird-Fick, Freilich, & Smith, 2016; He & Qian, 2016; Hsiao, 2008; Limoge & Zuppa, 2007; X. Liu et al., 2015; Markakis, Beckman, Suchman, & Frankel, 2000; Tucker et al., 2016; J. Wang et al., 2019 | effective communication training for medical staff:<br>1) *focused communication training tailored to facilitate positive communication between medical staff and service users (Phases 1 & 2; Coleman, 2011; Dang et al., 2017; Liu et al., 2015)<br>2) *communication training that encompasses techniques for positive service users experience, that can pass message of partnership, caring and empathy (Phase 2; Liu et al., 2015)<br>3) *shift emphasis of communication from emphasizing addressing service users' rational needs only to addressing both rational and emotional needs; both medical care technical and humanistic care should be emphasized (Phases 1 & 2; Allan, McKillop, Dooley, Allan & Preece, 2015; Finset 2012; Finset & Mjaaland, 2009; Jones, Bodie & Hughes, 2019; Lundeby et al., 2017)<br>4) *training that raises medical staff's awareness of risk of conflicts, and disputes, help medical staff to avoid conflicts and stay safe (Phases 1 & 2) |

| | | |
|---|---|---|
| Inadequate communication, brief consultation time; long waiting time | Gong et al., 2018; He & Qian, 2016; Hu, Sun, Wu, Liu, Chen, Jiang et al., 2017; J. Wang et al., 2019; Wu et al., 2014 | 1) controlling patient volume to be manageable and allowing adequate time for consultation<br>2) *promoting and rewarding quality communication and service delivery<br>3) training to improve awareness of proper informed consent (Phases1 & 2 Gong et al., 2018) |
| Problematic performance management criteria, financial incentives for over-prescription | He & Qian, 2016: Markakis et al., 2000; Tucker et al., 2016; | *improving performance management: equal weighting given to professionalism, humanistic care, and patient-centric service delivery (Nie et al., 2018a)<br><br>*promoting medical professionalism, medical ethics that encompasses traditional medical ethics in Chinese context; proper training to cultivate professionalism<br><br>*Taking care medical staff to cultivate their empathy and humanistic care |
| Unpleasant service provision environment; | Bao et al., 2017; He & Qian, 2016; Hu et al., 2017; Zeng et al., 2018 | Making hospital service delivery environment safer (Bowen et al., 2011; Hariadi et al., 2016; Rathert et al., 2009; Rathert & May 2007)<br><br>*improving supply of quality medical resources by increasing medical human resources via increasing government input and health reform;<br>*improving efficiency in using the medical resources available by strengthening primary health care facilities and changing the popular health seeking culture to enable effective implement of tiered service provision system (by shifting focus of medical services from curing to prevention via policy intervention) (Phase 2; literature) |

## 9.3 Highlighting key risks and corresponding intervention strategies

Many, but not all, of the identified risk factors have been cited earlier (Tables in Section 9.2). In this section, I highlight novel factors that have not yet been evident in the literature, and some of the key risk factors and suggested intervention strategies that are unique to the Chinese context. The presentation of factors incorporates the interplay among factors and pathway from risk factor to violence and violence prevention.

### 9.3.1 Addressing key risk factors associated with individuals

This section highlights key risks, and intervention strategies, associated with service users and medical staff.

#### 9.3.1.1 Enabling doctor-patient trust, positive communication, and user experience

As noted earlier in Section 8.4, rebuilding trust, promoting health education, bridging information gap, and managing service user expectation are the key tasks in addressing key risk associated with service users. Trust in doctors is considered a core feature in predicting patient satisfaction (Pellegrini, 2017). Trust is defined as the confidence that individuals and institutions will act in the other's best interet rather than their own (Mechanic, 1996; Pellegrini, 2017; Smith, 2005). Findings from Phase 2 were consistent with literature that trust is believed to provide a context for doctor-patient collaboration towards the expected treatment outcome (Jirotka, et al., 2005; Shore, 2007), and typically can result in high quality communication and interaction (Holland & Stocks, 2017). Trust can also provide insulation against serious conflicts (Holland & Stocks, 2017; Mechanic, 1996; Shoemaker & Smith, 2019; Webb, 1997). Trust is an important source of intrinsic motivation for employees (Okello & Gilson, 2015); and trust can inspire trust (Hsieh & Ku, 2018; Lee & Lin, 2009, 2011; Mechanic, 1996; Thorne & Robinson, 1988).

Trusting relationships can be extremely important for medical staff performance, as it can determine their willingness to act and take risks for the best interest of the patient during uncertainty (Diamond-Brown, 2016; Jirotka et al., 2005; Okello & Gilson, 2015). Given the uncertainties associated with medical services, such willingness can be extremely important for the best interest of patients.

Promoting trust is, therefore, important for both medical staff and service users—benefiting both parties.

Trust is easy to destroy and difficult to build, as negative events have a greater impact than positive information, and prior negative beliefs can be difficult to change (Mechanic, 1996; Poortinga & Pidgeon, 2004), which explains the damage that negative media coverage and user experience are capable of causing to doctor-patient trust. Trust during the medical encounter is believed to be determined by the information, empathy, and respect patients perceived during consultation (Johansson & Winkvist, 2002; Jones, Bodie & Hughes, 2019). As evidenced in Phase 2 (Section 8.2.1), whether the doctor is perceived as competent, responsible, and caring during the medical encounter can determine patients' trust, which is consistent with empirical evidence from literature (Hamelin, Nikolis, Armano, Harris, & Brutus, 2012).

As noted previously in Sections 6.4.3 and 8.2, trust, respect, and partnership are closely associated, and perceived lack of respect and not being taken seriously could result in patients' discontent (Dawson-Rose, et al., 2016; Hallowell, 2008; Hamelin et al., 2012; Jirotka et al., 2005; Jones et al., 2019). For example, the unpleasant negative experience shared by Phase 2 participants in Section 8.2.1 was directly related to a lack of respect, empathy and care by medical staff. On another occasion, the consulting doctor's rush in reaching a diagnosis for her child made it hard for Participant A to trust the doctor's decision and she chose to seek help from another doctor, whose communication gave her confidence in his professional knowledge and solved her child's problem. Evidence shows that experience of using services can impact the service users' perception of medical staff and consequent doctor-patient relationship; every visit can either reinforce or change service users' perception, reinforce trust or mistrust, a finding consistent with literature that highlights the importance of positive experience (Chan, 2018; D. Zhao et al., 2016; C. Zhou et al., 2016) and carefully managing communication during the medical encounter (Dang et al., 2017; Jones et al., 2019; King & Hoppe, 2013; Krupat, Fancey & Cleary, 2000).

Effective communication can help develop interpersonal trust between service users and medical staff, and facilitate humanistic care, which is achieved by conveying messages of care and creating partner effect (Barrow, 2013; Jagosh et al., 2011; Kenny, Veldhuijzen et al., 2010; King & Hoppe, 2013; Matusitz & Spear,

2014; Petrocchi et al., 2019). It is impossible to expect positive experience for service users to happen automatically if medical staff are only good at technical skills, but unable to communicate effectively during the medical encounter (Hamelin et al., 2012; Jonwa, Bodie & Huges, 2019). Impact of medical staff communication on service users' perception and trust of medical staff, and lack of adequate training for medical staff, are evidenced in the experience shared by participants in Section 8.2.1. Providing effective training to medical staff as an intervention strategy is derived directly from such findings and is consistent with literature (Geoffrion et al., 2020; Wright, 2011).

Workplace resources, such as training and supports, can contribute to medical staff job satisfaction, wellbeing, performance, and subsequent work (J. Fu et al., 2013; Gittell, Weinberg, Pfefferle, & Bishop, 2008; Leggat, Bartram, Casimir, & Stanton, 2010; Steven & Claire, 2017; van Erp, Gevers, Rispens, & Demerouti, 2018; Wright, 2011). A review of 20 empirical studies on outcomes of communication skill training programmes in China suggested that communication skill training can significantly improve medical staff's communication competence and has the potential to improve patient satisfaction (X. Liu et al., 2015).

Further, research on medical staff training programmes suggests that when learners are treated with respect and care, and their individual needs and strengths are acknowledged, they will, in turn, treat their patients with care and respect (Markakis et al., 2000). Literature suggests that medical staff who are being cared for, are more likely to treat their patients with greater care and respect, understanding and support (Crandall & Marion, 2009; Tucker et al., 2016). Communication that conveys care, empathy, and responds appropriately to emotions can be learned and improved through effective training (Finset, 2009; Lundeby et al., 2017; Markakis et al., 2000). Indeed, international research provides empirical evidence that communication skills training for physicians could improve patients' health literacy and health outcomes among patients with hypertension (Tavakoly Sany et al., 2020; Tavakoly Sany, Peyman, Behzhad, Esmaeily, Taghipoor, & Fern, 2018).

#### 9.3.1.2 Health literacy, information gaps, and expectation

Health literacy can be defined as "the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health" (Nutbeam, 1998,

p. 357). Phase 1 and Phase 2 findings (Sections 6.3.5, 8.2.2.3, 8.4.2) consistently show that limited health literacy can cause difficulty for service users to comprehend the risk and uncertainty in medical services, making it hard for them to understand the limit of medical sciences and accept death of patients and other perceived adverse treatment outcomes. Service users' inability to comprehend and accept death of patients and other adverse treatment outcomes is one of the main reasons for medical disputes and violence against medical staff in the Chinese context.

Limited health literacy in this study is, therefore, defined as not knowing the limits of medical services and medical sciences, inability in understanding the risk and uncertainty in medical services, inability to understand the complexity of medical service, and to accept adverse treatment outcomes. Such a definition is not necessarily consistent with definitions in the literature; however, it does capture the key reason identified behind service users' misunderstanding, discontent, and even violence in the present study. Figure 37 depicts the interplays of key risks associated with service users and how improved health literacy can change the dynamics and the outcome.

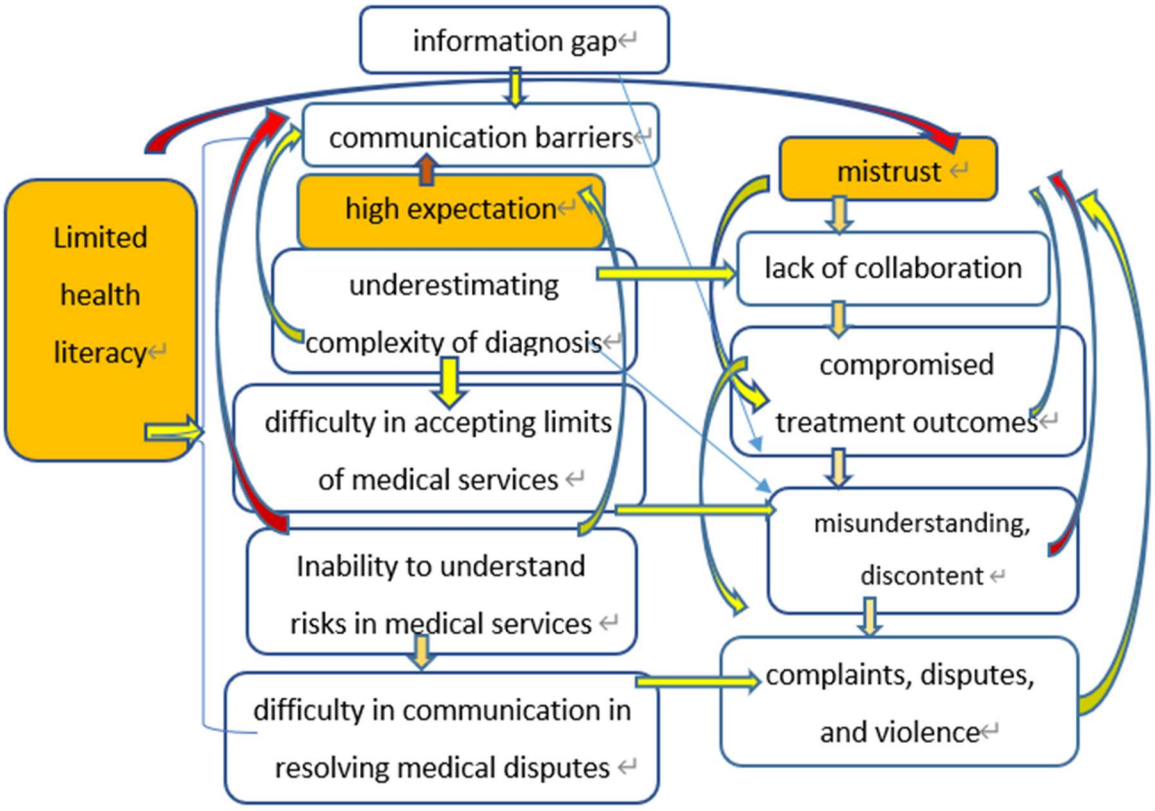


Figure 36. Interplays of key risk factors associated with service users

Consistent with such a definition, improving service users' health literacy entails helping service users to comprehend the limit of medical science, knowing the risks carried in medical services and being reasonable in taking adverse outcomes of the medical treatment received. Health literacy is viewed as an empowering mechanism (Nutbeam, 1998; Schulz & Nakamoto, 2013) that enables patients to play a more active role, take better control of, and manage their health. The enhanced sense of taking control can contribute to their trust in physicians (Gabay, 2015; Schulz, Israel, Barbara A., Zimmerman, & Checkoway, 1993; Schulz & Nakamoto, 2013) and more positive experience (Hu & Zhang, 2015; Lyu et al., 2016; Tucker et al., 2016).

Some authors believe "critical health literacy", the ability to critically evaluate the health information, is a key element of health literacy (Nutbeam, 2000, 2008). If health literacy only means the ability to read health information, yet lacks critical health literacy, then a person may still be misled by the available information. So-called high level of health literacy does not necessarily mean high degree of empowerment (Schulz & Nakamoto, 2013), and can result in less trust towards physicians. Phase 2 participants (K, M) similarly observed that better education of patients is not necessarily associated with greater trust. Based on such findings, the ability to understand risks and uncertainties carried in medical services, and the ability to comprehend the complexity of the medical service provision, should be viewed as essential elements of health literacy and key elements for public health education in the Chinese context.

With the definition of limited health literacy in the present study, promoting health education to overcome limited health literacy can be expected to enhance patient-physician trust, as literature suggests higher health literacy can mean better communication, greater collaboration from service users, and better health outcome (Dawson-Rose et al., 2016; Jirotka et al., 2005; McIntyre et al., 2018). While it is necessary to promote health education and improve health literacy, it should be noted that it remains medical staff' responsibility to tailor their language and help service users to understand the communication during the medical encounter (Brooks et al., 2017; Wittink & Oosterhaven, 2018); and hospital management need to help medical staff to be aware of such responsibility through training.

As noted previously in Chapter 8, gaps between service users' expectation and their perception of experience (Section 8.2, specifically Figure 24, and Section

8.4.1) can result in frustration, anger, and even violence, which suggests managing service users' expectation via adequate and open communication can be helpful in achieving greater service user satisfaction. Phase 2 participants from different stakeholder groups, including medical dispute mediators, all emphasised the importance of adequate communication with service users to manage their expectation to reduce risk of medical disputes. Hamilton et al. (2013) also found that meeting patients' preoperative expectation, achieving satisfactory treatment outcome, and having a satisfactory hospital experience were the main factors that determine patients' overall satisfaction. Literature further suggests patient expectation can be modified by adequately informing them of the anticipated outcome to narrow down the discrepancy between surgeon and patient expectations, which can be predictive of patient satisfaction (McGregor & Dore, 2013; Martinez & Spear, 2014; Palazzo, et al., 2014; Poiraudeau, 2014).

Information asymmetry is believed to be an important reason for mistrust between service users and medical staff (D. Zhao et al., 2016). While information transparency in diagnosis and treatment decision-making from doctors is important (Tucker et al., 2016), Phase 2 findings revealed honest information sharing about challenges hospitals face, including medical staff shortage and sacrifices medical staff make, were also important information gaps that need to be addressed in the Chinese context. Indeed, service users generally have high expectation towards medical service and medical staff, and patient discontent, most of the time, is caused by shortage of medical resource supply (see Chapter 8). Therefore, bridging such information gap can be an important intervention strategy to help gain service users' understanding, and manage a realistic expectation towards medical services. Keeping service users in the dark about problems that hospitals and medical staff face, can only make service users misunderstand the situation, and expect something impossible, which can inevitably lead to disappointment, frustration, and negative perception of medical staff.

Noticeable gaps were also identified between service users' and medical staff's interpretation of medical ethics (Section 8.3.2), which can result in service users' negative perception of medical staff. This finding indicates that bilateral communication between service users and medical staff is necessary and can be helpful in reaching a shared understanding about medical ethics in the Chinese context. Phase 2 findings (Sections 8.3, 8.6) also identify several information gaps

that need to be addressed to enable understanding and trust building between service users and medical staff and manage service user expectation.

### 9.3.2 Addressing key risks associated with service delivery by improving hospital management

Hospital management, especially human resource management, plays a key role in shaping medical staff performance and behaviours (Daniels et al., 2017; Oppel et al., 2017), and patient experience is shaped by hospital organisational features (Flott, Darzi, & Mayer, 2018). Management of service delivery and medical human resources, including job design and staffing, staff performance, and management of service provision environment and medical staff health and safety can be viewed as different sides of the same coin. Interplays of risks (Figure 35) help identify the key to stop the pathway from risks to violence.

#### 9.3.2.1 Improving daiyu, promoting medical ethics, and medical professionalism

Key risks previously identified (Section 8.5) associated with human resource management problems, along with other management problems (see Figure 37), create a context that induces friction and conflicts, a context that prevents effective communication from happening (He & Qian 2016; Millar et al., 2017; Nie et al., 2018a), and makes service users' positive perception of both medical staff and the experiences of using medical services difficult. Research on employee performance and wellbeing in relation to resources available offered insights on intervention through hospital management: more resources should be provided to medical staff to take care of their wellbeing and job satisfaction so that their job performance can be improved (Carvalho, & Chambel, 2017; Daniels et al., 2017; Dill, Erickson, & Diefendorff, 2016; Liu et al., 2018; Mrayyan, 2006; Nielsen et al., 2017; Oppel et al., 2017, 2019; Rathert & May, 2007; Wright & Cropanzano, 2004).

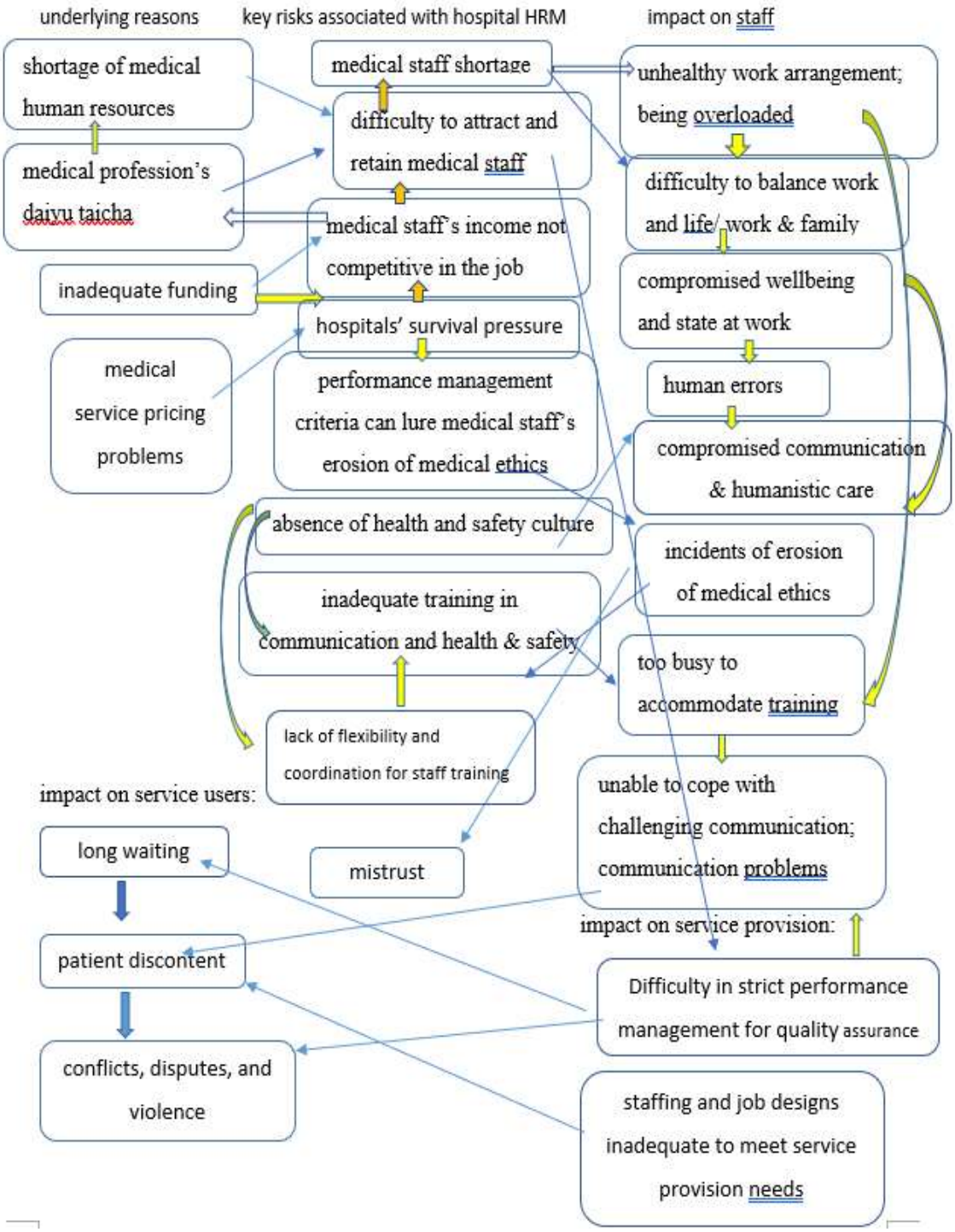


Figure 37. Key risks associated with hospital human resource management problems, reasons, and their impact

Consistent with literature (He & Qian, 2016; H. Wu et al., 2013; S. Wu et al., 2012), medical staff shortage has been identified as the cause of many problems observed in the medical encounter. Furthermore, Phase 2 findings identify that daiyu taicha (a Chinese expression meaning that overall income and compensation being

too poor) can be a key reason for medical staff shortage (Figure 37), which is also consistent with the literature (Dong et al. 2013; He, 2014; He & Qian, 2016; Y. Liu et al., 2018; Tucker et al., 2015). Such a finding indicates that improving medical staff's daiyu can be key to addressing the human resource problem and problems associated with medical staff shortage. Recently the Chinese central government has realised the importance of improving medical staff's daiyu in increasing medical human resources and is working on the issue (Wang, 2014).

Research on human resource management has generated abundance of evidence that job satisfaction is positively associated with individual's performance (Leggat et al., 2010; Mrayyan, 2006; Wright & Cropanzano, 2000) and overall organisational performance (Bakotić, 2016; Townsend, Lawrence, & Wilkinson, 2013). Research reveals that employees' job satisfaction is closely related to their wellbeing and job performance (Nielsen et al., 2017; Oppel et al., 2017, 2019) and quality of care (Ng, 2011). Compensation and remuneration, and the feeling of being properly paid, are important for job satisfaction (Kong et al., 2020; Liu et al., 2018). In China, salary is one of the main factors that influence medical staff's job satisfaction (Deng et al., 2016; Liu et al., 2018), as is perceived support from the organisation (Fang, Zhao, Yang, Sun, Li, Jiang, & Wu, 2018; Fu et al., 2013).

Empathy is an essential feature of professionalism, and essential to high quality care (Crandall, 2009). Absence of empathy during service provision was found to be the reason for damaged trust between service users and medical staff (Crandall, 2009), and could result in negative user experience (Phase 2, Section 8.2.1; X. Wang et al., 2019). Healthcare is regarded as a caring labour (Dill, 2016) which requires empathy, and could result in empathy fatigue (Larson & Yao, 2005). Empirical evidence suggests that effort-reward imbalance ratio was negatively associated with nurses' empathy levels (Kong et al., 2020), which suggests that improving medical staff's daiyu can be key in promoting humanistic care, resolving many of the problems observed, and stopping the path to service users' discontent and violence.

Improving medical staff's daiyu and providing more supports can, therefore, be the key to improving medical staff job satisfaction, wellbeing, job performance, and, consequently, service quality (Deng et al., 2018; Kong et al., 2020; Y. Liu et al., 2018; Nielsen et al., 2017). Improving daiyu can also enhance the overall

attractiveness of the medical profession, which can create a beneficial cycle of improving medical human resources and eventually improving medical service provision. Poor daiyu, excessive workload (Y. Fu, Schwebel & Hu 2018), and prevalence of workplace violence, may hinder recruitment and retainment of medical staff (Fang et al., 2018; Y. Liu et al., 2018) and further intensified medical staff shortage as observed in the Chines healthcare sector.

#### 9.3.2.2 Promoting patient-centredness, medical ethics, and medical professionalism

Problems with service provision identified in Phases 1 (Sections 6.3, 6.5) and 2 (Sections 8.2.1, 8.2.5) that ignite service users' anger and frustration, such as rules and regulations that show little consideration for service user, lack of coordination in services provision, inadequacy in staffing for service provision, lack of respect, absence of humanistic care, and erosion of medical ethics, all come down to one thing—not putting service users and their interest at the centre of consideration, which is just the opposite of what is conceptualised as patient-centredness (Institute of Picker, 2020; Mead & Bower, 2000). Figure 38 depicts risks associated with hospital service delivery management and their impact based on Phase 1 and 2 findings. As illustrated in Figure 38, all risks can be traced to absence of patient-centredness.

The concept of patient-centred care/patient-centredness seems able to address problems noted previously (Section 8.2). The concept of patient-centred care emphasises the experience of patients: being responsive to individual patient's needs, values, and preferences, and patients being informed decision makers in their care (Rather & May 2008; Rathert, Wyrwich, & Boren, 2013). It has been considered helpful in improving quality of service provided (Davies et al., 2008; Flach, McCoy, Vaughn, Ward, Bootsmiller, & Doebbeling, 2004; Rathert et al., 2013; Robinson et al., 2008; Wolf et al., 2008). Key dimensions of the concept, such as patients as valued individuals, egalitarian doctor-patient relationship, and therapeutic alliance (Mead & Bower, 2000) can be useful in guiding doctor-patient relationship and communication, emphasing respect to patients, sharing power and decision making during consultation and treatment, and a holistic approach to treatment. Doctor-as-a-person is a dimension that is largely ignored in literature (Langberg, Dyhr, & Davidsen, 2019). However, it has important implications for doctors practicing

patient-centredness, in recognising the impact of doctors' behaviours and response on patients, their communication, and subsequent treatment outcomes. Therefore, doctors need to be mindful of their response to patients. Furthermore, doctor-as-a person dimension acknowledges the limitation of medical staff, their needs be considered and their wellbeing being taken care of (Langberg et al., 2019).

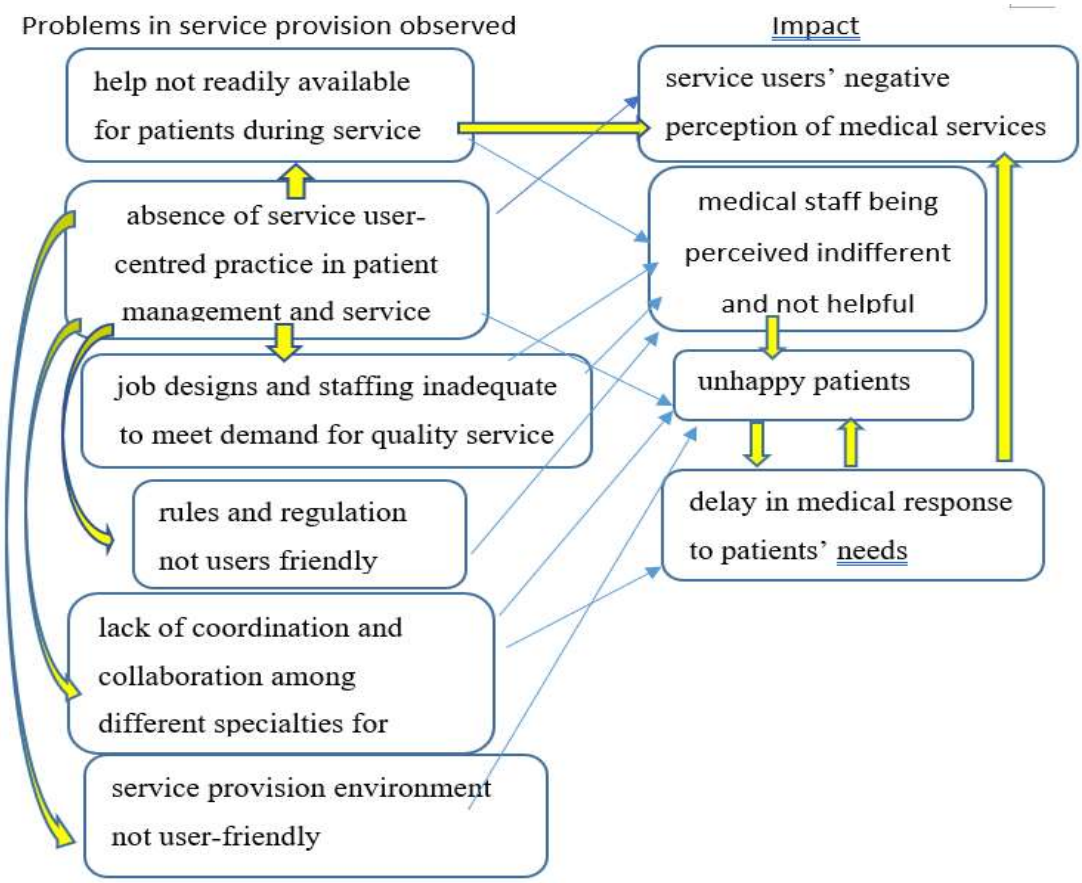


Figure 38. Risks associated with hospital service provision management and their impact based on Phase 2 findings

The dimension of coordinated and integrated service reflects care that puts patients' interests and health at the centre of consideration (Langberg et al., 2019) was absent from the negative experiences shared by Participants in Phase 2. In fact, the many dimensions of patient-centredness, as conceptualised, are exactly what were absent from service users' negative experience that triggered their anger and violence (Sections 6.3, 8.2). Therefore, patient-centredness in service provision fits well as an intervention strategy to address problems noted previously for medical service provision (Phases 1 & 2).

Closely related is the concept of relationship-centredness, which sees relationship as the key for healthcare and individuals. Both medical staff and service users deserve respect and care (Tesolini & the Pew-Fetzer Task Force, 1994); specifically, relationship-centredness also views medical staff's wellbeing as critical for quality service provision, which echoes the need to take care of their wellbeing to ensure quality service delivery. When medical staff's health and wellbeing can be undermined due to factors such as workplace violence (Chen et al., 2016; Shi et al., 2017), or even threatened with sudden death from overwork (Shan et al., 2017; Shen et al., 2018), what can we expect from medical staff?

Person-centredness is believed to share the same approach as patient-centredness, being specific in the medical encounter context. Person-centredness can also be applied to other aspects of hospital management beyond management of patients and service delivery, including human resource management (Gameiro, Chambel, & Carvalho, 2020).

The term "patient-centredness" is used along with person-centred in the Chinese context. However, it may not have the same meaning as outlined in the literature; and is likely not being implemented as noted in Section 8.2. Patient care in the Chinese context has its own unique culture characteristics (Holroyd, 2001). For example, it is normally patient's family, not the patient themselves, that gives informed consent to make decisions regarding treatment plan, and most often pays the medical bill. Based on their literature review of person-centred care in China, J. Wang et al. (2019) found that person-centred care is a new concept and organisational support for person-centred care is extremely limited. Given the importance of patient's family during service provision in the Chinese healthcare context, the term patient-centred more often is used to mean "service user-centred", which includes both patients and their family, and puts the interest of service users at the centre of consideration. It can be difficult to implement all dimensions of patient centredness, as mapped in the literature, with the seeming conflict between traditional family values and emerging individual awareness in the Chinese medical context. It can also be difficult to balance patient and family interests when disagreements and conflicts arise. However, this issue is beyond the scope of the present research.

The term patient-centric practice in the Chinese context is more often used by hospital management to promote medical staff work ethics. It emphasises putting

service users' interest at the centre of consideration in service provision, a core value of medical professionalism and medical ethics (Birden, Glass, Wilson, Harrison, Usherwood, & Nass, 2014; Jotterand, 2005; Nie et al., 2018a), which is both practical and necessary for positive service user experience. Emphasising service users' interests as the centre of consideration and service delivery by hospital management in the Chinese context is expected to generate a positive image among service users and benefit trust-building. However, what is often ignored is that putting service users at the centre of consideration cannot be realised by medical staff alone; it relies on hospital management to make it happen (Sections 6.3.1, 8.3, 8.5.7).

Managing patient experience should be an integrative part of hospital management efforts in building trust and positive image of medical staff and hospitals. Findings from the present study coincide with findings from J. Wang et al.'s (2019) literature review that patient-centred care remains more of an abstract concept and has not yet been clearly conceptualised to enable being operationalised or applied in daily practices. Based on Phase 2 findings, I join other researchers in advocating for hospital management to be aware of the impact of human resource management and management of other aspects of the service delivery management system on shaping medical staff performance (De Olivira Matias & Coelho 2002; Evans & Lepore 1997; Nielsen et al., 2017; Townsend et al., 2013), quality of care, and, consequently, patient experience (Flott et al, 2018; Limoge & Zuppa, 2007; Oppel et al., 2017).

#### 9.3.2.3 Health and safety management and hospital management

Health and safety management is regarded as an integrated part of human resource management (Jackson et al., 2014). Figure 39 summarises key risk factors with hospital health and safety management, and underlying reasons based on synthesis of findings from Phase 1, Phase 2, and literature. Underlying causes for the different risks, included narrow interpretation of medical staff health and safety, low awareness/intention by hospital management to improve medical staff's work arrangement, absence of health and safety culture, and lack of consistent health and safety practices within hospitals that are important for organisations (De Oliveira Matias & Coelho, 2002; Nielsen, 2014). Medical staff health and safety was not observed to be encompassed by hospital human resource management and service

delivery management when they should, as suggested by literature (Corcoran & Shackman, 2007; Hariadi et al., 2016; Geisler, Berthelsen, & Muhonen, 2019)

Strategic human resource management (Jackson, Schuler, & Jiang, 2014) that is consistently oriented towards medical staff health and safety, prioritises, and takes care of medical staff wellbeing to enable better job performance (Daniel et al., 2017; De Oliveira Matias & Coelho, 2002; Leggat et al., 2010; Nielsen et al., 2017). However, how to empower medical staff and provide a context that makes possible positive communication between service users and medical staff was found to be absent in existing hospital management (Phase 2; Yorio et al., 2015).

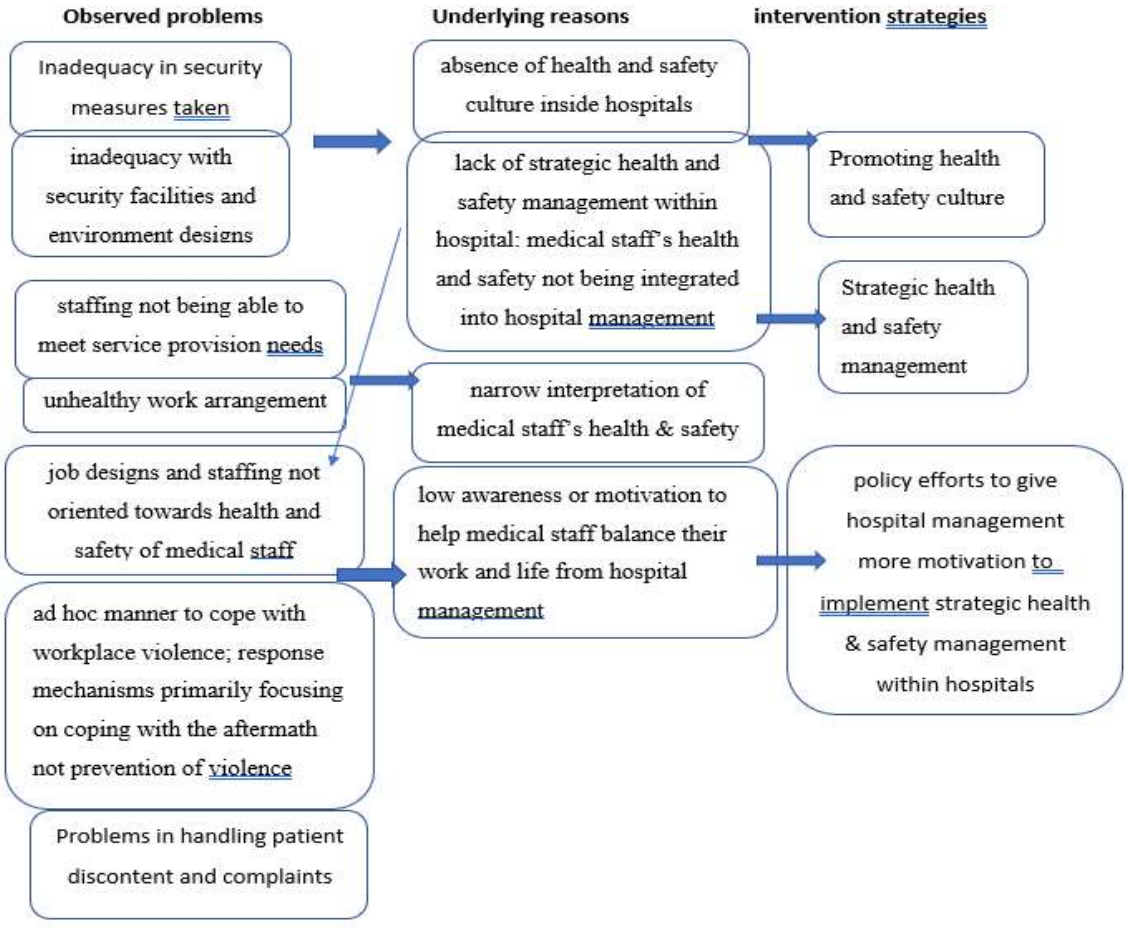


Figure 39. Key risk factors associated with hospital health & safety management and their intervention strategies

Strategic human resource management and promoting a health and safety culture within the organisation that is consistently oriented towards improving medical staff health and safety (Zanko & Dawson, 2012) seems to be the answer to address risks in service provision. The intervention strategy emerged from

synthesising findings from Phases 1 and 2, and findings from multiple fields. Research from occupational health, work safety, and human resource management, offered abundance of evidence to support the impact of human resource management and workplace environment on employees' wellbeing and job performance (Daniel et al., 2017; Dill et al., 2016; Fu et al., 2013; Llorens, Bakker, Schaufeli & Salanova, 2006; Townsend et al., 2013; Van der Doef & Maes, 1999). Insights from different fields reveal that hospitals as workplaces have the responsibility and capacity to manage resources, processes, and environments within hospitals in such a way that both medical staff and service users in the medical encounter can have positive communication and achieve the expected outcome (Daniel et al., 2017; Flott et al., 2018; Luchman & Gonzalez Moreales, 2013; Limoge & Zuppa, 2007; Oppel et al., 2017; Van der Doef & Maes, 1999; Wolf et al., 2008; Yaris et al., 2020)

The link between human resource management practices, employee wellbeing, and employee performance as identified in Phase 2 (Sections 8.3.1, 8.3.3) and literature (Dill, Erickson & Diefendorff, 2016), along with the empirical evidence accumulated for job demands and resources theory (Bakker et al., 2014, 2017; Daniels et al., 2017), provide justification that hospital management should empower medical staff with more resources, provide more supports and training to empower them, and look after their wellbeing to improve their performance and quality of service delivered, which will also benefit doctor-patient relationship as illustrated by Figure 40.

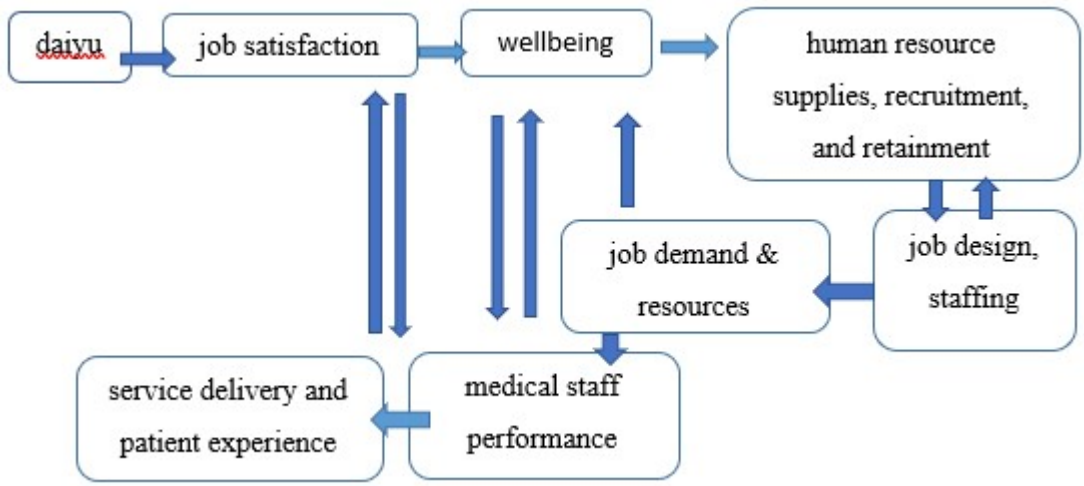


Figure 40. Interplays of medical staff's daiyu, job satisfaction, performance, and patient experience

Phase 2 findings are consistent with literature that reveals making medical staff's job less demanding, and their workload more reasonable to ensure job satisfaction and overall wellbeing, can contribute to their health and safety. This finding suggests that human resource management practices should be better aligned with medical staff performance and motivation, and the hospital's organisational vision and missions. Positive association of organisational support and job satisfaction (J. Fu et al., 2013), positive association of organisational support to cope with workplace violence and subjective wellbeing, and quality of life (T. Sun et al., 2017), and a negative association between work-family conflict and job satisfaction (Deng et al., 2018) all point to the need to take care of medical staff to improve their health and safety.

Consistent with literature, Phase 2 findings suggest that improving medical staff health and safety requires empowering medical staff to effectively communicate. As shown by findings in Section 8.2, it can be achieved by consistently managing human resources, service delivery process, and the environment in such a way that medical staff can have healthy work arrangements and work without compromising their wellbeing. This can be achieved by improving hospital environment design, staffing, and job designs and procedures in such a way that contributes to positive service users' experience and perception (Daniel et al., 2017; Hariadi et al., 2016).

Lack of support provided to medical staff who are involved in patient complaints or medical disputes, and lack of support to enable medical staff to balance their work and family can impact negatively on medical staff's job satisfaction (Phase 2; Bourne, De Cock, Wynants, Peters, Van Audenhove, Timmerman, 2017; Deng et al., 2018; J. Fu et al., 2013). Problems deserve attention from hospital management and should be integrated in hospital management rather than viewed as personal matters of individual staff.

Hospital management should encompass both service user-centric practice and health and safety-centric practice into every aspect of the planning and management of hospital operation (De Oliveira Matias & Coelho, 2002). Every aspect of hospital management should be strategically oriented towards medical staff health and safety, and service users' positive experience (see Figure 41). Health and safety management should be integrated into hospital operational management and human resource management (Nielsen, 2014; Rathert & May, 2007, 2008). Empirical

evidence shows that there is value in improving organisational performance by strategic health and safety management rather than mere compliance (Corcoran & Shackman, 2007; Hariadi et al., 2016).

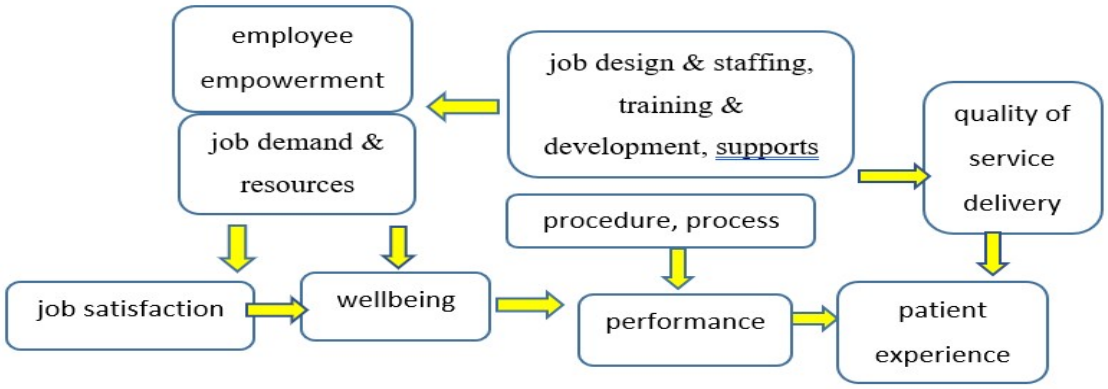


Figure 41. Job demands and resources, employee empowerment, and patient experience

As revealed by Phase 2 findings (Chapter 8, Section 8.8), hospital management can play a key role in violence prevention intervention. Figures in section 9.3.2.2 describe the interplay of key factors that impact medical staff job performance and service user experience, two areas on which hospital management can significantly impact the outcome. Among them, communication, and service users' positive perception of their experience in using medical service are key areas that require careful management, as they are critical for positive doctor-patient relationship and violence prevention and need to be taken seriously by both hospital management and medical staff. Figure 42 describes how medical staff's effective communication and performance can result in positive patient experience and less chance of disputes, and Figure 43 describe how professionalism and patient-centred service delivery contribute to positive user experience based on Phase 2 findings.

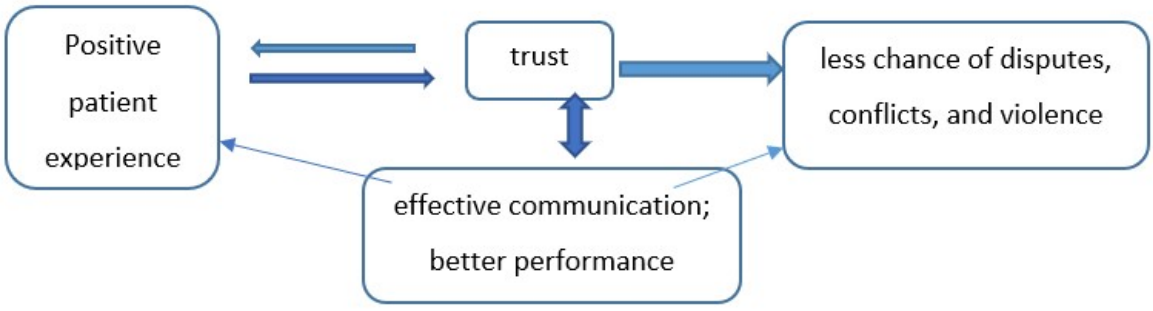


Figure 42. Trust, patient experience, and medical staff performance

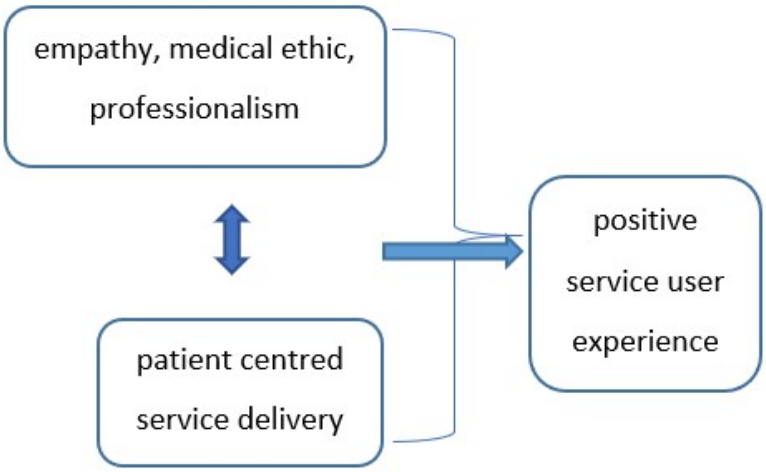


Figure 43. Professionalism and service user experience

### 9.3.3 Addressing risks in the community: Media, mistrust, and expectation

Media coverage is an important factor in shaping public's perception and expectation towards medical services and medical profession (Mechanic, 1996; Terkildsen & Schnell, 1997), and partly responsible for the mistrust towards the medical profession (Mechanic, 1996; Nie et al., 2018c; Su, 2013). Media have also been identified as shaping the high expectation towards medical profession through framing and there is no doubt that media can help shape realistic expectation towards medical staff and medical services as well as play an active role in shaping perception, opinion, and intervention of behaviour changes (Salter, & Byrne, 2018; Terkildsen & Schnell, 1997; WHO, 2017). The interplay of media coverage, mistrust, and public expectation and opinions are depicted in Figure 45. Close collaboration between hospitals and mass media can be helpful for improving public health literacy and enabling a more realistic understanding about medical staff and medical service provision, with media playing an active role in campaigning for behaviours and perception changes (Salter, & Byrne, 2018; Su, 2013; Terkildsen and Schnell,1997; WHO, 2017).

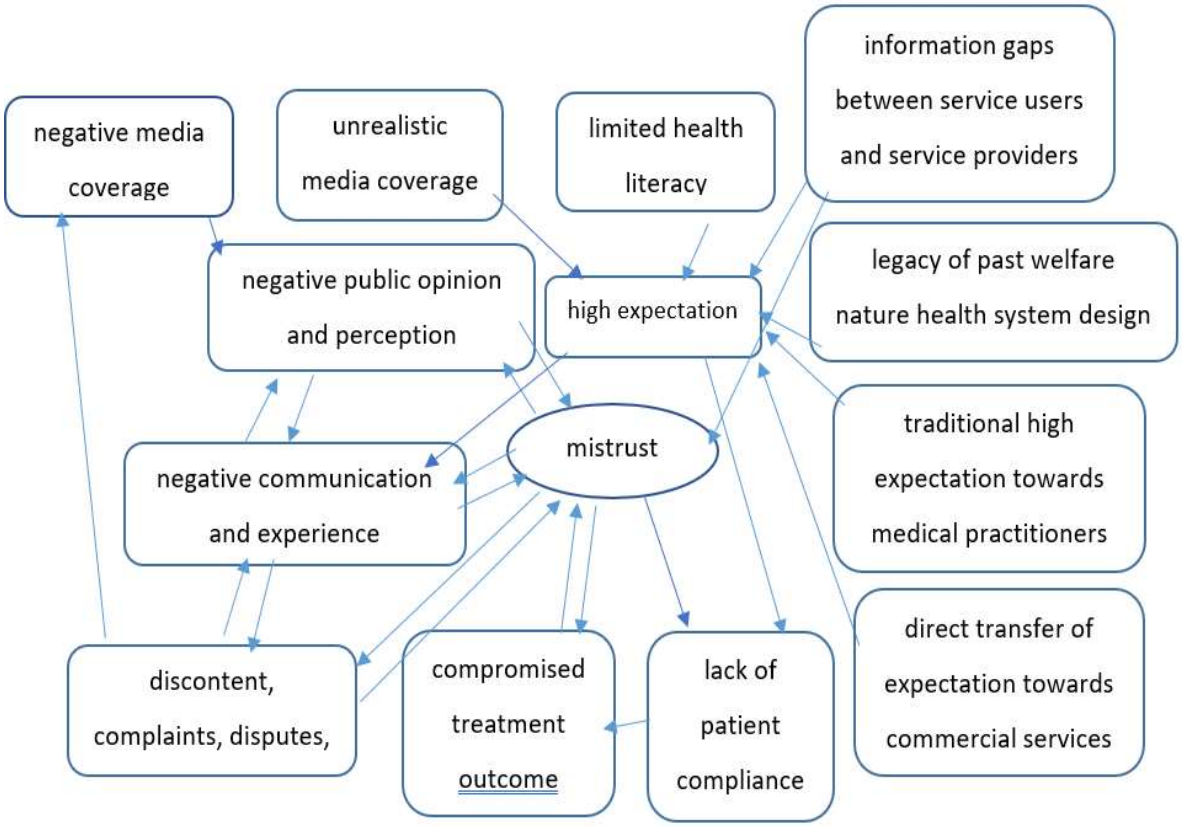


Figure 44. Interplays of media coverage, mistrust, expectation, and public opinion

As depicted in Figure 44, negative service users' experience and service outcomes often underly mistrust. Therefore, although media can contribute towards positive imaging of the medical profession, improving medical service treatment outcomes and enabling positive service user experience are of utmost importance in rebuilding trust (Chan, 2018; Dang et al., 2017; Gundlach & Cannon, 2010; Hamelin, Nikolis, Armano, Harris, & Brutus, 2012). Meanwhile, managing service users' expectation in the community to avoid negative perception of experience when using services is also important for fulfilling expectations and determining satisfaction (McGregor et al., 2013; Palazzo et al., 2014).

### 9.3.4 Addressing risks associated with medical resources and with health system

As noted in Chapter 8, kanbing nan can find its underlying reasons in problems of the health system (Figure 45) based on Phase 2 findings which indicate that health policy changes may be the answer to resolving the problem. Specifically, improving medical staff's daiyu to resolve medical human resource shortage by

health reform, redesign and resolve public hospital funding problems, and improving medical service payment system are important areas that need policy intervention (Blumenthal & Hsiao, 2015; Chan, 2018; Liu et al., 2017; J. Pan et al., 2015; G. Sun et al., 2017).

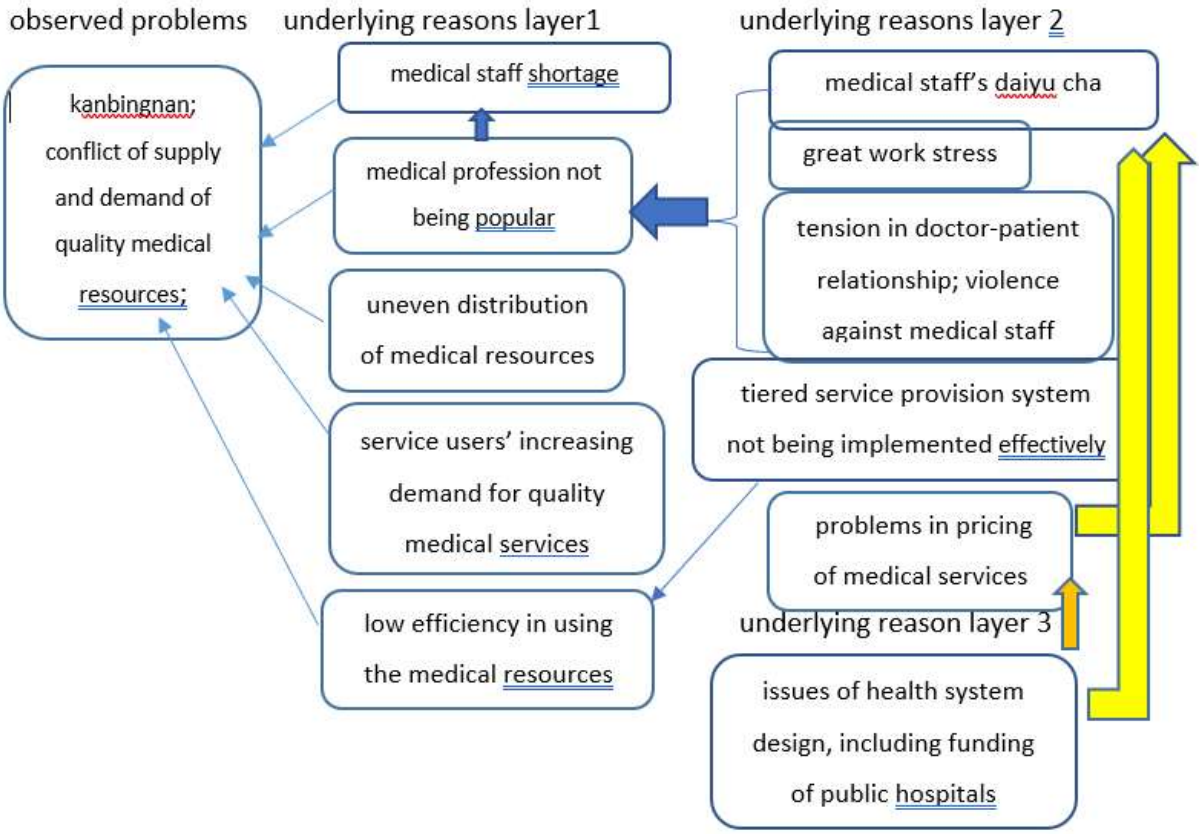


Figure 45. Underlying reasons of kanbing nan

Furthermore, consistent with literature, a focus on treatment of diseases within existing healthcare services is identified, which makes me join other researchers in advocating for adjusting the direction of health care from only the treatment of diseases to improving health status (Deng et al., 2017).

Review of previous rounds of health reform (Chapter 2) show that despite the good intention of health reforms and policies, there could be unintended and unexpected consequence of the change. Instigators of health reforms should be aware of the unintended policy impact on development, distribution, and use of medical resources.

Previous sections have identified the pivotal role of hospital management in improving medical service delivery management and addressing problems that can affect medical staff performance and communication with service users. Taking care of medical staff wellbeing, empowering them to have positive communication with service users, and positive user experience are all important (Oppel et al., 2017, 2019). However, ensuring hospital management are motivated and empowered to create positive change relies on health system design and government policy (Phase 2; Bluff, 2003; McKoy & Smith, 2001; Zanko & Dawson, 2012). One lesson learned from review of health reform is that health care is too important for government to retreat, and government needs to play a critical role in designing, supervising, guiding the development and operation of the healthcare sector with appropriate policies, rules and regulations (Blumenthal & Hsiao, 2015; Meng et al., 2019).

While many of the problems identified with individuals and hospital management can find their roots in the health system, and we can keep reforming and improving health systems, we should acknowledge that there is no perfect health system. Rather than do nothing and wait for the perfect health system to come, we can improve hospital management to enhance service user experience while continuing to develop the health system and health reforms.

Currently, Chinese health reform is progressing in accordance to the 2009 health reform roadmap. Universal basic medical insurance coverage and essential drug system reforms are expected to address equity and accessibility issues of health care services, and now public hospital reform and improvement is the focus (G. Liu et al., 2017). Despite the problems that emerged in the process of health reforms, reform remains the hope to resolve problems withing the health system and health policy. Addressing service users' disappointment and resentment associated with gaps in service users' expectation of the health system (Sections 2.3.3, 8.5.3) also relies on continuing health sytem reforms. More empirical evidence can be generated with the progress of health reform and more health reform policies being implemented to test the effectiveness of the many intervention strategies proposed in the present study.

### 9.3.5 Addressing risks associated with resolving medical disputes and handling violence

The external legal environment was found to have far-reaching influence on service users' way of resolving medical disputes. Phase 2 identified a vicious cycle of lack of clear legal reference in settling medical disputes, inconsistency in handling disputes with flaws in laws and legislation, and a culture of settling disputes through nao, which was found to create an ecology prone to professional yinao (He & Qian, 2016; Liebman, 2013; Tucker et al., 2015). Nao was once used by people, who otherwise had no other way to claim justice, as one last resort to claim one's rights and interests (Harris & Wu, 2005; He & Qian, 2016; Tucker, et al., 2015). Consistent with literature (noted in Section 8.7.2), positive changes in law and law enforcement were explicitly identified by participants to be the reason behind improved yinao and other violence situations against medical staff. This finding indicates that improving law and law enforcement can be an intervention strategy to address risks associated with the external legal environment2. Specifically, improving laws and regulation in resolving disputes and violence, including improving handling medical disputes, help rid the possibility of rule by people (Harris & Wu, 2005; Howard, 1996; Jiang, 2014; McKoy & Smith 2001).

Phase 2 findings revealed multiple reasons behind service users' seeming reluctance to resolve medical disputes through legal channels (Figure 46). Again, improving service users' health literacy to enhance their sense of control is an intervention strategy to offset their sense of being victimised and enhance their trust in medical evaluation. Improving medical disputes resolution channels and making it easier to handle medical disputes in a fair and timely manner, along with improving access to information and assistance to go through the process of resolving medical disputes, are identified as key to address risks associated with problems in resolving medical disputes.

Some researchers (Mor & Einy, 2012) have noted the possible negative impact of law on doctor-patient relationship on the grounds that doctor-patient relationship should not be viewed purely as medical issues (malpractice law may generate problematic doctor-patient relationship), and suggest a relational approach to healthcare law. Specifically, flaws with the existing Tort liability laws were identified to be a reason behind people's hesitation to turn to legal channels to resolve medical disputes and mistrust between doctor and patient (Harris & Wu,

2005; He & Qian, 2016). Researchers argue for no-fault compensation scheme for malpractice to protect service users, thereby removing a possible negative implication of law on doctor-patient relationship, and possible mistrust, so that collaboration and partnership between service users and providers is possible (Mor & Einy, 2012; Tucker et al., 2015).

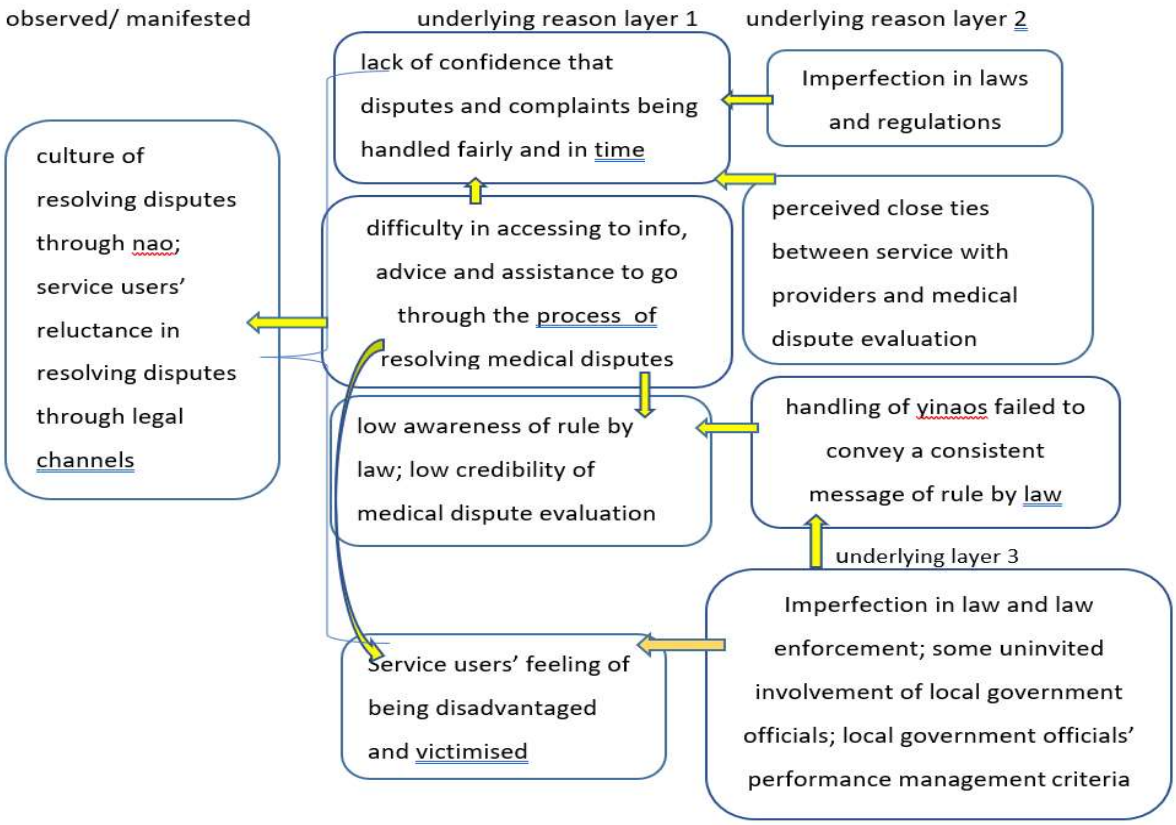


Figure 46. Risks associated with problems in resolving medical disputes and their underlying reasons

## 9.4 Literature updates

The initial literature review on workplace violence against medical staff in China was conducted 2015 to 2017 prior to Phase 1 data collection. Since then, more studies relevant to the current research have emerged (see Table 51).

A review of the latest literature showed that while English language literature on workplace violence in the healthcare sector in China in is emerging, studies are still limited. There have been even fewer violence prevention intervention studies (Hall, Xiong, Chang, Yin, & Sui, 2018) and the research design for most of these studies is still largely limited to descriptive survey. Despite noticeable flaws and

limitations with the relevant studies, overall, they enhance our understanding of the workplace violence medical staff face in the Chinese healthcare setting. What is more, they provide useful sources of reference to check rigour of the present research. Several findings can be identified from the literature update.

Firstly, workplace violence against medical staff is still a concern (Tian, Yue, Wang, Luo, Li, & Zhou, 2020; Zhang, Li, Yang, & Jiang, 2021). Secondly, the impact of workplace violence on medical staff continues to draw attention from researchers. Empirical studies examining the impact of workplace violence on medical staff's job satisfaction (Tian et al., 2020), wellbeing, and performance (Fang et al., 2018; Tang & Thomson, 2019) reveal that frequency of workplace violence is positively associated with medical staff's depressive symptoms, which suggests the need for effective prevention interventions to address workplace stress and support medical staff's psychological wellbeing to improve quality of care (Fang et al., 2018; Tang & Thompson, 2019).

Furthermore, literature updates reveal findings that are consistent with many of the findings from the present study. For example, support from hospital management to medical staff who fall into victims of violence was inadequate, which can contribute to medical staff's mistrust towards service users, and affect their job satisfaction (Yang et al., 2019; Zhan et al., 2019) and quality of life (Xie et al., 2021).

Under-reporting of violence was widespread with inadequate measures to encourage reporting of violent incidents (Yang et al., 2019), which is consistent with present research findings and literature reviewed in Section 3.6. Several studies draw implications that echo intervention strategies proposed in the present study: that hospital management need to improve medical staff work arrangements, and provide support and resources to take care of their wellbeing, including quality of life and job satisfaction (Fang et al., 2018; Lu et al., 2018; Tian et al., 2020; Tang & Thomson, 2019; Zhan et al., 2019). Studies that examine possible causes of risk factors of violence echo findings in the present research, including working long hours (over 50 hours a week), shift work (Tian et al., 2020), stress from workplace violence, and lack of support from organisation (Fang et al., 2018). Triggers of violence identified include poor communication, death of patients, dissatisfaction of treatment outcome and sequela (Zhang et al., 2021).

Liu, Zhou, Liu, and Wang's study (2019) examined the outcome of violent incidents and external involvement, particularly local government's involvement in settling yinao, which echoed findings noted in Sections 9.1 and 9.3.5 that external involvement may create unfavourable external ecology that may contribute to occurrence of yinao, and effective violence prevention intervention should include efforts at policy level. Although Liu et al.'s study was published in 2019, it only examined violent incidents that occurred from 2012 to 2013 and failed to mention developments in legislation since 2015 which forbid paying compensation without prior medical assessment and clear legal references to clarify accountability. Another learning from the updated literature is that prevalence of violence varies depending on multiple factors (Chen et al., 2018; Zhan et al., 2019), such as location, which echoes findings from the present research and supports the need for systematic violence incidents reporting for better understanding and effective prevention intervention as proposed in Section 9.1.

The literature update indicates that despite progress, the research arena on the topic of workplace violence against medical staff in the Chinese healthcare sector still has not been able to break through the existing limitations of research design and methods, and possible lack of theoretical framework in guiding the investigation.

Table 51. Literature updates of workplace violence in Chinese context (2018 to 2021)

| Citation | Method(s) | Sample | Findings |
|---|---|---|---|
| Tian, Y., Yue, Y., Wang, J., Luo, T., Li, Y., & Zhou, J. (2020). Workplace violence against hospital healthcare workers in China: A national WeChat-based survey | A WeChat-based questionnaire survey. | 3706 participants (2750 nurses and 956 doctors) | 2078 (56.4%) participants reported at least one type of workplace violence in the last year. Healthcare workers experienced higher levels of workplace violence were less likely to be satisfied with their careers. Workplace violence remains a special concern for the Chinese healthcare system.<br><br>Risk factors: male, shift work, bachelor's degree education, a senior professional title, working long hour (≤50 hours per week) and working in secondary-level hospitals. |
| Tang, N., & Thomson, L. E. (2019). Workplace violence in Chinese hospitals: The effects of healthcare disturbance on the psychological well-being of Chinese healthcare workers | Cross-sectional online survey | Doctors and nurses from one hospital (n=418) | Frequency of healthcare disturbance was positively related to surface acting and depressive symptoms respectively; surface acting was also positively related to depression, It highlights the importance of preventing healthcare disturbance and of training healthcare staff in strategies for managing emotional demands in reducing depressive symptoms in Chinese healthcare staff |

| Citation | Method(s) | Sample | Findings |
|---|---|---|---|
| Liu, J., Zhou, H., Liu, L., & Wang, C. (2020). The weakness of the strong: Examining the squeaky-wheel effect of hospital violence in China | Survey and the summary statistics of 225 medical disputes (occurring between 2012 to 2013) in Z city. Logit and OLS regression analyses | | Multiple forms of disruptive behaviours involved in medical disputes. The number of protest participants and the length of protest can significantly predict whether the claimant receives compensation and the amount of compensation. Government's overwhelming emphasis on social stability gives protestors leverage against hospitals, which can be summarised as "the squeaky wheel gets the grease." Government's active intervention to reach a peace-oriented goal will incentivise patients to resort to violence in pursuit of compensation. |
| Hall, B., Xiong, P., Chang, K., Yin, M., & Sui, X. R. (2018). Prevalence of medical workplace violence and the shortage of secondary and tertiary interventions among healthcare workers in China | Systematic literature review | 10 studies on secondary and tertiary prevention programmes designed to ameliorate psychological suffering following medical workplace violence | Only 10 published studies identified, suggesting a critical gap in the intervention literature on addressing the public health burden of medical workplace violence. |
| Fang, H., Zhao, X., Yang, H.C., Sun, P., Li, Y., Jiang, K., & Wu, Q. (2018) Depressive symptoms and workplace violence-related risk factors among otorhinolaryngology nurses and physicians in Northern China: A cross-sectional study | A cross-sectional study in grade A tertiary hospitals of Heilongjiang province in Northern China | 379 otorhinolaryngologists and 273 nurses | Respondents who had suffered from physical violence, 71.25% had depressive symptoms. With less than 1 year of experience, frequently working alone was more likely to suffer from depressive symptoms. To reduce depressive symptoms caused by workplace violence and improve quality of medical services, medical institutions should implement effective measures to prevent the occurrence of physical violence, strengthen team cooperation ability and increase peer support. |

| Citation | Method(s) | Sample | Findings |
|---|---|---|---|
| Zhang, X., Li, Y., Yang, C., & Jiang, G. (2021). Trends in workplace violence involving health care professionals in China from 2000 to 2020 | Secondary data analysis (including pictures and videos of violent injuries posted on the internet with real-time data). Frequency count | n=345 | 38.3% of violent crimes were committed using lethal weapons, such as knives. Causes of violence: death of the patient (18.8%); disapproval of staff member's skills, diagnosis, or recommendation of the health care staff (18.3%); poor treatment outcomes (15.9%).<br><br>Trigger of violence: poor communication (38.8%), patient's death (18.8%), the level of service (16.5%). |
| Lu, L., Dong, M., Wang, S.-B., Zhang, L., Ng, C. H., Ungvari, G. S., Li, J., & Xiang, Y.-T. (2020). Prevalence of workplace violence against health-care professionals in China: A comprehensive meta-analysis of observational surveys | Systematic literature review and meta-analysis of observational surveys | 47 studies covering 81,771 health-care professionals | workplace violence against health-care professionals appears to be a significant issue in China. Relevant policies and procedures related to workplace violence should be developed. Staff should be provided with adequate training, education, and support to implement violence management policies to ensure safety at the workplace. |
| Chen, X., Lv, M., Wang, M., Want, X., Liu, J., Zheng, N., & Liu, C. (2018). Incidence and risk factors of workplace violence against nurses in a Chinese top-level teaching hospital: A cross-sectional study | whole hospital survey June 1-15, 2016, with a cross-sectional study design. Logistic regression analysis applied to evaluate risk factors for nurses related to workplace violence | n=1831 registered nurses | 904 (49.4%) nurses reported having experienced any type of violence in the past year. The frequencies of exposure to physical and non-physical violence were 6.3% (116) and 49.0% (897), respectively. All incidence rates of violence were lower than those of other studies based on regional hospitals in China and were found to be at the same level as developed countries and districts. Nurses at levels 2 to 4, and female nurses in clinical departments were most vulnerable to non-physical violence. For physical violence, the two independent risk factors were working in an emergency department and having 6-10 years of work experience. The incidence of workplace violence against nurses in this teaching hospital was better than that in regional hospitals. |

| Citation | Method(s) | Sample | Findings |
|---|---|---|---|
| Xie, X.-M., Zhao, Y.-J., An, F.-R., Zhang, Q.-E., Yu, H.-Y., Yuan, Z., . . . Xiang, Y.-T. (2021). Workplace violence and its association with quality of life among mental health professionals in China during the COVID-19 pandemic | National survey March 15-20, 2020. Workplace violence and Quality of Life were assessed with standardised measures | Frontline mental health professionals during the COVID-19 pandemic (n=10,516) | The prevalence of overall workplace violence was 18.5%. Verbal abuse/threats 15.8% and physical violence was 8.4%.<br><br>Risk factors: male gender, higher educational level, working in tertiary hospitals, caring for COVID-19 patients, and having more severe anxiety symptoms.<br><br>Protective factors: working in inpatient departments, having longer work experience, being a junior nurse. Mental health professionals who experienced workplace violence had a lower overall quality of life compared to those without workplace violence. |
| Yang, S. Z., Wu, D., Wang, N., Hesketh, T., Sun, K. S., Li, L., & Zhou, X. (2019). Workplace violence and its aftermath in China's health sector: Implications from a cross-sectional survey across three tiers of the health system | Cross-sectional questionnaire survey | Health workers (n=4862) who have contact with patients from 5 tertiary hospitals, 8 secondary hospitals, and 32 primary care facilities located in both urban and rural areas of Zhejiang Province, China, were chosen as the study sites from July 2016 to July 2017. | 224 (4.6%) were physically attacked and 848 (17.4%) experienced threats in the past year. Respondents in secondary hospitals were more likely to experience physical violence (AOR=3.29, 95% CI 2.21-4.89), threats (AOR=1.61, 95% CI 1.32-1.98), and Yi Nao (AOR=2.47, 95% CI 2.10-2.91), compared with primary care providers. Lack of organisational policies to report workplace violence was associated with higher likelihood of physical violence (AOR=3.64, 95% CI 2.57-5.18) and threats (AOR=2.21, 95% CI 1.76-2.78).<br><br>Among physical violence cases, only 29.1% reported the attack to police mainly because most felt it useless to do so (58.8%). Only 25.7% were investigated and 72.4% of attackers received no punishment. Of all those attacked or threatened, 59.4% wanted to quit current post and 76.0% were fearful of dealing with urgent or severe cases. Proper management of the aftermath of violence against health workers is inadequate. Formal guidelines for reporting and managing workplace violence are urgently needed. |

| Citation | Method(s) | Sample | Findings |
|---|---|---|---|
| Du, Y. X., Wang, W. X., Washburn, D. J., Lee, S., Towne, S. D., Zhang, H., & Maddock, J. E. (2020). Violence against healthcare workers and other serious responses to medical disputes in China: Surveys of patients at 12 public hospitals | Patient survey, survey asking sociodemographic information, patients' attitudes (e.g., general optimism, trust in their physicians, perceived healthcare quality), and their primary response to a medical dispute. Options ranged from "complaining within the family" to "violence." t-tests and Chi-square tests to explore the relationships between reactions and patient characteristics. multivariable logistic regressions | Patients from 12 leading public hospitals in five Chinese provinces (n=5556) | The primary response was complaining to hospital or health department officials (32.5%). Seeking legal help (26.3%) and direct negotiation with doctors (19.6%) were other frequent responses. More serious responses included 83 stating violence (1.5%), 9.7% expressing a desire to expose the issue to the news media, and 7.4% resorting to seeking third-party assistance. Patients who were more likely to report "violence" were male (OR = 1.81, $p < .05$), high-income earners (OR = 3.71, $p < .05$), or reported lower life satisfaction (OR = 1.40, $p < .05$). Higher trust scores were associated with a lower likelihood of a serious response, including violence (OR = 0.80, $p < .01$). |

## 9.5 Latest development in the healthcare sector

As I was finishing writing this thesis, there have been changes happening in the Chinese healthcare sector. For example, the National Health Commission (2020) put forward a programme to restore professional ethics in pharmaceutical sales and medical service provision, aiming to have stricter professional monitoring for medical staff's medical ethics compliance, stricter monitoring of medical service provision environment, tightening scrutiny of link between pharmaceutical companies and hospitals. There has been a series of actions taken to eliminate corruption in the healthcare sector among medical doctors having senior professional titles and senior management from public hospitals who have been involved in serious corruption and erosion of medical ethics in their practice (Legal Daily, 2020).

According to a briefing from the China Discipline and Inspection Committee (2021a, 2021b), during the period of 13th Five Year plan, in Guangxi province alone, there were more than 4000 cases of corruptions, of which about 2500 cases involved secondary hospitals in township. Corruption cases typically involved hospital management staff purchasing medical supplies and drugs; and health insurance fraud initiated by medical staff, especially senior hospital management. Typical cases included senior hospital management from multiple public hospitals accepting bribes and kickback money from pharmaceutical companies in their bidding and purchasing of medicines and medical supplies, charging patients for quality medical supplies but using low priced medical supplies (China Discipline and Inspection Committee, 2021a, 2021b). There have also been stricter rules to ensure compliance with medical ethics. For example, medical staff taking kickback money over 2000 RMB (NZD400) may face suspension of practice (National Health Commission, 2020).

The government has also started moving forward with public hospital reforms. In a document released by the General Office of State Council in 2021, improving hospital senior management's accountability and improving hospital management, including medical human resource management, compensation, and remuneration structure to improve their daiyu, with improved performance management that focuses more on quality of care rather than volume of services, has been clearly listed among the key agenda of public hospitals reforms (General Office of the State Council of China, 2021). What can be observed recently from the

Chinese healthcare sector can provide unique opportunities to further test the intervention strategies proposed in Section 9.1.

# Chapter 10 Conclusions and Implications

In this chapter, I reflect on aspects of the present research to see what has been achieved, including the strengths and contributions, as well as limitations, of the study. Implications are drawn from findings that focus primarily on what can be done from hospital management to improve medical encounter communication and enable service users' positive perception of their experience in using services as part of promoting violence prevention. Last, I identify possible directions and topics for future research.

## 10.1 Conclusions and implications

A review of violence incidents reported in the media confirmed that violence against medical staff is a nationwide phenomenon in China. Violence was reported across different parts of the country, at different levels and types of hospitals—private and public. Phase 2t showed that perception of workplace violence varied significantly within the context, personal experience, and positional role. For example, compared to general service users, hospital deans, medical staff, and medical disputes mediators are more likely to have personally experienced, witnessed, or been involved in workplace violence or handling of workplace violence, and have perceptions more closely aligned to what is reflected in the literature.

Phase 2 participants identified changes in workplace violence situations against medical staff in relation to changes of doctor-patient relationship and trust: lack of trust and tension in doctor-patient relationship were associated with more violence incidents against medical staff and more medical disputes. Workplace violence was very bad around the year 2010, but has improved since 2015, as evidenced in empirical studies (CDMA, 2017; Zhou et al., 2017).

Thesis findings reveal that systematic violence incident reporting systems within hospitals would offer important evidence to inform prevention measures. The violent abstraction and variables used for Phase 1 data analysis may be helpful in designing a template for reporting violent incidents. Even violent incidents that may not necessarily result in physical harm and attempted violent incidents that have been stopped (noted in Phase 1) can provide useful insights for violence prevention. Thus, the reporting system should include both the attempted and implemented violent

incidents regardless of the resultant harm, rather than limited to those incidents that only resulted in serious physical harm. Systematic reporting (e.g., violent incident abstraction forms) can accurately capture the situation of workplace violence against medical staff; provide information to help understand antecedents of violence; and offer useful insights for improving service delivery management, environment designs, and security measures for effective violence prevention.

Findings identified key risk factors at all levels of the socio-ecological model. While the proximal risks that come from the situational context of the medical encounter, or from the individuals involved in the medical encounters (e.g., medical staff's communication problems, behaviours, and attitudes that are inductive of service users' negative perception), risks at the organisational level (e.g., problems in hospital human resource management, problems in service delivery management, and problems in health and safety management), can contribute to proximal risks associated with individuals.

Meanwhile, factors in the wider community and national policy levels can also contribute to risk of violence occurrence, either by affecting factors in hospitals that then indirectly affect individuals or by directly affecting individuals' perceptions, attitudes, and behaviours. For example, viewed chronologically, when hospitals were pushed to the market and operated as money-making organisations, medical staff's performance management criteria were tied to their ability to create revenue. Medical staff's behaviours and attitudes at work were not immune to the money-making context, which in turn affected how service users and medical staff perceived and interacted each other, determining the outcome of their medical encounter (Chan, 2018; He & Qian 2016). Factors at the organisational level—job designs, level of staffing, training provided to staff, service delivery management system, human resource management—were identified to play a pivotal role in enabling positive service users' experience and effective communication during the medical encounter.

Key elements of the conceptual framework for future interventions, as illustrated in Figure 35, show the pivotal role hospital management must play in violence prevention intervention. Hospital management can facilitate and enable positive communication and service user experience by improving service provision management, making healthy work arrangements, improving job designs, and providing necessary resources to make things happen rather than rely on individuals'

effort alone. Intervention efforts targeting proximal risk factors at the individual level are necessary and helpful. However, intervention efforts at the organisational and community levels have more far-reaching effect as revealed by the ecological theory. This is perhaps particularly true in the Chinese context given its cultural heritage as an authoritarian society, collectivism, and tradition of central planning and control in the national social and economy development. A top-down approach appears to be more effective in the Chinese context.

Besides identifying key risk factors, the intersection and pathway of risk factors to violence occurrence, several findings and implications are worth noting. First, recorded violent incidents and experiences shared by participants show that when service users' needs—emotional or rational—fail to be taken care of, it can cause frustration and negative perception of the experience of using services. The implication from such a finding is that medical staff and hospital management should be aware that it is important to address both the emotional and rational needs of service users in medical services; that is, both the humanistic care and technical aspects of health care are equally important in healthcare for service users' positive perception. Medical staff and hospital management need guidance and protocol development to address service users' emotional and rational needs by adopting patient-centric care.

Second, qualitative interviews revealed that unhealthy work arrangements—long working hours, shift work, unreasonable workload—were perceived by medical staff as a key threat to their health and safety, alongside violence against medical staff. However, the impact of unhealthy work arrangements on medical staff health and performance is found to be largely ignored by both hospital management and other non-medical professional participants. In addition, association between medical staff wellbeing and job performance did not get attention from hospital management, and medical staff wellbeing was not included as part of health and safety management in hospitals. This finding is reflected in the narrow interpretation of the Chinese term "zhiye anquan yu jiankang" (OHS) for medical staff that is limited to risks of exposure in medical service provision and workplace violence.

The negative impact of unhealthy work arrangements on medical staff health and performance means that hospital senior management must take care of medical staff wellbeing to support their job performance. It also highlights the need for integration and coordination of service delivery management and human resource

management. Specifically, staffing for service provision and medical staff shift arrangements need to avoid compromising medical staff wellbeing. Awareness and commitment by hospital management to a more inclusive understanding of health and safety and violence prevention are needed. However, in the Chinese context, it can be difficult for such changes to happen from within hospital unless motivated by central government policy for compliance (Bluff, 2003; Zanko & Dawson, 2012).

Third, medical staff feel their voices not being heard. Very often they are expected to take care of others, however they are often not being respected and cared for. Lack of hospital management support, when faced medical disputes results in mistrust towards service users from medical staff and contributes to observed over-prescription out of self-protection. This indicates that more workplace support should be provided. All key stakeholders' voices and interests should be considered in health reforms for greater collaboration amongst stakeholders to ensure better policy development and outcome.

Fourth, violence against medical staff can be explained by risk factors at multiple levels. The interplay of the risk factors at different levels of the socio-ecological model indicate that efforts should be made to address the contextual risk factors at the organisational and community levels, which echoes Reason's (2008) claim regarding the causal chain of an impact—that medical staff as the front-line practitioners, often inherit the (problematic) latent conditions of system and organisational failures, which often act as "contributory factors," necessary for any causal agents to generate an impact. It is an injustice to blame individual medical staff for their communication and behaviour problems and use their behaviour problems alone to explain conflicts and violence (Reason 2000, 2008; Zanko & Dawson, 2012). Likewise, service users should not be blamed for their limited health literacy and be expected to overcome communication barriers alone. Instead, community and hospitals should work together to help both medical staff and service users overcome their communication barriers, enable positive communication between them, and facilitate positive user experience.

Finally, hospital management play a pivot role in improving service delivery and medical staff health and safety. There is low awareness or motivation for hospital senior management to implement strategic health and safety management within hospitals, including improving medical staff work environments and work arrangements. It requires policy and regulatory efforts, as well as education and

training to motivate senior hospital management to commitment to implementing strategic health and safety management within hospitals.

## 10.2 Limitations of the current research

Subject to practical constraints of available time and resources, there are limitations for the present study. For example, Phase 1 data included only those violent incident reports that were publicly accessible on the internet, which was not originally reported for the present research purpose. As a result, it is possible that the number and types of violent incidents being collected in Phase 1 could be subject to different filters, media preference, and constraints of the socio-cultural context. For example, many of the violent incidents shared by Phase 2 participants involved emotional and psychological harm rather than physical harm. These violent incidents were not reported in the media, which favoured incidents with physical harm. This highlighted the limitation of relying on one type of data method alone for drawing conclusions. Despite its limitations, as stated previously in section 3.1, focus of the present study was on yinao and physical violence against medical staff in China. Phase 1 study only identified different patterns and risk factors of reported violent incidents. Furthermore, limitations of Phase 1 were mitigated to some degree with a mixed method design, which enabled methods and source triangulation.

Due to various factors previously noted in Section 6.2, in addition to the actual number of violence incidents that occurred, various factors could affect the number of violent incidents reported and collected in Phase 1. The number of cases reported and collected may not necessarily reflect the number of violent incidents that happened. It is, therefore, difficult to gauge the situation of workplace violence against medical staff nationwide in the Chinese context based on data collected in Phase 1 alone. Although Phase 2 findings and the literature review added novel understandings regarding the violence situation, it is still difficult to reach clear conclusions, which again indicates the importance of systematic reporting of violence incidents in the workplace.

Additionally, despite best efforts made by myself and my field supervisor to obtain institutional support in recruiting participants; I was unable to recruit all the key stakeholders identified in Phase 1 for Phase 2 data collection. For example, police officers were originally identified and intended to be included in the interviews. However, due to lack of availability of potential participants, police

participants were unable to be included. For identified allied stakeholder groups, such as news reporters and lawyers, more participants beyond the single lawyer would have benefitted the study. As an emerging researcher, I recognise I have sections in the data collection phases that I could have done better. For example, I might not have always worded the interview questions clearly enough for participants to understand, and sometimes I needed to paraphrase and restate the question. In some instances, I might not have grasped participant cues and lost the chance to follow up with participant responses.

Data collection and data analysis of the present research were guided by the modified socio-ecological model as depicted in Figure 9. As noted in previously in section 3.7.1, the socio-ecological model was not originally designed to explain workplace violence, and it is not possible to stick to the original terms used by Urie Bronfenbrenner. There has not been a universal model with accepted terms to describe workplace violence and different layers of context for workplace violence. The present research used terms including individual, situational, organisational, community and societal levels to indicate the different layers of focal interest for understanding the context of violence. Therefore, possible confusion may arise.

Furthermore, although it was desirable to validate the conceptual framework developed in the study with a survey of key stakeholders, due to practical constraints of time and resources, this was impossible to be included in the present research. However, this can be one direction for future research.

## 10.3 Strengths and contributions of the current research

The present study contributes to the existing knowledge and has successfully answered the overarching research questions regarding understanding violence and developing a violence prevention intervention framework. The multi-phase findings and analysis add to the empirical knowledge of workplace violence situation in China, generating better understanding about patterns, and key risk factors and interplay of risk factors for workplace violence against medical staff in China. Specifically, it revealed the pivotal role that hospital management can play in shaping service user experience, doctor-patient relationship by identifying how problems in hospital management can contribute to the occurrence of violence against medical staff. The study offers novel and meaningful insights for making positive service user experience, doctor-patient communication, and doctor-patient

relationship through improving multiple aspects of management within hospitals. It highlighted the importance of managing service users experience and taking care of medical staff's wellbeing. It revealed the critical role hospital management can play in violence prevention: facilitating, enabling effective communication and positive service user experience as a way of violence prevention. The insights gained and the intervention framework developed are useful for the Chinese context and, more broadly, hospitals that want to enhance service user experience and doctor-patient communication.

The present study also contributes to violence prevention intervention by developing an evidence-based prevention intervention framework underpinned by the socio-ecological model. By identifying risk key factors, investigating the interplay of risk factors, and mapping out the pathway from risks to violence, the present study developed practically feasible strategies for violence prevention that can be implemented and coordinated on different levels. It is also an initial effort towards exploring how prevention intervention efforts can be implemented among different stakeholders and in community contexts.

The present study also contributes to flexible multi-phase research methodology and design. With a multiple stakeholder design, the present research was able to uncover how miscommunication and mistrust can arise by triangulating different perspectives and perceptions rather than relying on participants' self-report alone. A sequential mixed method multi-phased design was used, which enabled triangulation of findings from data collected with different data collection methods. The sequential mixed-method design enabled source triangulation and method triangulation in the present study.

The present study looks beyond service users and medical staff involved in the medical context, drawing on insights from multiple disciplines and research areas to identify key risk factors and their interplay in triggering violence, and key factors in prevention intervention. These include insights from workplace violence, management, particularly human resource management, occupational health and safety, safety science ergonomics, communication, and psychology. The present study encompasses insights from multiple disciplines underpinned with the socio-ecological model and shows the avenues for collaboration amongst various stakeholders to gain synergy for effective intervention.

## 10.4 Possible future research

The present research set out to explore the complex interplay of key risk factors for violence occurrence and develop a practical intervention framework for violence prevention. More empirical studies are needed to test the feasibility and effectiveness of the intervention measures suggested in the present study, although most of the intervention measures were based on empirical findings and have been triangulated against literature. Intervention pilot studies with the stakeholders identified in the present study over a set time can be used to refine and explore how intervention efforts can be collaborated and coordinated among different stakeholders. Furthermore, the ongoing health reform in China, especially the latest public hospitals reforms (General Office of the State Council of China, 2021), can provide evidence to measure the feasibility of the many intervention strategies proposed in the present study.

Although the preliminary conceptual intervention framework in the present research was developed in the Chinese context, many of the suggested intervention measures are general guidelines and not specific enough to be applied directly in a specific context. For example, concepts such as health literacy require operationalised definitions for localisation to implement intervention and improve public's health literacy; what elements of communication skills could be included in training for medical staff in the Chinese context. More empirical evidence is needed to develop effective training specifically tailored to medical staff communication needs to help them to cope with challenging communication situations, build rapport, and convey the message of medical staff being partners and allies with service users. Future research using a systems approach is required to identify the key elements for communication training to enable positive service user experience and trusting relationship building; as well as research addressing how patient-centric care and relationship-centredness can be integrated in hospital operations through strategic management.

In all, the present research successfully achieved its objectives: generated greater understanding of workplace violence against medical staff in China, including its patterns and risk factors; developed a conceptual framework, with which detailed violence prevention interventions can be implemented. It also added novel empirical knowledge of workplace violence in the Chinese context, showing

how a socio-ecological model underpinned with a systems approach can help reach a better understanding of violence in the context of effective violence prevention intervention.

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# Glossary

| | |
|---|---|
| **bianzhi**: | a Chinese term – the resources allocated for and within public institutions. When used in the context of human resource management, an employee with bianzhi means having a formal contract with the public institution |
| **daiyu**: | a Chinese term – the combination of compensation and remuneration and benefits provided to an employee |
| **daiyu taicha**: | a Chinese expression – overall income and compensation is too poor |
| **da nao, xiao nao**: | a Chinese expression – describes serious disturbance and minor disturbance |
| **da nao da pei**: | (big disturbance, big compensation); zhong nao zhong pei (medium disturbance, medium compensation); and small disturbance, no compensation |
| **hongbao**: | red pocket |
| **hukou:** | a household registration system in China that classifies residents into rural and urban, each tied to different employment, education, and healthcare welfare policy. The system makes it hard for people to migrate between different areas and has been dramatically changed with economic reforms and marketisation |
| **kanbing nan**: | difficulty accessing medical services/visiting a doctor |
| **kangbing gui**: | expensive to get medical services/visit a doctor |
| **guanxi**: | relationship, connection |
| **jishu**: | the combination of professional knowledge, skills, and experience in a doctor's medical practice that determines the doctor's ability to help patients |
| **Majio**: | a popular table game played by four people |
| **shangyi shijian**: | violent incidents against medical staff |
| **shuofa**: | explanation of, and settlement for the dispute |
| **tizhi**: | system – specifically refers to the health system and supporting policy systems for health service provision |
| **Wechat**: | a popular social media via mobile phone in China |
| **Weibo**: | a social media on the internet in China |
| **xinku**: | very difficult, exhausting, as to be torturing and hard to bear |

| | |
|---|---|
| **yide**: | medical ethics |
| **yihu renyuan** | medical staff, including medical doctors, nurses, and allied health professionals |
| **yiliao baoli**: | violence in healthcare sector, violence against medical professionals |
| **yiliao jiufen**: | medical disputes |
| **yinao**: | a Chinese term – refers to a unique form of violence in China which features severe disruption of hospital operations in combination of both physical and verbal abuse that aim to gain substantial financial compensation from the victim hospitals. Yinao incidents mostly aim at financial compensation. People can make a living by having yinao |
| **yi yao yang yi**: | a Chinese expression – to provide for medical services with drug sales. It was once a government initiative (as noted in Chapter 2) to encourage hospitals to be self-sufficient to cope with national fiscal difficulty |
| **yishu**: | a Chinese expression – the combination of a doctor's professional knowledge, skills, and experience to help patients and provide treatment |
| **yiwuke**: | medical affair department that handles patient complaints and patient discontent within hospitals |
| **zhuai**: | being arrogant, cold, and indifferent; so as to make people feel unwelcome (idiomatic expression) |

# Appendices

## Appendix A: Phase 1 Violent Incident Abstraction Format

**Record No.**

**Record ID:**

**File Name: VI**

**Original Link:**
**permanent link:**

**Source:**

**Date: (YY/MM/DD)**

**Time:**

**Duration of the incident:**

**Hospital Location:**

**Hospital Name:**

**Type of hospital: Comprehensive Western Medicine Hospital /Traditional Chinese Medicine Hospital/ Specialty Hospital**

**Level of hospital in Chinese:**

**Level of hospital: tertiary / secondary /community**

**Type of violence: Verbal violence (Y); Physical violence (Y); Yinao (N); Other**

**Perpetrator:**

**Number of perpetrator(s):**

**Perpetrator Gender:**

**Victim job title:**

**Victim gender:**

**Number of victim (s):**

**Victim's specialty:**

**Victim professional title:**

**Incident Site:**

**Consequence (on victim and victim hospital)**

**Degree of Injury: Hospitalised: (Y/N); Rest/ Ward/ICU/ Death**

**Long term impact on victim:**

**Medical condition as reported:**

**Consequence (on perpetrator(s)' side):**

**Mechanism of Injury (MOI):**

**Weapon used:**

**Trigger/antecedent as reported:**

**Reason given by perpetrator:**

**Detailed account of the incident:**

**Medical dispute involved? Yes/ No**

**Communication involved? Yes/No**

**Workplace environment:**

**Responses/helps available at site? Yes/No**

**Alarm/security camera in place? Yes/No**

**Source of help: self / Colleagues/ Security guards/passers-by**

**Follow-Up:**

**Police involvement: Yes/No**

**Local government involvement: Yes/No**

**Local authorities involvement: Yes/No**

**Notes:**

# Appendix B: Examples of Phase 1 Data Management Processed with Extra Translation and Consultation Procedure

## Example 1

**Record No. VI1**

**Case ID:** VIYaan20170105

**File Name:** ABVIYaan20170105

**Link:** http://finance.ifeng.com/a/20170105/15125370_0.shtml
permanent link: http://www.webcitation.org/6nNOKJ9Zz
**Source:** www.wccdaily.com.cn **(Huaxi Dushi Bao)**

**Date:** 2017/01/05 (YY/MM/DD)

**Time:** 1:28 am

**Duration of the incident:** No details available, being brief based on report

**Location:** Yaan, Sichuan Province

**Hospital:** Yaan People's Hospital

**Type of hospital**: **Comprehensive Western Medicine Hospital** /Traditional Chinese Medicine Hospital / Specialty Hospital

**Level of hospital: tertiary** / secondary /community

**Type of violence:** Verbal violence (**Y**); **P**hysical violence (**Y**); Yinao (N); Other:

**Perpetrator:** Patient family

**Number of perpetrator**: 4

**Perpetrator Gender**: Male

**Victim:** Doctor

**Gender of victim:** Female

**Number of victim**: 1

**Victim's specialty**: **Department of** Respiratory

**Accident Site:** Emergency Department

**Consequence (on victim and victim hospital):** victim was hospitalised for treatment with severe physical injury.

Degree of Injury: Hospitalised: (**Y**/N); Rest/ Ward/ICU/ Death

**Long term effect:** (disability/loss of workability/self-managing-ability)**:** NA

**Consequence (on perpetrator(s)' side):** According to some informant, one perpetrator was under control of police and the other three were still at large. No comment from the police about that information.

**Trigger/antecedent as reported by victim or witness:** hospital unable to admit the patient as expected due to lack of bed

**Reason given by perpetrator:** The doctor used excuse to refuse request to provide service

**Mechanism of Injury** (MOI)**:** stabbing/beating/kicking/stepping

**Weapon used**: Legs

**Detailed account of the incident:** Doctor C was attending a consultation meeting at ED where the patient and family members requested hospitalization and getting treatment. Due to high demand of beds at Department of Respiratory, the doctor tried to explain to the perpetrators that there was no vacant bed at department of respiration but there would be a bed at the Emergency department to make it possible. The perpetrator interpreted the explanation as an excuse to refuse them service. The communication soon evolved into verbal conflicts and later ended up with four men chasing and beating the victim, including kicking, and stepping over the victim's head. The victim was wounded all over her body and hospitalised. According to witness, the victim ended up with her finger tendon exposed and skin damaged.

**Medical dispute involves?** No

**Responses/helps at site:** Security guards

**Workplace environment:**

Alarm/security camera in place? Yes

**Self** / Colleagues/ Security guards/ Management

**Follow-up:**

**Police:** Police involved following a call and investigation followed.

**Local government:**

**Local authorities:**

## Example 2

**Record No. VI2**

**Record ID:** VIChangzhi20161123

**File Name: ABVI2**

**Link:** http://cq.qq.com/a/20161123/019819.htm
permanent link: http://www.webcitation.org/6nNN39iUD

**Source:** Beijing Youth Paper (www. ynet.com)

**Date:** 2016/11/22

**Time:** About 10am

**Duration of the incident:** Brief according to report

**Location:** Changzhi, Shanxi Province

**Hospital:** Heping Hospital Affiliated to Changzhi Medical Institute

**Type of hospital**: **Comprehensive Western Medicine Hospital** /Traditional Chinese Medicine Hospital / Specialty Hospital

**Level of hospital: tertiary** / secondary /community

**Type of violence: Verbal violence** (**Y**); **P**hysical violence (**Y**); Yinao (N); Other:

**Perpetrator:** Patient family

**Number of perpetrator**: 1

**Perpetrator Gender**: Male

**Victim:** Doctor

**Victim gender:** female

**Number of victim**: 1

**Victim's specialty Department**: Infectious Diseases Department

**Accident Site:** Department of Geriatrics

**Consequence (on victim and victim hospital):** Victim was severely injured and was still in critical condition after emergency operation by the time of news report.

**Degree of Injury**: Hospitalised: (**Y**/N); Rest/ Ward/**ICU**/ Death

**Long term effect: (disability/loss of workability/self-managing-ability):** NA**,** victim's life was still at risk at the time of report

**Consequence (on perpetrator(s)' side):** the perpetrator turned himself in to the police

**Trigger/antecedent as reported:** The victim refused to give treatment in the way requested by the perpetrator, who had made the request based on information he obtained from internet.

**Reason given by perpetrator:** Same as above

**Mechanism of Injury** (MOI): **stabbing**/beating/kicking/stepping

**Weapon used**: Knife

**Number of attacks**: 9

**Detailed account of the incident:**

Doctor S from the Infectious Disease Department was stabbed nine times by a patient family with a knife, with one of the most serious stab piercing through her inferior vena cava and the right ventricular wall, which caused her to suffer from heart rapture, pericardial tamponade, and shock. After the emergency rescue operation, the victim was still in critical condition. The perpetrator's 4-year-old daughter was an inpatient receiving treatment at the hospital for Hand-Foot and Mouth Disease (HFMD) and was getting better. The perpetrator searched online and obtained some information for HFMD and kept demanding doctor S to treat his daughter in the way described online, which was rejected by the doctor. Then the patient family then began to resist the doctor's treatment plan after the refusal.

**Medical dispute involves?** No

**Communication involved? Yes**/No

### Workplace environment:

**Responses/helps at site: No**

Alarm/security camera in place? **Yes**/No

**Self** / Colleagues/ Security guards/passersby

**Follow-up**: NA

## Example 3

**Record No. VI3**

**Record ID: ABVIGuangxi20150616**

**Original Link:** http://news.163.com/15/0607/16/ARH64NM900014AEE.html

Permanent link: **http://www.webcitation.org/6mTLlQcx5**

**Source:** www.thepaper.cn

**Time:** 2015/06/16 (YY/MM/DD)

**Duration of the incident: NA,** brief

**Location: Nanning, Guangxi (Autonomy Region)**

**Hospital:** No. 1 Hospital Affiliated to Guangxi Medical University

**Level of hospital: tertiary**/secondary/community

**Type of hospital**: **Comprehensive Western Medicine Hospital** /Traditional Chinese Medicine Hospital / Specialty Hospital

**Type of violence:** verbal **/physical**/Yinao/ Other

**Perpetrator:** Former patient

**Perpetrator Gender**: Male

**Number of perpetrator**: 1

**Victim (s):** Doctor

**Victim Gender**: Male

**Number of Victim**: 1

**Victim Specialty**: Radiation Oncology department

**Incident Site**: Entry to elevator

**Consequence (on victim and victim hospital):** Injured with 30% to 35% of burns and ended up in ICU care. 72 hours after the rescue effort, the victim was still in a critical condition.

**Seriousness of Injury**: Hospitalised: (**Y**/N); Rest/ Ward/**ICU/** Death

**Long term effect:** (disability: loss of workability/loss of self-care-ability) possible

**Consequence (on perpetrator(s)' side):** arrested following report

**Trigger/antecedent as reported:** dissatisfaction after treatment

**Reason given by perpetrator:**

**Mechanism of Injury** (MOI): stabbing/beating/kicking/stepping/**others: burning**

**Weapon used**: petrol and fire

**Trigger/antecedent as reported:** Dissatisfaction after the treatment

**Reason given by perpetrator:** Same

**Detailed account of the incident:** Doctor Q from Radiation Oncology department was poured petrol at the entry to the elevator and seriously burned by a former patient with nasopharyngeal carcinoma who was once treated by the doctor. The victim suffered from over 30% to 35% of third degree burns and ended up in ICU care. 72 hours after the rescue effort, the victim was still in a critical condition

**Medical dispute involved?** Yes/No/**Unknown**

**Legal procedure suggested by the hospital but rejected by patient/ family: NA**

**Workplace environment**

**Responses/helps available at site?** No, Victim was on his own.

Alarm/security camera in place? NA

**Follow-up:**

**Police:** Yes, after the violent incident for investigation.

## Example 4

**Record No: ABVI4**

**Record ID: ABVI4Yulin**

**Original Link:** http://news.163.com/15/0607/16/ARH64NM900014AEE.html
**Permanent link:** http://www.webcitation.org/6nRzGLH76

**Source:** www.hsw.cn **(huashangwang)**

**Date:** 2015/06/05 (YY/MM/DD)

**Time: morning**

**Duration of the incident: Brief**

**Hospital Location:** Yulin City, Shanxi Province

**Hospital:** No.2 Hospital of Yulin City

**Type of hospital**: **Comprehensive Western Medicine Hospital** /Traditional Chinese Medicine Hospital/ Specialty Hospital

**Level of hospital: tertiary** / secondary /community

**Type of violence:** Verbal violence (**Y**); **Physical violence** (**Y**); Yinao (N); Other

**Perpetrator:** Patient and patient family

**Number of perpetrator**: 2

**Perpetrator Gender**: one female, one male

**Victim:** Doctor

**Victim gender:** Male

**Number of victim**: 1

**Victim's specialty**: Department of Otorhinolaryngology

**Incident Site: consultation room**

**Consequence (on victim and victim hospital):** injured with eyeball cracked and risk of loss of vision permanently

**Degree of Injury**: Hospitalised: (**Y**/N); Rest/ **Ward**/ICU/ Death

**Long term impact on victim:** Possible loss of vision permanently and further treatment is needed

**Consequence (on perpetrator(s)' side):** One perpetrator arrested for further investigation. No consequence for the other perpetrator, the mother who caused no injury.

**Mechanism of Injury** (MOI): stabbing/beating/kicking/stepping/**punching**

**Weapon(s) used**: medical history notebook, fist

**Trigger/antecedent as reported:** the patient's request to jump the queue for treatment was rejected by the doctor (patient's unreasonable request rejected by the doctor)

**Reason given by perpetrator:**

**Detailed account of the incident:** the patient together with his mother requested immediate consultation service from the doctor, L, claiming the patient was in a hurry to enter the national entrance exam, which was declined but the doctor. The patient's mother got angry and threw the medical history notebook she was holding toward the doctor, which led to dispute between them. The patient, who was 16, punched the doctor with his fist. Before people could respond, the doctor's left eye was injured.

**Medical dispute involved?** Yes/ **No/**unknown

**Legal procedure suggested by the hospital but rejected by patient/ family?** Yes/No/NA

**Communication involved? Yes**/No

**Unreasonable request being rejected**? **Yes**/No

**Motivation** of violence:

### Workplace environment:

**Responses/helps available at site? Yes**/No

Alarm/security camera in place? **Yes**/No

**Self** / Colleagues/ **Security guards/bystanders**

### Follow-Up:

**Police: Yes**/No

Police involved following a call and investigation followed.

**Local government: NA**

**Local authorities: NA**

## Example 5

**Record No. VI8**

**Record ID:** VI8Laigang

**File Name:** ABVI8

**Original Link:** http://news.xinhuanet.com/legal/2016-10/05/c_1119664581.htm

**Permanent link**: http://www.webcitation.org/6oKjT6qde

**Source:** www.bjnews.com/cn **(xinjingbao)**

**Date:** (YY/MM/DD) 2016-10-03

**Time:** morning, about 10 am

**Duration of the incident:** Brief

**Hospital Location:** Laifu, Shandong Province,

**Hospital:** Laigang Hospital

**Type of hospital**: Comprehensive Western Medicine Hospital

**Level of hospital: tertiary**

**Type of violence: Physical violence** (**Y**);

Perpetrator: Patient's father, C

**Number of perpetrator**: 1

**Perpetrator Gender**: Male

**Victim:** Doctor Li

**Victim gender: M**ale

**Number of victim**: 1

**Victim's specialty**: Department of Paediatrics

**Incident Site: doctor's office**

**Consequence (on victim and victim hospital)**

**Degree of Injury**: **Death**

**Long term impact on victim:** NA

**Consequence (on perpetrator(s)' side): arrest**

**Mechanism of Injury** (MOI): **chopping 15 times, 12 in head**

**Wounds: 15**

**Weapon used**: A chopping knife and a sharp knife

**Trigger/antecedent as reported: death of patient, who was new born**

**Reason given by perpetrator: revenge**

**Detailed account of the incident:** The perpetrator's new born baby developed neonatal septicemia and pulmonitis, and died two days after birth due to rapid deterioration of her condition. Doctor Li who was the doctor on duty working at the ICU at Paediatrics Department communicated once with the patient family on the patient's medical condition. After the death of his daughter, the perpetrator failed to reach a reconciliation agreement with the hospital and he decided to take a revenge. On 3 October 2017, the perpetrator arrived with a backpack, carrying a chopping knife and a sharp knife. . The victim Doctor L who had been working on his night shift was chopped 5 times by the perpetrator with the chopping knife in the doctor's office. The victim died after rescue efforts in the afternoon.

**Medical dispute involved? Yes**/ No

**Communication involved? Yes**/No

## Workplace environment:

**Responses/helps available at site?** Yes**/No**

Alarm/security camera in place? **Yes**/No

**Self** / Colleagues/ **Security guards/passersby**

## Follow-Up:

**Police: Yes/**No

Police involved following a call and investigation followed. The perpetrator was under arrest.

**Local government: NA**

**Local authorities: NA**

Guojia weijiwei, Ministry of Public Security sent officers to oversee the investigation of the case. The case was classified as a Serious Health professionals-related case (Zhongda Sheyi anjian).

# Appendix C: Ethics Approval Letter

**AUTEC Secretariat**

Auckland University of Technology
D-88, WU406 Level 4 WU Building City Campus
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

7 March 2017

Jane Koziol-McLain
Faculty of Health and Environmental Sciences

Dear Jane

Re Ethics Application: **17/30 Workplace violence against health professionals in China: Contextual factors and interventions**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 6 March 2020.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through http://www.aut.ac.nz/researchethics. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 6 March 2020;
- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/researchethics. This report is to be submitted either when the approval expires on 6 March 2020 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

Kate O'Connor
Executive Secretary
**Auckland University of Technology Ethics Committee**

Cc: tyumei@aut.ac.nz; Eleanor Holroyd

## Appendix D: Advertisement for Phase 2 Participant Recruitment and Participant Information Sheet (Chinese version)

**参与《中国医护人员的职业安全与健康：情境因素及干预》课题访谈调研邀请**

医疗环境，医疗服务，

您身边从事医护工作的家人及朋友的职业安全与健康，

您关心吗？您关注吗？您希望改善吗？

亲爱的朋友：

不论您是医护工作者，医院管理者，法律工作者，新闻工作者，还是一名普通的医疗服务的使用者，《中国医护人员的职业安全与健康：情境因素及干预》课题组诚挚邀请您参加课题的访谈调研，分享您对医疗环境，医疗服务及医患关系的看法和体验。

本课题是一个关注医护职业安全与健康，关注医患关系的研究课题，将就中国医护人员遭遇的职业安全事件进行深入探讨，为防范医护职业安全事故事件的发生、建构和谐医患关系及创建平安医院，寻求切实可行的方案，供政府有关部门参考。

您一个小时的畅言和倾诉，您的参与和关怀也许就是改善的开始。了解本课题详情或参与访谈调研，请给何玉梅邮箱 tyumei@aut.ac.nz 留言。谢谢大家！

共建和谐医患关系、创建平安医院，用您的学识、经验参与这个项目，为改善医疗环境出谋献策吧！

本研究由奥克兰理工大学研究伦理委员会（AUTECE）于 2017 年 3 月 7 日批准，AUTEC 申请批准号 17/30

**关于本课题研究的一些常见问题解答：**

**1. 问：本课题的研究目的是什么?**

**答**：本课题的目的是识别中国医疗环境下威胁医护人员职业安全与健康的主要风险因素，并建构一个综合干预防范的基本框架， 作为干预防范暴力伤医事件及其它职业安全与健康事故的基础。本课题的研究成果将以论文、研究报告等形式发表，并会在恰当的时候转送到主管医疗卫生机构的相关政府部门，为各级部门和各医疗单位制定切实可行的综合干预改善医护人员的职业安全与健康机制提供科学的指导。改善医疗环境，改善医护人员的职业安全与健康状况将惠及整个医疗体系的相关各方。不仅使医护人员的职业环境得以改善，普通大众亦将受益于医疗系统的稳定和医疗服务质量的保障。

**2. 问：为什么会邀请我参加课题调研呢?**

**答**：本课题向社会各界招募课题调研受访人员，邀请医疗服务的使用者，医护人员及工作中涉及医疗纠纷处理，医患关系，医院管理，法律工作，新闻报道的各界人士参加调研访谈。如果您同时满足以下条件， 欢迎您参加我们的调研：

- 常住国内；
- 在工作中或生活中对于中国的医疗服务和医护人员的职业安全与健康事件有足够的经验和体会；
- 愿意就与医护人员职业安全与健康相关的问题分享您的看法、个人经验和视角。
- 能够在知情同意书上签名

**3. 问：我如何确认参与调研?**

**答**：如在仔细阅读本知情告知书后，您选择参与本次调研，请在后面的知情同意书上签名确认，并交还研究人员。参与本次调研完全自愿。是否参与本次调研完全由您自己决定的。不论是否参与本次调研，都不会因此对您造成任何影响。您也可以随时退出调研。若您中途退出调研，您的相关的数据将由您决定是否继续在本课题中使用。

**4. 问：本次调研将如何进行?**

**答**：本次调研会采取一对一的匿名访谈方式。整个课题会访谈多组受访人员。访谈的具体问题将随依据您的职业/所处立场的不同而调整。您将只参加其中的一次访谈。访谈将在轻松愉快的氛围中，本着平等、尊重的原则进行。研究人员希望倾听您的心声，了解您在工作中的相关经历和看法。访谈可能的访谈话题如下：

1）医护人员：您经历的病人及其家属造成的伤医事件，您对于原因及防范的看法。也会包括您的基本工作状态，包括工作时间、工作压力，您所在工作单位对于伤医事件的反应机制。

2）医院的管理者：您所在的医院经历的医护职业安全事件，包括起因及处理机制，遇到的困难和防范方法，医院的人事管理制度及医院处理医疗纠纷的沟通机制，医院防范职场暴力所采取的措施，经验和教训都是可能涉及的话题。

3）医疗服务的使用者：个人或家人寻医问药的经历和对医疗服务的看法。

4） 律师或法律工作者：您在工作中处理医疗纠纷的经历，您对处理医疗纠纷，医疗事故认定的相关法律法规的看法，防范暴力伤医的看法。

5）职能机关工作人员：您所在部门处理伤医事件医疗纠纷的做法、原则，经历、经验和教训。

6）新闻工作者：您在工作中对于医疗事故报道，医疗纠纷或者伤医案件报道的经验和感受。

7）专职处理医疗纠纷和医患关系的工作人员：您处理医疗纠纷的经历，感受和评价医疗纠纷的原则。

本课题的主要研究人员，将和您见面或通过电话/网络对您进行一对一的深度访谈。访谈的目的是倾听各方的意见和建议，从而找到解决问题的答案。为了保护您的隐私，所有访谈内容将不会涉及任何可识别的个人身份信息。在您的同意下，访谈调研将全程录音并转成文档，作为研究数据进行分析。所有参与调研的人员，或任何参与调研工作，接触到课题数据的工作人员都必须签署隐私和保密协议，不将访谈调研的内容与任何第三方人员讨论和分享。所有采集的数据也仅限用于本课题的研究目的。本次调研的所有数据，都会按照研究伦理委员会的要求，遵照严格的程序，分开保留在奥克兰理工大学校园内安全的地方。

**5.问：调研过程可能存在哪些不适和风险呢?**

**答**：对某些人来说，谈论与暴力有关的经历有可能会引起不适。如果您曾亲历了严重暴力伤医事件，在您考虑参加调研前，请您仔细考虑以下两个问题：

1） 您是否乐意参加本课题的访谈调研并谈论您亲历的职场安全事件?
2） 在访谈过程中您若出现严重不适，您身边是否有您愿意谈心的亲朋好友?

如果您对以上两个问题的回答都是肯定的，欢迎您参加我们的调研。如果您在访谈中有出现不适，您可以随时退出访谈。

本课题严格遵照奥克兰理工大学研究伦理委员会提出的研究伦理标准进行，不让任何参与者， 包括研究者本人因此处于任何危险之中。访谈调研只是邀请受访者分享自己在工作中的一些经验、体会和看法。访谈只是为了倾听各方面的看法和意见，从而理解不同风险因素之间的相互作用，找到研究问题的答案。在设计调研问题时，研究者已经咨询了中国各方面的专家，力求问题设计合理安全，符合中国的社会和文化环境。如果在访谈过程中受访者认为某些问题自己不便回答，可以选择不回答。研究者会始终尊重受访者的权利和自由，保护受访者的安全和利益。尽管本课题的主要研究者在海外学习多年，依然是中国公民，所以在一个完全符合中国社会文化特点，安全的框架下进行本课题的研究符合研究者本人的利益。

在调研过程中，研究者和所有的受访者之间是相互平等、尊重的合作伙伴关系。我们走到一起，是为了一个共同的心愿：找到解决威胁医护人员职业安全与健康，尤其是暴力伤医问题的答案，切实解决问题。

**6. 问：如何缓解调研中出现的不适合和风险?**

**答：**尽管采取了措施降低风险，您在访谈中还是有可能出现不适。如果调研中您出现不适，可随时选择退出访谈。您可以随时向研究人员索取世卫组织版的《压力评估和管理指导手册》，里面有关于评测压力的和管理压力的一些非常有用的信息。如有您觉得自己心理压力很大，需要帮助，可以尝试向自己的亲朋好友倾诉和寻求帮助。如有需要，研究者本人也很乐意向您推荐专业的指导和资源，帮助解决您的问题。

**7.问：本研究课题的利益**

**答**：一方面，希望能汇聚众人的智慧和力量，找到解决问题的办法。根本解决针对医护人员的职场暴力，不仅有利于改善医护人员的职业安全与健康状况，亦将有利于维护中国医疗系统的稳定及可持续性，为全体中国人的健康保驾护航。对于参与调研的受访者个人不会有直接的利益。如果受访者希望和提出要求，研究人员可以无偿为参与受访者所在医院的医护人员职业安全与健康改善计划或改善医患沟通的设计和实施。

**8.问：本课题研究如何保护我的隐私?**

**答**：课题只会收集一些统计学上的基本信息，如基本工作状态和工作年限的信息，这些数据仅用于分析研究目的。整个调研过程严格保护受访者的隐私，严格遵循保密程序。在本次调研中，您所有的联系信息都会和一个本研究专用的身份代码一起保存，而不会和任何个人可识别信息保存在一起。所有访谈采集的信息都不会和第三方分享。所有受访者的签名表和录音会严格按照奥克兰理工大学研究伦理委员会的隐私及保密程序的要求，保存在奥克兰理工大学。

**9.问：参加调研参加者的投入与付出**

**答**：您只需要参加一次访谈调研，时间大概一个小时。具体访谈地点可以由双方协商，在您觉得方便的地点进行。参加访谈您个人无额外费用。调研结束后每个受访者可以获得一份来自新西兰的特色礼品，作为对您参与调研的感谢。

**10.问：我有机会考虑是否参加调研吗?**

**答**：您无需仓促决定是否接受调研邀请。可以在阅读完本告知书后充分考虑，在两周内做决定。访谈调研初步拟定 11 月中下旬。初步拟定的访谈地点有广州、深圳、上海和南宁。具体地点和时间可以协商再定。对于非常有兴趣参加，但是无法前往以上几个城市的朋友，研究人员也可以视情况灵活安排访谈地点，去受访者集中的地方进行访谈。

**11.问：我可以获得到本次调研结果的反馈吗?**

**答**：您如果希望收到这次调研结果的反馈，可以告知研究人员。您也可以通过参加本课题的第四阶段的问卷调查，直接看到综合本次调研和前期研究成果提出的干预基本框架。在这个调查问卷中，您会看到综合了第一阶段和您参加的本次访谈调研（第二阶段）的结果提出的基本框架，并对这个干预基本框架的进行评价。您签同意书的时候， 会有机会选择是否希望在本课题结束时收到本次调研结果的反馈，及是否参加下一阶段的调研。

**12.问：如果我对于本课题有什么担心的问题，我将如何处理?**

**答：**如果对本课题有任何的担心，请第一时间联系本课题的导师 Jane Koziol-Mclain 教授, 她的电子邮件是 jane.koziol-mclain@aut.ac.nz。对于涉及课题执行中任何关切，请联系奥克兰理工大学伦研究伦理委员会的执行秘书 Kate O’ Connor, 电子邮件是：ethics@aut.ac.nz , 联系电话是：0064921 9999， 分机号 6038。

如果您有问题需要联系以上人员，又担心自己的英语可能会影响沟通，可先联系主要研究人员何玉梅，安排一名本地的翻译协助。

**13. 问：如果我需要知道更多本课题的信息，我需要联系谁?**

**答：**请联系本课题的主要研究人员：**何玉梅：**tyumei@aut.ac.nz， 课题主要导师 Jane Koziol-Mclain 教授, jane.koziol-mclain@aut.ac.nz

请保留本知情告知书以备日后查询。

Last updated 30 Aug 2017

# Appendix E: Interview Participant Recruitment and Participant Information Sheet (English version)

Date Information Sheet updated: 13 September 2017

**An Invitation to participate in interview study for the research project: Workplace viiolence against medical Professionals in China: Contextual factors and Interventions**

**Healthcare Environments, medical services, and occupational health & safety** of your family or friends who are medical professionals, do you care? Do you have a concern? Do you want to improve?

My dear friend, whether you are a medical professional, or a hospital manager, a lawyer or legal professional, a media reporter, or a medical service user, the research team for the project on workplace health and safety of medical professionals in China: would like to invite you to participate an interview to share your opinions and experience on Chinese healthcare environments, medical services and doctor-patient relationships.

This study seeks to investigate the nature of violent incidents against medical professionals and to develop practical schemes to prevent violent incidents, by informing harmonious doctor-patient relationships and safer hospitals in China.

This interview will take approximately an hour of your time. To learn more details about the research project and the interview study, please contact the contact Yumei He via email tyumei@aut.ac.nz. Thank you!

Please join us with your knowledge and experience and contribute to building of harmonious doctor-patient relationship, safe hospitals and improving our healthcare environments.

## Frequent questions about this research

### 1. Q: What is the purpose of this research?

This proposed study aims to identify key patient and visitor-perpetrated violence risk factors for the Chinese healthcare sector and to develop a conceptual framework as a basis for intervention. Findings of this research will be presented in the form of thesis, reports, journal articles and a book, which will be forwarded to relevant government authorities to inform policymaking and provide practical insights for comprehensive interventions on various levels to address the serious violence situation in the Chinese health sector. Tackling violence in the Chinese health care settings will benefit everyone within the health care system. For example, medical professionals will have a safer workplace environment and the wider community can benefit from having quality health care services accessible with the sustainability of the healthcare system being safeguard.

### 2. Q: How was I identified and why am I being invited to participate in this research?

This study recruits participants from the wider community and hopes to invite medical service users, medical professionals and people whose job involves handling medical disputes, your knowledge and experience in your work and your views can provide useful insights to help find answers to the research questions.

If you meet the following criteria, then you are welcome to participate in our study:

### 3. Q: How do I agree to participate in this research?

If you choose to participate in the interview after reading this information sheet, you can sign the Informed and Voluntary Consent form and return it to the researcher. Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the interview at any time. If you choose to withdraw from the interview, any data that might belong to you may be decided by you whether to be used by the study or not.

### 4: Q: What will happen in this research?

You will participate in a face-to-face interview with the primary researcher once. Depending on your job or perspective, different questions will be asked. Regardless of your job, your experience in work related to workplace violence in the health sector will be the possible topic for discussion.

Possible topics for focus groups:

1) For medical professionals: Your experience related to workplace violence caused by patients and their families, reasons and ways to prevention workplace violence. These may include general working condition and measures taken in your organisation to prevent violence or in response to violence
2) For hospital managers, your experience of workplace violence in your institution, understanding of reasons, difficulties in managing and ways for managing.
3) For medical services users: Your experience and opinions in using medical services, your perspectives on doctor-patient relationship, and your opinions on violence against medical professionals.
4) For legal experts: Your experience in handling medical disputes, your opinions on law and regulations relevant to medical disputes handling and ways for prevention from your perspectives.
5) For government officers/police officer: Your experience of handling workplace violence against medical professionals, difficulties you encountered, and lessons learned.
6) For reporters: Your experience of reporting medical disputes and workplace violence against medical professionals and your opinions.
7) For experts working at agencies handling medical disputes: Your experience of handling medical disputes and the criteria for evaluation and your opinions.

All interviews will be tape-recorded with your consent. I, as the primary researcher will interview you either face to face or via telephone/internet. The aim of interviews is to listen to different perspectives and advice, so that to explore and find solutions to address problems. No individual identifying information will be collected. General demographic characteristics, together with interview transcripts will be used for research purpose for this project only.

## 5. Q: What are the discomforts and risks?

For some people, talking about violence may be upsetting. If you have personally experience workplace violence, please consider the following two questions before you consider participating in the study:

1) Are you comfortable taking part in the interview and talking about the violent incident that you have experienced?
2) If you experience discomfort during the interview, do you have someone around who you would like to talk and seek help from?

Criteria for ethical research practices outlined by AUTEC include not putting anyone involved in the study at risk. I, as the primary researcher is a Chinese citizen although I have studied years in New Zealand. It is therefore in my best interest to conduct the research within a framework that is suitable and safe in the Chinese context. The primary researcher has actively sought consultation from an advisory team consisting of experts living in China on cultural and legal issues during design of the interview questions.

## 6. How will these discomforts and risks be alleviated?

Despite measures taken to minimise and lower risks, there is possibility of you feeling upset during the focus group study. Should it happen, you can choose to withdraw the focus group anytime you want. A copy of Assessment and Management of Conditions Specifically Related to Stress (AMCSRS) by World Health Organization (WHO) (Chinese version) will be available from the primary researcher for guide in managing your condition if needed. Should serious discomforts occur during the interview, it will be helpful for you to talk to your close friends and family and seek help from them. It is therefore helpful for you to read through the WHO guide prior to the focus group session and identify a list of close family members or friends or someone you are willing to talk to should you need help and bring their contact details with you when you attend the focus group sesseion.

## 7. Q: What are the benefits?

During the interview, we will listen to your perspectives and learn from your experience to find ways to address workplace violence against medical professionals in China. Solving the problem will improve

occupational health and safety for medical professionals, and also to safeguard the sustainability of the health care system in China for the sake of protecting the Chinese population's health. There is not benefit to you personally for participating in the study.

## 8. Q: How will my privacy be protected?

Your demographic information is collected for research purpose only. All your contact details will be kept along with an identification code for the study. All the information collected during the study will be treated with confidentiality and will not be shared with any other third party. All participants can remain anonymous. There is no way for anyone to identify what each participant has said during the discussion. All the consent letters and the audio record will be kept in AUT following strict confidential procedure.

## 9. Q: What are the costs of participating in this research?

The interview will take place at a place that is convenient to you with which you are comfortable. The interview will take approximately 60 to 90 minutes of your time. There will be no personal cost to you. You will be provided with refreshments during the interview. A gift from NZ will be provided as appreciation for your kindness and contribution in the study.

## 10. Q: What opportunity do I have to consider this invitation?

There is no hurry for you to accept this invitation. You can read this information sheet carefully and make your decision in two weeks' time. The interview is scheduled between late November and December 2017. To make good preparation for interview study, the researcher tries to get confirmation from participants as early as possible.

## 11. Q: Will I receive feedback on the results of this research?

You will receive feedback if you choose to. There are two possible ways for you to receive feedback of this study. One way is to receive a summary by the end of the study. Another way is to participate in our Phase 4 study, which will be a survey for you to evaluate the effectiveness of the conceptual framework developed with your input during the focus group study. You will have a chance to indicate your option in the consent form.

## 12. Q: What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Jane Koziol- Mclain via email: jane.koziol-mclain@aut.ac.nz, 00649219670

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz*, 0064921 9999 ext 6038.

For participants who has limited or no English, arrangements can be made to find an interpreter from China to help in the communication regarding to your concern. Please contact the primary researcher Yumei He for further information in this regard.

## 12. Q: Whom do I contact for further information about this research?

For any further information about this research, please contact the primary researcher Yumei He. Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

***Researcher Contact Details:*** Yumei He tyumei@aut.ac.nz

***Project Supervisor Contact Details:***

Primary supervisor: Professor Jane Koziol-Mclain, jane.koziol-mclain@aut.ac.nz

## Appendix F: Participant Informed Consent (Chinese version)

# 知情同意书

**课题名称：中国医护人员的职业安全与健康：情境因素及干预**

- 我已仔细阅读关于本研究项目的知情告知书内容；
- 我有机会就本课题提出问题并已得到解答；
- 我理解访谈将不会问及任何个人可识别身份信息，将会被录音和现场记录，录音会被转录成书面文字；
- 我理解参加访谈是完全自主自愿的，我随时可以退出访谈；
- 我希望收到本次调研的总结报告：　（是）　（否）　（请在相应的选择上打勾）

**访谈所在地：**

**确认签名：**

**签名日期：**

**课题导师联系方式：**

**第一导师：** Jane KoziolMclain 教授 jane.koziol-mclain@aut.ac.nz

**本研究由奥克兰理工大学研究伦理委员会（AUTECE）于 2017 年 3 月 7 日批准，AUTEC 申请批准号 17/30**

## Appendix G: Participant Informed Consent (English version)

# Participant informed consent

**Research Title: Research Title: Workplace violence against medical professionals in China: contextual factors and interventions**

- I have carefully read all information provided in the participant information sheet for the study
- I had chance to ask questions about the study and my questions were answered
- I understand that the interview will be recorded, and no information that will lead to personal identification will be collected. The recorded audio record will be transcribed into scripts.
- I understand that participation of the interview is voluntary and I can without the interview anytime I want
- I hope to receive the report for this study: (Yes) (No) (Please tick your option)

Location of interview you want to attend:

**Participant signature:**
**Date:**
**Contact for Primary supervisor of the present study:**
Jane KoziolMclain 教授 jane.koziol-mclain@aut.ac.nz

**本研究由奥克兰理工大学研究伦理委员会（AUTECE）于 2017 年 3 月 7 日批准，AUTEC 申请批准号 17/30**

## Appendix H: Examples of Phase 2 Interviews Transcription

Participant (H): 我觉得医生也第一他们确实很忙，一天要看五六十个门诊，或者是看至少一个上午要看五六十个门诊，他们没有，根本就没有时间去去跟你提到其他的东西，这就是其一。如果是普通的话病人的话，他可能就开个药啊之类的。

Participant(N): 就要不光技术方面嘛，最好从各方面给他全方位的，能给患者提供良好的服务环境啊，还有我们的，我们人文关怀也是个方法，能给他们更多的关心，帮助，这样子可能对我们最后医疗，治疗也会达到事半功倍的效果，特别是这方面我也我觉得是这样子

Participant (K); 医生首先要技术好，要把病给人治好。这是第一。第二个你要懂得去关怀。对，要懂得去关心病人，安慰病人。解除两种痛苦，一个心理上的痛苦，一个肉体上的痛苦。

Participant (D): 就是我父母他们跟就是说跟病人就是很好的这种关系。他们那个时代可能跟病人的关系就是会会比现在更融洽。现在的，我听到那个媒体报道那些事情，我父母，我也经常跟我父母讨论，他们就觉得很不可思议。

Participant (N)：（网上）大部分负面的，真的是负面的，但是对于我们医务人员，不但不同情怜悯，还在这里攻击我们，说我们的医德怎么样，收红包怎么样，黑心医生怎么样。可能他觉得我们工作者其实看病也是为了赚钱。我怀疑他们有这个心理，这样子才不相信我们医生。我觉得有时候他们就觉得医院的话就是为了赚钱。我觉得可能最重要的原因是是在这里，我是觉得是这样。

Participant (T):有些医务人员呢，确实的我自己也有碰到过。他们一句很好听的话，他会把他说得不好，本来是关心的啊，比如说我去挂号，那你就可以说你真的唉你这卡上没钱了，啊。她不会这样说。她会说卡上没钱你还来挂号

## Appendix I: Examples for Phase 2 Data Management with Extra Translation and Consultation Procedures

Quote: I feel doctors firstly they are indeed very busy. They need to see 50 to 60 patients a day, or to see at least 50 to 60 in just one morning. They don't even have time to mention other things (N) .我觉得医生也第一他们确实很忙，一天要看五六十个门诊，或者是看至少一个上午要看五六十个门诊，他们没有，根本就没有时间去去跟你提到其他的东西. (Coding: 病人多门诊时间短 big volume of patient, brief consultation. Category: communication barrier)

Quote2: Most of (the media report) is negative. Really very negative remarks. Most comments, not only not to show sympathy and mercy, but also there to attack us, saying how bad we were with medical ethics, taking red pockets, or black-hearted doctors. Perhaps, they feel that we work just for money. I suspect that because of this kind of mentality, they don't trust us doctors. I think it can be the main reason. (N)大部分负面的，真的是负面的，但是对于我们医务人员，不但不同情怜悯，还在这里攻击我们，说我们的医德怎么样，收红包怎么样，黑心医生怎么样.可能他觉得我们工作者其实看病也是为了赚钱。我怀疑他们有这个心理，这样子才不相信我们医生。我觉得有时候他们就觉得医院的话就是为了赚钱。我觉得可能最重要的原因是是在这里，我是觉得是这样。(Code：对医护人员的负面看法是不信任原因 negative perception about medical staff, a source of mistrust)

Quote 3: There is a perception in the society that doctors are only thinking of money when they are providing medical services. With that perception, so when you asked them to go through some necessary examination, they think you do that just for money. When you prescribe, they think you only thinking of making money. They tend to misunderstand you.社会形成一个观念，就是总觉得与医生啊治病就是为了赚钱。然后你，当你给他做一些必要检查的时候，他觉得你为了赚钱。开药的时候，他又有赚钱，等等吧，他误解你。嗯他觉得这个医生啊，你想方设法你是为了什么目的。（Code: 对医生的误解是不信任的根源 negative perception towards medical doctors a source of mistrust）

Quote 4: Medical staff's communication skills, especially their inability to voice some remarks with good intention into pleasant words. They could have made it sound more pleasant， but they usually put in a very nasty way.有些医务人员呢，确实的我自己也有碰到过他们一句很好听的话，他会把他说得不好，本来是关心的啊，比如说我去挂号，那你就可以说你真的唉你这卡上没钱了，啊。她不会这样说。她会说卡上没钱你还来挂号。(code: 医护人员的沟通技巧问题造成不愉快 medical staff's poor communication skills can lead to unpleasant communication)

Quote 5：We would explain to the patient or our colleagues would help explain. We told the patient when she made the appointment that the actual time needed would depend on how it the examination would proceed, it could be only about a quarter of an hour or one or two days. Even though we had explained, it may still happen that patients couldn't understand why it could take so long. 她约的时候我们跟

她说过，我们说做这个检查可能时间会长一点。因为看胎儿的体位是怎么样来决定你这个检查需要多长时间。顺利话，会有十几分钟，如果不顺利，可能有，甚至有一两天都检查不完，这样子。是啊，可能他们也不明白这样子。我们跟她说了，她她可能也不一定都都说明白 （病人不理解

## Appendix J: Service User Participants' Impression of Medical Staff's Work (Example of phase 2 data abstraction and analysis)

| Category | Coding | Original quote (Original Chinese and English translation |
|---|---|---|
| Medical staff are very xinku | 加班多 Often work extra hours | 医护人员的生活？不是很了解.但是医生确实加班多 (N) I don't know much about medical staff's life. But it is true that they often have to work extra hours. |
| | 临时被叫回上班 Have to work on-call | 医生实际上也挺辛苦的，晚上来了，接的病号来了，一个电话来，你必须要赶过来呀，是吧？(F) Doctors really have a tough job. At night, if a patient come and they get a phone call, they have to make it to hospital. |
| | 三班倒 Working shift work | 我是感觉医护人员比较辛苦。呃。医护人员一般好像都三班倒 (A) I feel medical staff are normally very xinku as they work shift work |
| | Can be demanding to cope with | They have to face so many people every day, which can be demanding for their patience, perseverance and personal quality （A） 像他们这样每天面对那么多病人，我觉得有耐心，确实也是需要一定的毅力和修养 |