Understanding Women's Long-Term Wellbeing in a Nepalese Community Following the 2015 Nepal Earthquake: A Constructivist Case Study

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Abstract

Worldwide, natural hazard events have enduring impacts on wellbeing of survivors. These effects vary according to the location, the communities involved in the disaster, and the available health services. Post disaster, women are disproportionately affected, with higher vulnerability compared to men. The immediate impact of 2015 earthquake was profound for rural Nepalese women as they sustained injuries, experienced property damage, and had limited access to basic resources such as food, water, and health resources. Many women needed to cope with additional responsibilities of caring their family members during the hardship. However, whether their wellbeing was influenced over the long-term remains unexplored. This study aimed to understand the long-term wellbeing of Nepalese women following the 2015 earthquake.

Informed by a constructivist paradigm of inquiry, this study employed intrinsic case study methodology guided by the procedure recommended by Stake (1995). The case was women who survived the earthquake of Nepal in 2015 and continued living in Nuwakot, one of the districts most severely affected by the disaster. Data were collected through multiple sources: focus group discussions with women survivors, individual interviews with local health service providers, document reviews examining immediate earthquake impacts and recovery efforts in Nuwakot. Focus groups and interview data were analysed using Braun and Clarke's six-step reflexive thematic approach, while reviewed documents were analysed using direct interpretation, providing insights into the context of the case. Eleven assertions about the case were derived by finding patterns and correspondence across different data sources.

Five themes were interpreted from the analysis of the focus group discussions. While women's initial suffering was severe, physical and psychosomatic symptoms persisted over the long-term. Additionally, their socio-economic wellbeing over the long-term was profoundly affected, with ongoing loss of employment opportunities for male family members and increased male migration which caused impaired family functioning. Women's wellbeing was partially supported through community support, religious faith and optimism, and by accepting recurring adversities as "problems are part of life". However, enduring long-term influences were evident with critical gaps in health service

availability, affordability and accessibility due to resource constraints and geographical barriers. Interviews with health service providers highlighted systemic service fragility and transportation challenges, which hindered equitable public healthcare for the women. The women's efforts to support their wellbeing were further constrained by deeply entrenched, gender-based domestic roles, positioning them as a hub of family life. Stigma, and hesitancy to discuss health issues with male service providers contributed to delayed health-seeking behavior amongst the women.

The study recommends a comprehensive assessment with the women survivors to understand and best meet their long-term wellbeing needs. Study findings suggested that providing gender specific relief measures, through culturally responsive disaster response and awareness frameworks, and implementation plans can strengthen women's health care autonomy in promoting their wellbeing in post-disaster context. Findings also suggested the role of local governments in women's economic empowerment by creating opportunities beyond household responsibilities, such as supporting small-scale farming businesses. These findings contribute to a deeper understanding of women's long-term experiences in post-disaster context and offer evidence-based practical guidance for developing more fair and sustainable disaster recovery strategies that promote women's long-term wellbeing following disaster events.

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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 used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), 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.

Signed

29/09/2026
Date

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(Goddess of Knowledge)

and

Jagadamba Devi

(Mother of Universe)

This study was approved by Auckland University of Technology Ethics Committee on 30th March 2023. Approval number 23/16

Abbreviations

UNDRR	United Nations Office for Disaster Risk Reduction
MoHA	Ministry of Home Affairs
WHO	World Health Organisation
NSO	National Statistic Office
GON	Government of Nepal
MoHP	Ministry of Health and Population
FCHV	Female Community Health Volunteer
MOH	Ministry of Health
NHIP	The National Health Insurance Programme
OCMC	One-stop Crisis management Centres
NPC	National Planning Commission
OSOCC	On-Site Operations Coordination Centre
CDPS	Central Department of Population Studies
AUTEC	Auckland University of Technology Ethics Committee
NHRC	Nepal Health Research Council

Chapter One Introduction

Worldwide, natural hazard events claimed an average of 41,683 lives annually between 2015 and 2023 (United Nations Office for Disaster Risk Reduction [UNDRR], 2025). Over this time, these disaster impacts extended far beyond mortality, affecting 124 million survivors globally. Disaster-related consequences include injury, illness, displacement, and destruction of homes and livelihoods. Disasters disproportionately affect vulnerable populations including women (Nolting et al., 2025; UNDRR, 2025). The 2015 Earthquake in Nepal was a devastating disaster that claimed around 9,000 lives and caused significant economic loss (Ministry of Home Affairs [MoHA], 2019b). This qualitative constructivist case study research aims to understand the long-term wellbeing of women in a Nepalese community following the 2015 Nepal earthquake. Greater insight into how the earthquake has affected women's wellbeing can help enable the development of an effective health response plan to support the survivors. It can also offer important insights to help inform the development of national and local policies and programmes that manage and regulate disaster preparedness, management, recovery, and resilience, both immediately after a disaster as well as to deal with the long-term consequence of such an event.

First, to shed light on the social vulnerability of people involved in the Nepal earthquake impacts, the chapter briefly highlights Nepal's socio-economic and political landscape. It outlines the initial impact of the 2015 Nepal earthquake on Nepalese women's wellbeing. The chapter then discusses the researcher's positionality, the study's significance, and the aim of the study. The chapter further summarises the research method and design and concludes with a brief outline of the thesis' structure.

Background

Every year, many communities worldwide experience disasters that disrupt the overall health and wellbeing of the survivors (Makwana, 2019). Between 2000 and 2023, five major hazards- earthquakes (50%), extreme heat (18%), storms (14%), floods (8%), and droughts (2%) accounted for 90% of disaster-related deaths globally (UNDRR, 2025). Such disasters impose short and long-term consequences on the physical, psychological,

and socio-economic dimensions of affected individuals and communities (World Health Organisation [WHO], 2019). Across the world, Asia has the highest occurrence of natural hazard events (UNDRR, 2025). Since 1970, these hazardous events that occurred in Asia and the Pacific have killed two million people which accounts 59 percent of global deaths from these events disasters (United Nations, 2019). The most vulnerable groups to encounter post-disaster impacts on their health and wellbeing are women, children, people with disabilities, older adults, and ethnic minorities (Nair, 2018). For women, gender-based inequalities constrain their access to health and social services and their ability to secure their livelihoods (Goodman, 2016). This undermines women's capacities to cope with adverse effects of disasters and exacerbates their vulnerability, subsequently affecting their wellbeing (Goodman, 2016; Maurya, 2018).

In April 2015, Nepal, a country in south Asia, experienced a major earthquake of 7.8 magnitude, which caused significant loss of lives and infrastructure in many districts. Consequently, about 9,000 people died and about 23,000 people were left seriously injured (MoHA, 2017). Along with substantial physical mortality and morbidity, the earthquakes resulted in destructive impacts on all sectors of Nepalese society, including social (human settlements, health infrastructures, educational sectors, and cultural heritages), and economic (agriculture, industry, road infrastructures, and tourism) areas (Shakya, 2016). As evidenced in other disaster contexts in South Asia (Aksha et al., 2019; Oxfam, 2005), mortality due to the 2015 Nepal earthquake was higher amongst females (55%) and people living in rural hilly and mountainous areas (MoHA, 2017). Immediately after the earthquake, disruption of health services and schools, deterioration of water and sanitation services, and increased food insecurity had a negative impact on survivors' wellbeing (United Nations, 2019).

Nepal and Its Vulnerability to Disasters

Nepal is prone to natural hazard events because of its variable climatic conditions, complex geographic structures, active tectonic processes, continued seismic activities, increasing population, unplanned settlement, and weak economic conditions. Annually, multiple hazards such as earthquakes, Glacier Lake Outburst Floods (GOLFs), floods, landslides, forest fires, and epidemics affect the nation. The country is among the 20

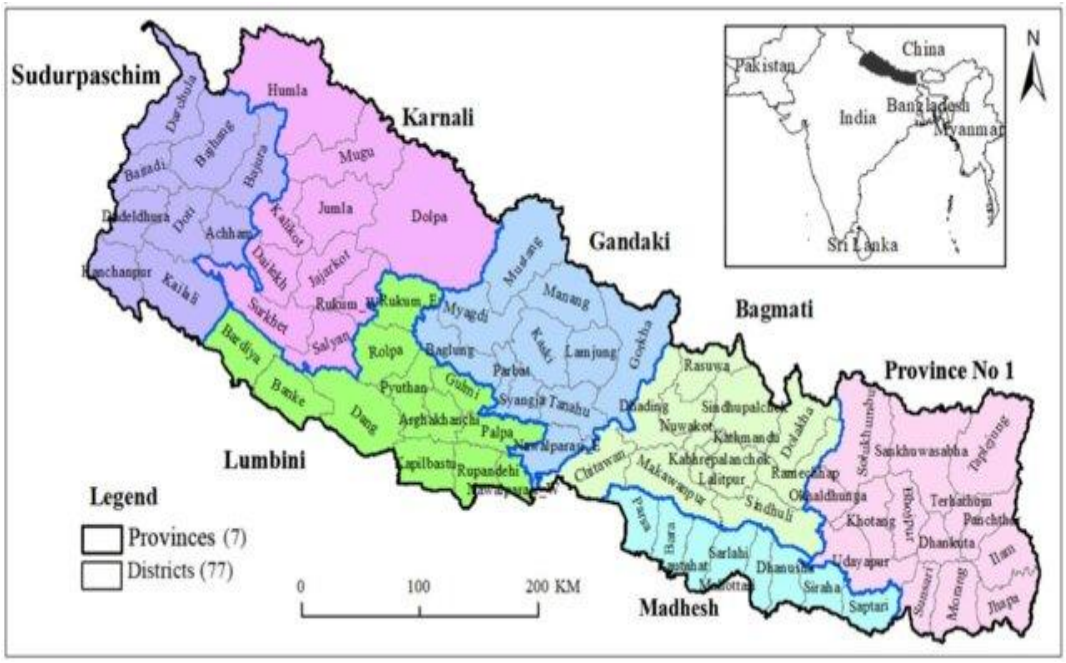
most disaster-prone countries in the world (MoHA, 2017). According to a survey of 200 countries, Nepal is the 11th most vulnerable country in terms of earthquakes (Aksha et al., 2019; MoHA, 2017). Nepal's diverse demography, topography, socio-economic and political characteristics together with the country's geo-physical processes reflect the social vulnerability of the country to disasters.

The Socio-Economic and Political Context of Nepal

Nepal is a landlocked, south-asian country located in the central part of the Himalayan belt. It occupies 0.03% of the world's total land, 0.3% of Asia, and 3% of South Asia. The total population of Nepal as per the 2021 Census is 29,164,578 (National Statistic Office [NSO], 2021).The country borders to the north with the People's Republic of China and to the south, east, and west with India. Nepal is also known as the country of the birthplace of Lord Buddha, the country of cultural diversity, the country of unique natural beauty, and the country of the highest mountain peak of the world, "Sagarmatha," which is known globally as "Mount Everest" (Government of Nepal [GON], 2019). Nepal features a varied topography, classified into three ecological zones, namely the Terai, Hill, and Mountain. The Terai region, located in the southernmost part of the country, is known as the "grain basket" of Nepal and features flat, fertile land (NSO, 2021). The Hill region makes up around 42% of the country's total area, and on the northern side lies the Himalaya region (GON, 2019). The figure below provides the map of Nepal with seven Provinces and 77 Districts. Appendix A further provides a detailed map of the country- Nepal.

Figure 1

Location Map of Nepal showing the seven provinces and 77 districts



Note. From An Initial Spatiotemporal Assessment of COVID-19 Clusters in Nepal," by B. K. Acharya, S. K. Adhikari, S. Pandit, and L. Khanal, 2022, *Journal of Institute of Science and Technology, 27*(1), 37-49. (https://doi.org/10.3126/jist.v27i1.42652) [CC BY-SA 4.0].

Nepal is one of the least developed countries in the world ranking 145 in a recent Human Development Index (HDI) report (United Nations Development Program [UNDP], 2025). The socio-economic conditions are further weakened by lack of infrastructure, limited development activity in rural areas, and a lack of financial resources (Gautam, 2017). A high percentage of the population of Nepal is engaged in agriculture, which contributes 33% of the country's Gross Domestic Product [GDP] (NSO, 2021). However, poverty in Nepal has compelled many young people to immigrate to foreign countries in search of employment. The census of 2021 showed that 3.31% of the total population were living abroad to earn for their family and that the greatest proportion of them (44.8%) belonged to the economically most productive (15-24 year) age group (NSO, 2021).

Nepal exhibits great demographic diversity in terms of caste, ethnicity, and language which influences social vulnerability (Yadav, 2016). In Nepal, there is no clear distinction between caste and ethnicity, as the term *'Jaat'* translated as 'descent group' is used for both (Gellner & Hachhethu, 2010; Upadhyay, 2013). There are four primary

occupational caste groups also known as "*Char Jaat*" referred as the Brahmins (highest rank) as the priests, Kshatriya as kings and warriors, Vaishya the traders and businesspeople, and Sudra/Dalits (lowest rank) as the peasants, and laborers. These social markers, specifically the caste system prevalent in rural Nepal, cause discrimination and social exclusion. This discriminatory system was introduced during the autocratic Rana Dynasty, which ruled Nepal for 104 years (Upadhyay, 2013). Although caste-based discrimination is no longer legally supported in Nepal, it still persists in society, particularly in remote communities (Lynn et al., 2008). Evidence suggests that immediate post-earthquake discrimination was higher among the women belonging to Dalit communities in terms of getting the relief aids and social support Some of the most marginalized households, particularly those headed by single women or belonging to Dalit communities, were excluded from receiving the distributed goods, either due to negligence or as a result of deliberate discrimination based on cast (Bengts, 2016; Sthapit, 2015).

The Transition of Nepal's Health System from a Unitary to a Federal System

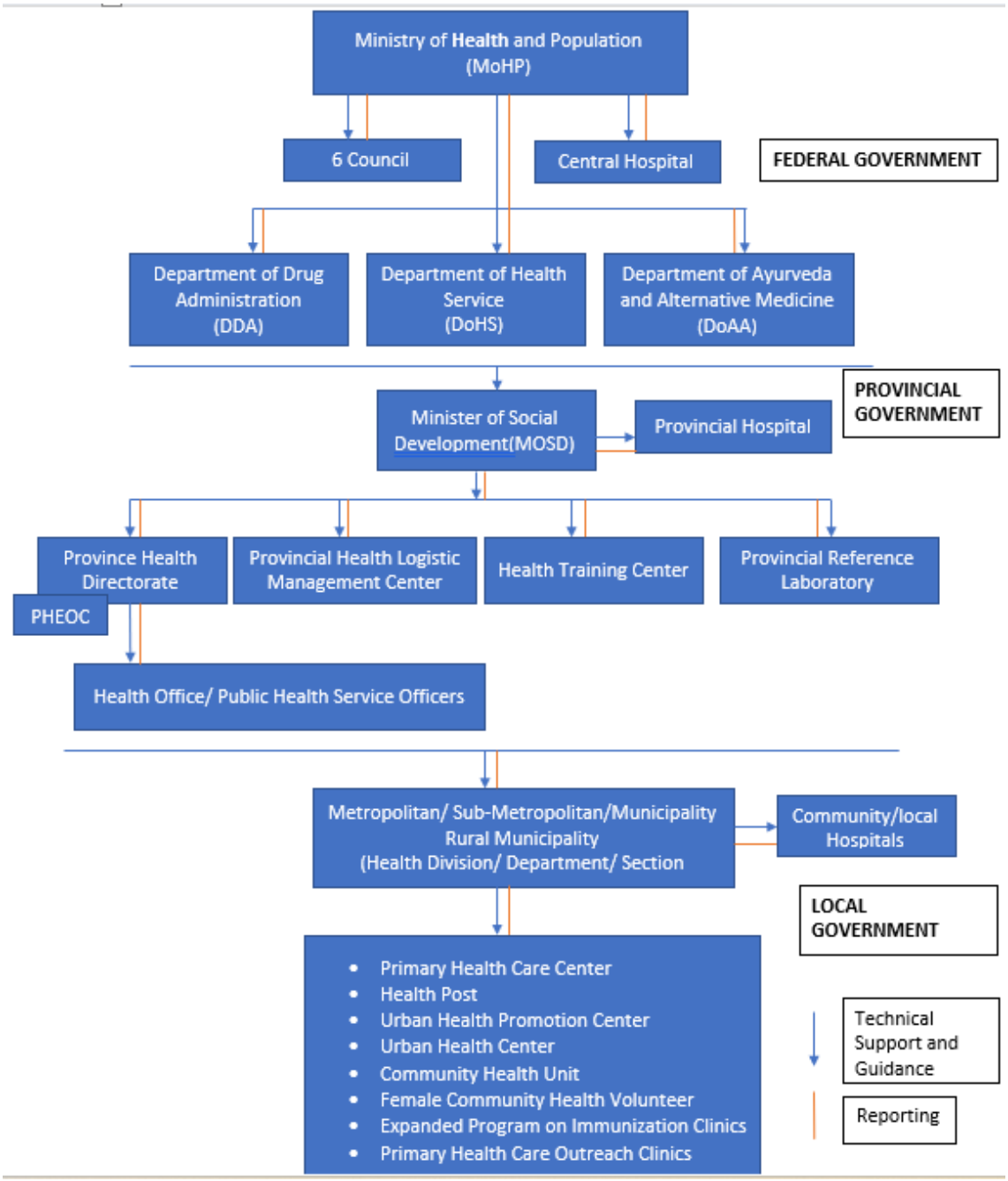
Nepal has experienced numerous political changes in its history, transforming from a monarchy to a democracy before emerging as the Federal Republic of Nepal (GON, 2019). Nepal replaced its unitary government with a federal system, with the promulgation of its new constitution in 2015 after the earthquake. According to the new constitution, the Democratic Republic of Nepal is divided into three main levels of structures, namely Federal, Provincial and Local levels. Thus, the government system is a federal republic with a federal level, seven provinces, 77 districts, and 753 local governments. The local government comprises six metropolitan cities, 11 sub-metropolitan cities, 276 urban municipal councils, and 460 rural municipalities (GON, 2015).

At the local level, wards operate within municipalities (Nagarpalika) and rural municipalities (Gaunpalika). Each local government is divided into between five and 35 wards, depending on population size and the area of the location. Wards are the smallest local government units. There are 6743 wards across 753 local governments. Additionally, the health system of Nepal was also restructured after the earthquake,

with the new constitution to align with the new federal structure (Ministry of Health and Population [MoHP], 2024). Figure 2 (below) features the organogram of the health care delivery system of Nepal at the time of the current research.

Figure 2

Organogram of National Health System in Nepal



In Federal Nepal, technical support and program monitoring of the district health system is provided by the Provincial Health Directorates. These directorates come directly under

the Ministry of Social Development of the Province. Furthermore, the regional, sub regional, zonal, and district hospitals are categorized into three levels: Primary, Secondary, and Tertiary (MoHP, 2024).

Hospitals are primarily focused on providing acute care services to patients, and health posts which are the first institutional contact point for local communities, provide basic health care services. These community health facilities monitor the community-based activities of female community health volunteers (FCHVs), expanded program on immunization clinics, and primary health care outreach clinics. Health posts are the referral centers of FCHVs and venues for public health community-based activities. This hierarchical design ensures that most of the Nepalese population can receive equitable public health and primary care in accessible places with affordable services (MoHP, 2024).

Most of the Nepal government's health services are under the Ministry of Health, serving the major population of the country by offering affordable services; private tertiary-level hospitals, on the other hand, are costly and predominantly serve urban populations who are able to bear the private health care expenses (MoHP, 2024). Healthcare is guided by the National Health Policy, which is developed, standardised, and governed at the central level by the Ministry of Health (MoHP, 2019). However, equitable accessibility and availability of healthcare, including services provided following the 2015 earthquake, are still major challenges in Nepal. Mental health problems, epidemics, and recurring disaster-induced health problems are growing challenges that the health sector needs to monitor and respond to effectively and efficiently (MoHA, 2017). These challenges are even more severe for vulnerable populations, such as socio-economically disadvantaged groups, rural communities, and women, who face disproportionate impacts and significant barriers to accessing adequate healthcare (Aryal et al., 2019).

Nepalese Women Vulnerability to Disaster Impacts

Globally, gendered aspects of societies cause substantial differences in how women and men of different age groups experience and deal with disasters before, during, and over the aftermath. Women and men have distinct life experiences according to their

gendered identities, roles, and responsibilities, leading to gender-based variances in disaster impact, response, and recovery (United Nations, 2019). The major factors which put girls and women at higher risk in disasters are limitations in self-mobility, social restrictions for women where they need to be accompanied by males. These intersecting factors provide cause minimal access to disaster warning information among women (Maurya, 2018). Immediately after disasters, women and girls are at greater risk of sexual and domestic violence. Pregnancy and postnatal phases further increase women's susceptibility to health complications. Caregiving responsibilities for children, older adults and ill family members compounds women's physical and emotional stress phase after a disaster (Ashraf & Azad, 2015; Maurya, 2018).

In the context of Nepal, women are particularly disadvantaged post-disaster. With a total population of 29 million, females represent 51.13% (National Statistics Office, 2021). The Sustainable Development Goals (SDGs) for 2030 prioritize gender parity, emphasizing equity, non-discrimination, and social inclusion (UN Women, 2015). However, various obstacles impede achieving gender parity in Nepal. Many rural women face financial hardship, limited rights and opportunities, and restricted access to resources (Dulal, 2020; UN Women, n.d.). Their health is significantly affected by social, economic, and environmental factors such as poverty, education, and safety. Women lag behind men in literacy, employment, land ownership, and access to media, largely due to their increased burden of unpaid caregiving, reflecting ongoing gender inequality (WHO, n.d.)

According to review report after the earthquake, numerous factors hindered achievement of the target of gender parity in Nepal (MoHP, 2018). Despite some progress since the adoption of the 2015 Constitution, challenges remain. The Constitution guarantees 33% representation of women in parliament (GON, 2015) and permits citizenship for children through either parent. However, it still embodies patriarchal norms, recognizing only men as legitimate claimants of national identity. In the 2022 Federal elections, women constituted 31.10% of the newly elected members (UN Women, 2015).

In terms of economic security, the Government of Nepal has instituted various legislative provisions including the right to employment, right to appropriate labor and equal wages and equal property rights for women based on the principle of inclusion and proportional representation (GON, 2015). However, because of historical and social discrimination, women in Nepal, especially in rural areas, still face challenges. They often have less power in public and private life, lagging in decision-making and land or house ownership (UN Women, 2015; MoHP, 2018).

Enhancing Healthcare Utilisation by Women in Nepal

Health promotion through healthcare utilisation is a crucial element in promoting people's overall wellbeing. Recurrent disasters and epidemics have hindered healthcare utilisation by Nepalese women to promote their health (Adhikari et al., 2020) . Despite the enduring effort of the Ministry of Health and Population to promote safer maternal and child health nationally, there has not been satisfactory progress in increasing the utilisation of reproductive health and safe motherhood programmes in various parts of the country (Myers et al., 2018).

Nepal has implemented various important, strategic healthcare initiatives to enhance service accessibility and reduce financial barriers for vulnerable populations, including women. Although these programmes were initiated prior to the 2015 earthquake, they gained significant momentum following the disaster and the establishment of the federal system (GON, 2015). In response to recurring disasters and public health challenges, these programmes were designed to advance universal health coverage through expanded pharmaceutical access, social health insurance, and crisis management services. While these initiatives demonstrate the government's commitment to equitable healthcare delivery, implementation challenges persist, affecting programme uptake and sustainability. Major barriers for the utilisation of these services for women are their poor economic and social status, various traditional and cultural barriers, lack of adequate infrastructure, and topography that impedes easy access the emergency healthcare services (Aryal et al., 2019).

National Health Insurance Program

The National Health Insurance Programme (NHIP) is a crucial pillar in Nepal's journey to alleviate unexpected healthcare expenses of its citizens within the framework of government-led social health protection. Launched in 2017 after the 2015 earthquake as a part of Nepal's social security initiative, the goal of the NHIP is to achieve Universal Health Coverage by 2030, which makes it a vital aspect of Nepal's commitment towards achieving the WHO's Sustainable Development (Mishra et al., 2015). It was implemented in all 77 districts (by the end of 2022)(Ayer et al., 2024). Individuals can become members of this scheme by paying yearly premium of NRs[1] 35,000 (approximately US $250) for a family of five. Members of NHIP are entitled to free care at government health facilities up to a maximum of NRs 100,000 (approximately US $750) per family annually (Ayer et al., 2024). Within a brief period of its inception, the programme has stretched its coverage to over seven million individuals among the total 30 million population of country. However, strong efforts are needed to convince consumers and cover more individuals and households (Ayer et al., 2024).

Despite its benefits, NHIP faces several challenges, leading to dissatisfaction and dropouts. Key issues include limited availability of listed medicines at government pharmacies, inadequate infrastructure and staffing at primary health centres, and difficulties accessing distant referral services. Additionally, transportation and accommodation costs during treatment pose financial burdens. Many insured individuals also lack awareness of available services, reducing the effectiveness of programmes (MoHP, 2020). Some insurers identified that many of the medicines listed in the insurance schemes were not available from the pharmacies of government hospitals. This forced those insured to pay for their medications and medical supplies by themselves (Ayer et al., 2024). The program has the potential to boost healthcare utilization, but its effectiveness is closely tied to the overall quality and accessibility of the health system.

[1] Nrs.- Nepali Rupees (1 Nrs =approx. 0.0067 USD)

One-Stop Crisis Management Centres

Another important health initiative by the MoHP, Nepal is the introduction of one-stop crisis management centres (OCMCs) in hospitals. This system was initially started in 2011 in 67 different hospitals to provide integrated services for survivors of gender-based violence (GBV) (Rana, 2016). The service was provided as an integrated package for survivors of intimate partner violence or family violence through a "one-door" system. In 2015, to address the needs of GBV victims in earthquake-affected districts, successive OCMCs were established in 77 hospitals in 74 districts, including Nuwakot. While OCMCs provide locally coordinated services, they are designed to follow multi-sectoral support system including healthcare, psycho-social counseling, access to safe homes, legal protection, personal security, and vocational skills training for those suffering from family violence. The services can be accessed by anyone suffering from any type of violence. However, it was found that more than 95% of the service receivers were women. A high percentage of these women were the victims of intimate partner violence in the form of physical, mental, and sexual abuse. Others accessed the service after experiencing violence in relation to trafficking and child marriages (Rana, 2016).

Since the start of the OCMC initiative, some evaluation studies have been carried out to identify the effectiveness and challenges of this initiative. The report revealed an increased risk of gender-based violence in the districts hit hardest by earthquakes in comparison to the other districts. A case analysis report by the Ministry of Health, Nepal identified major obstacles in accessing OCMC services by women who suffered violence (Ministry of Health [MOH], 2017) . Firstly, the most important barrier identified was the lack of awareness and information about the OCMC services. Women stated that their whole time was spent either inside the house doing household chores or outside to work the fields and provide for their family's livelihood. Therefore, a lack of exposure to the "outside world" was the main reason for not seeking help for violence. Most of the women survivors who belonged to poor families stated that going to the hospital was a long way for them, especially when they had a lot of work to do at home and the field. Therefore, they feared that seeking help may cause further violence from their husbands (MOH, 2017).

Additionally, some of the women revealed financial constraints as a barrier to utilising the service. Even if they know about the free service available in the district hospital, accessing the services for a day or two cost money for transportation and expenses for food and shelter. The women, who had already been victimized by violence at home, were unable to pay those expenses. Some women feared openly talking about the violence they had experienced and never sought any help. Women also lacked knowledge of legal issues and were reluctant to take legal action because of the expenses involved in filing a court case and attending court. Even after coming to the hospital, most of the women hid the fact that it was domestic or intimate partner violence because of the fear of being stigmatised by society (MOH, 2017).

During the initial post-disaster phase, women's vulnerabilities were amplified across multiple dimensions as they experienced physical injuries and psychological concerns, as well as experiencing increased social and economic burden (National Planning Commission [NPC], 2015b). Women faced increased workload, had limited access to basic living resources such as food and water and health resources, pointing to an overall impact on their wellbeing (Shakya, 2016; Singh, 2021). Despite the government's initiatives aimed at improving equitable health care access, including NIHP and OCMC programs in all 77 districts, structural and socio-cultural constraints continued to impede service utilization which might cause impact on women's long-term wellbeing post-disaster. The present study sought to understand how the long-term wellbeing of women survivors following the 2015 earthquake, including the extent to which practical accessibility and utilisation of health services mediated their wellbeing.

Situating Myself as a Researcher

Gaining insights into a researcher's socio-cultural and professional background can help readers ascertain the researcher's perspectives and can subsequently deepen the readers' understanding of the research (Fischer, 2009; Mutch, 2013). As a Nepalese woman, an earthquake survivor, and a healthcare professional involved in rescuing survivors, I am uniquely positioned to reflect on how the wellbeing of female survivors may have been affected in the long- term following the earthquake.

Firstly, I experienced the 2015 Nepal earthquake while residing in the Pokhara city of Gandaki Province, which is about six hours by road from the site of the present study. On the day of the earthquake, I was at home with my family when we felt a massive tremor. Fortunately, we had an open space nearby and were able to reach that safely. However, the experience of the one-minute-long earthquake was an extremely frightening event for me and my family. There were no human casualties or significant structural damage in our area beyond cracks in some older houses. However, due to the ongoing aftershocks and the fear that buildings made of stone might collapse, we spent the following three nights sleeping in an open school ground near our house. The frequent aftershocks caused anxiety and persistent thoughts about the possibility of another earthquake.

Secondly, my educational and professional background played a crucial role in motivating me to assist in caring for those injured in the earthquake. At the time of the disaster, I was a Master of Nursing student completing a clinical placement at a tertiary-level hospital in Pokhara. The earthquake epicentre, Barpak village in Gorkha District, is in a remote area and the hospital where I was placed served as the primary referral centre for injured survivors. Consequently, my colleagues and I were directly involved in providing care for the survivors, many of whom had sustained head injuries, fractures, and traumatic wounds. Through this experience, I witnessed both the fatalities caused by the earthquake and the disabilities endured by the survivors. My continuous involvement in caring for those injured individuals led me to observe that many survivors continued to live in fear of another earthquake and struggled with anxiety about reliving the same terrifying situation again. This prompted me to explore how the disaster had impacted their mental health. That same year, I conducted my Master of Nursing thesis on the prevalence of post-traumatic stress disorder (PTSD) among earthquake survivors and the coping strategies they employed to overcome disaster related stress.

For the data collection for my master's study, I conducted fieldwork and a survey in the Nuwakot district of rural Nepal, one of the 14 districts severely affected by the 2015 Nepal earthquake. The disaster resulted in a total of 1,061 fatalities in that district, with females accounting for 57% of these deaths (National Planning Commission, 2015). In

Nuwakot, 93.3% of the infrastructure and households were fully damaged by the earthquake and required full reconstruction (Shakya, 2016). The findings of my master's thesis revealed that women were more vulnerable to PTSD in comparison with men (Adhikari Baral & K.C, 2019). The foundation of this PhD research is thus built upon my prior exposure to this earthquake-affected community during the study I conducted for my Master of Nursing thesis. Over the years, considerable progress has been made in the Nuwakot district, with nearly all housing reconstruction completed. However, eight years later, some schools, healthcare centres, and historical buildings were still under reconstruction. Appendix B provides a map of the study setting– Nuwakot.

While previous studies have highlighted the burden of mental health issues among communities in Nuwakot (Adhikari Baral & K.C, 2019; Dahal et al., 2018), I was aware that the earthquake affected women along multiple fronts. I could also see that research about the long-term wellbeing of survivors remained limited. Therefore, I developed a strong interest in understanding the longer-term experiences of female survivors following the disaster and the influences on their wellbeing. My previous engagement with the affected community facilitated the research process by enabling regular communication with key stakeholders to discuss the potential implications of exploring women's long-term wellbeing after the earthquake.

As a woman, a survivor, and a healthcare worker involved in rescuing earthquake survivors, I am uniquely positioned to reflect on how the wellbeing of affected women might have been impacted in both the short and long-term. Through my engagement with rural communities, I have come to recognize the significant role that geographic and sociocultural factors play in shaping women's vulnerability during and after such disasters. I was concerned over the experiences of the women I had worked with, both patients and my colleagues. I believed that understanding their experiences was important to learn about their wellbeing and the key influences over the long- term. I could also see that the women's experiences were deeply contextual and involved factors that were often unique to their community. Therefore, my study aimed to understand the long-term wellbeing of women survivors living in a community of Nuwakot following the earthquake.

Understanding Key Terms and Concepts

Wellbeing

The World Health Organization (WHO) has defined health as “a state of complete physical, mental, social, and spiritual wellbeing and not merely the absence of disease or infirmity”(World Health Organization, 1948, p. 100). Building from this definition of health, wellbeing can be understood as a multidimensional concept that encompasses all aspects of health. Prayag et al. (2021) defined wellbeing as “a positive psychology concept that refers to an individualized and subjectively experienced way of being” (p.3). Prayag et al. (2021) adds that wellbeing is also closely related to socio-cultural, contextual, and situational domains. Similarly, as Sfeatcu et al. (2014) conceptualise positive wellbeing as the ability to live a life with a sense of meaning and purpose; it is also dependent on individual’s objective circumstances, such as their physical and social networks, and can be influenced by changes in those circumstances. In other words, wellbeing not only reflects an individual's life experience but also recognises their life circumstances, including social norms, religious, and cultural beliefs and values (Sfeatcu et al., 2014).

The holistic wellbeing model developed by dos Santos Silva et al. (2024) highlights various elements that influence wellbeing. It includes the dynamic interplay between physical and mental health, with internal attributes such as resilience and self-esteem contributing to wellbeing. The model also acknowledges the external conditions such as social relationships and support, environment, and meaningful engagement with life. Furthermore, health knowledge, health care access, and utilisation are highlighted as key dimensions of holistic wellbeing (dos Santos Silva et al., 2024). Evidence also supports the importance of health knowledge and utilization to support positive wellbeing. Health knowledge enables people to make informed choices about their physical and mental wellbeing and promotes health care utilisation. Being informed about health can shape future aspirations, as people feel more confident about maintaining their wellness when they have learned how to take care of their needs (Helliwell, 2019; Kirana et al., 2009).

In this study, wellbeing is understood as a holistic construct that reflects the interdependence of physical, psychological, social, economic, and spiritual dimensions all of which shape people's capacity to cope after a disaster. When disaster happens, survivors exhibit the array of impacts on all domains of human functioning and wellbeing (Bonanno et al., 2010; Maurya, 2018). Thus, over the long-term recovery phase, wellbeing is affected by distinctive characteristics and perceptions of the survivors and the resources available, including the health care services. Survivor's subjective wellbeing is supported through self-acceptance, or commitment to socially meaningful goals and capabilities (Malik & Khalid, 2015; Maurya, 2018) and combination of risk and resilience factors. While resilience refers to bouncing back, or the notion of rebound, from deformation or distress, it is seen as a set of protective factors to recover after the disaster. Most importantly, it is regarded as a process of positive adaptation following exposure to adverse events (Maurya, 2018; Prayag et al., 2021). Understanding wellbeing through these integrated perspectives allows recognition of how women's immediate earthquake experiences, the resources available in the immediate and long-term aftermath, and cultural values and spiritual practices interact to shape their long-term wellbeing following the disaster.

Defining Timeframe for Long-term Impacts of Earthquake

Post-earthquake hardships can negatively impact survivors' wellbeing for a long time (Noy & duPont IV, 2016; Oishi et al., 2015; Tanaka et al., 2019). Particularly after an earthquake, disaster losses continue to unfold during the reconstruction and recovery stages. Therefore, such impacts are categorised as short-term or long-term, lasting from a few months to several years. There is no agreed-upon definition of how long the long-term is in existing literature. Some researchers define long-term impacts as consequences that persist for three to five years, sometimes extending over decades (Noy & duPont IV, 2016) while others distinguish between mid-term impacts (two to five years) and long-term impacts (more than five years) (Tanaka et al., 2019). The period needed for an individual to return to their pre-disaster wellbeing level is still debatable. For this study, data were collected eight years after the 2015 Nepal Earthquake. Therefore, women's experiences of the earthquake and its aftermath are framed as long-term.

Long-term wellbeing assessment studies have been conducted in a variety of different countries. For instance, assessment of long-term wellbeing was undertaken many years after the Great East Japan Earthquake and Tsunami (Bourke et al., 2022; Oishi et al., 2015; Shiba et al., 2022) and people's psychological wellbeing and perspectives of long-term disaster recovery was also assessed after five years of the Canterbury earthquake, Christchurch, New Zealand (Prayag et al., 2021). Research on long-term wellbeing of major earthquake survivors of the Japanese earthquake in 1995 revealed that 20 years after the earthquake, loss of loved ones because of the disaster had a significant, continuing effect on survivors' wellbeing. Similarly, those who suffered displacement because of collapse of houses reported lower levels of wellbeing in terms of life satisfaction, negative effects with increased anxiety and sadness, or physical health problems (Oishi et al., 2015; Tanaka et al., 2019). Studies conducted in India and Iran conducted five years post-disaster to evaluate the long-term mental health outcomes of the 2004 Asian tsunami survivors and 2003 Bam Earthquake in Iran revealed a higher prevalence of psychiatric morbidity among the survivors (Ardalan et al., 2010; Kar et al., 2014). Another example is the Christchurch study by Prayag et al. (2021), who explored the role of community support and individual resilience for effective recovery and psychological wellbeing over the long-term after the 2010 Canterbury earthquake. However, despite Nepal being vulnerable to recurrent natural hazard events, long-term influences on wellbeing of the survivors remains unexplored.

Significance of the Study

The Nepal Earthquake, 2015

On April 25, 2015, at 11:56 am local time, an earthquake with 7.6 magnitude hit Nepal. The earthquake occurred in a geological collision zone, where the Indian tectonic plate is pressing northward into the Eurasian plate. The epicenter was located near Barpak Village in the Gorkha district, about 81 km northwest of Kathmandu. Again, on May 12, 2015, at 12:50 pm local time, a powerful aftershock with a magnitude of 6.8 hit, with its epicenter located in Sunkhani, Dolakha district. The epicenter was situated 76 km northeast of Kathmandu (Onsite Operation Coordination Centre [OSOCC], 2015). Appendix C provides a map of Nepal and shows the epicentre of the 2015 Nepal

Earthquake. The devastating quake and its powerful aftershock resulted in the deaths of 8,891 people, with 198 missing and 22,303 seriously injured. Mortality rates were higher among females, older adults, children, and people living in rural hilly and mountainous regions (Adhikari et al., 2021). The strong aftershock of 12 May collapsed already weakened buildings and triggered a series of landslides. Ongoing aftershocks further troubled relief efforts (MoHA, 2015).

The earthquake and continuous aftershocks destroyed over a hundred thousand households, while approximately three hundred thousand others suffered partial damage. The earthquake had a severe impact on 14 districts of Nepal, namely Gorkha, Rasuwa, Dhading, Nuwakot, Kathmandu, Bhaktapur, Lalitpur, Kavrepalanchowk, Sindhupalchowk, Sindhuli, Dolakha, Ramechhap, Makawanpur and Okhaldhunga, with 31 other districts experiencing varying degrees of damage. Most casualties resulted from the collapse of infrastructure (MoHA, 2015). This earthquake was the largest to strike Nepal since the 1934 Nepal–Bihar earthquake. Most casualties resulted from the collapse of infrastructure following the earthquake (MoHA, 2015). Appendix D provides detailed information of the number of deaths in each region following the 2015 earthquake in Nepal.

Along with immense mortality and morbidity causing physical and psychological impacts of fear, stress, and anxiety, the earthquakes also significantly impacted all areas of public life. The socio-economic influences on housing, health, education, cultural heritage buildings, industry, agriculture, infrastructure, and tourism were alarming (K.C et al., 2019). The earthquakes pushed an additional 2.5-3.5 percent of Nepal's population into poverty in the year following the disaster (MoHA, 2017). Evidence collected shortly after the 2015 earthquake revealed that a significant impact on wellbeing was high among females, children, poor families, and disadvantaged ethnicities. The reason for this was that the pre-earthquake vulnerability among these population groups poorly prepared them to adapt to disaster consequences (Adhikari et al., 2021; He et al., 2018). The collective impact of disasters on the physical, mental, social, and economic wellbeing of the survivors was thought to be attributable to secondary stressors, such as loss of property, death and injury to loved ones, loss of ongoing occupation, and constant fear of an earthquake happening again. It is thought these impacts might have modulated

the outcomes, not only for individuals, but also for all affected communities over the long- term (NPC, 2015a).

The earthquake also imposed severe disruption in health service sectors. A total of 446 government health facilities and 16 private health centres were destroyed, and 765 health infrastructures were partially damaged, which is 43% of the country's total health institutions (NPC, 2015a). Immediately after the earthquake, many people were exposed to further risks through living in temporary shelters with safety and security issues, poor hygiene, and ongoing aftershocks. It took considerable time to start the post-earthquake reconstruction because of financial, political, and institutional constraints, as critical human and material resources were insufficient to initiate timely recovery efforts (Subedi & Poudyal Chhetri, 2019). The delay in reconstruction further exacerbated the vulnerability of survivors that hindered their ability to promote and sustain wellbeing (Adhikari et al., 2017a). Relief efforts were slow and insufficient, and they failed to reach many affected people in remote, rural, and hilly areas promptly. This delay was primarily due to the lack of road infrastructure, limited transportation resources, and adverse weather conditions (United Nations, 2019). Thousands of people in the affected districts were deprived of fundamental necessities such as food, water, clothing, and shelters. The rainy season and chilly winters made daily life even more difficult for the earthquake victims (Adhikari et al., 2017a; Subedi & Poudyal Chetri, 2019).

Challenges for Immediate Healthcare Support After the Earthquake

Even though Nepal is a disaster-prone country, it responded to the major earthquake in eight decades (Goyet et al., 2018). The immediate impact assessment revealed that Nepalese health institutions were not well prepared to cope with powerful earthquakes that could happen at any time. Most public hospitals and local health facilities had few strategies for patient evacuation, continuation of medical support, or handling many injured people (NPC, 2015a). Rescue operations faced many physical and structural challenges because communication towers were severely affected, and continuous landslides blocked road access to affected areas. This caused a delay in the timely evacuation of the severely injured and in supplying relief materials to all the affected communities (Aryal et al., 2025; Gautam, 2017). Another challenge was the lack of

logistic management and supplies from the Nepal Government for immediate management and treatment of casualties (Goyet et al., 2018). Hospitals, including tertiary care and central-level hospitals, lacked the medical and surgical supplies required to manage the vast number of trauma cases (Adhikari et al., 2017a). There were some offers from foreign medical teams; however, there was an acute shortage of resources for emergency care, mental health support, and post-disaster rehabilitation (Aryal et al., 2015; Karki et al., 2016).

Why was Nepalese Women's Wellbeing at Risk after the Earthquake?

Historically, Nepal is considered as a patriarchal society, where women are dependent and subordinate to men in all aspects of life (Acharya, 2020). Men have traditionally been regarded as the heads of households, held ownership over family property, and possessed exclusive rights in family decision making (Bhandari, 2023). Within this societal structure, women have experienced systemic discrimination, which has significantly restricted their freedom of expression, mobility, personal choices, and rights (Dulal, 2020). Such limitations have been a major barrier to women's equal participation in socio-economic activities and household decision-making processes. Consequently, women have faced disparities in all social, economic, and political spheres (Bhandari, 2023; UN Women, 2015).

Wider research evidence suggests that women's vulnerability is higher than males in context of natural hazard events. Additionally, women and have gender-specific needs in the aftermath of disasters (Aryal et al., 2019; Fothergill & Squier, 2018). There are numerous studies that explained the gendered impacts of disasters among women, including biological differences (Paudel et al., 2025), discriminatory practices in supply of relief supports (Trieb, 2015), limited access to information and resources before,

during and after the disasters (K.C & Hilhorst, 2022)[2], increased care responsibilities, and gendered poverty (Thapa & Pathranarakul, 2019).

After the earthquake in 2015, various root causes further increased the vulnerability of women in Nepal. Firstly, many women lacked awareness of how to respond during disaster events due to illiteracy, poverty, and limited ability to express their needs (K.C & Hilhorst, 2022). Additionally, those women without citizenship, education, or income; particularly those whose husbands were either abroad or had died in the earthquake, faced discrimination when accessing relief, securing housing reconstruction funds, or seeking employment (K.C & Hilhorst, 2022; Mackintosh, 2022).

Women's situation in the aftermath of the 2015 earthquake was also worsened by their socially assigned gendered roles and responsibilities (Fothergill & Squier, 2018). In Nepal's patriarchal society, women are primarily responsible for the unpaid labour and caregiving roles that became increasingly burdensome immediately after the earthquake (Fothergill & Squier, 2018). Women not only had to cope with loss, displacement, and trauma, but were expected to provide care for the injured family members, secure food, and maintain household stability admist limited access to relief resources (K.C & Hilhorst, 2022; Rajbhandari, 2016). Additionally, the migration of the male population to urban areas or out of the country to earn for their family left women, older adults, and children inhabiting in the rural areas where they were dependent on farming and remittances paid by their men. Nepalese women become overloaded with the care of family and arranging their livelihood (Sthapit 2025; UNDRR, 2019). These intensified responsibilities heightened risk of long-term stress, and deteriorating wellbeing among the women.

[2] K C is a common family name in Nepal. It is short form of Karki Chhetri. The initials KC are accepted for use in official documents, and are used in the abbreviation format rather than a full name in journal publications.

There were reports of violence and trafficking among the affected women and girls immediately after the earthquake (NPC, 2015a; Singh, 2021). As patriarchy is deeply embedded, maintained, and reproduced within many rural communities in Nepal, women are not aware of gender sensitive needs and how to respond during domestic violence, because of their lower ability to achieve influential positions of power and limited decision-making capacity (Aryal et al., 2019). Moreover, these cultural norms prevented women to effectively express their needs and constrained Nepalese women's access and control over the resources before, during, and after the earthquake (Thapa & Pathranarakul, 2019).

Women in Nepal also face numerous obstacles in attaining economic security and rights, and these are amplified for women specially from marginalised and rural societal groups. The ingrained system of patriarchy has entrenched the discriminatory social norms and practices imposed upon women (UN Women, n.d.; Yadav, 2016). Women have limited participation in the labor force and employment sector. According to Alaref et al. (2024), women in Nepal disproportionately bear the burden of unpaid house works which is amplified in a disaster situation. Nearly all of the young girls are engaged in household chores and involved in caring for the family and livestock. Furthermore, the fundamental household role is often ignored as it lacks financial value (WHO, n.d.). Many women who are financially dependent upon their husbands mention their family and household responsibilities as the most common reasons for not trying to find a job, continuing the ongoing job, or starting a business (Alaref et al., 2024; UN Women, n.d.)

The economic vulnerability was increased following the disaster as many women lost their homes, valuable property, and agricultural resources (Mackintosh, 2022). Many females temporarily became heads of their households during and after the earthquake, either because their husbands had migrated for work or had died (NPC, 2015b). Women also had to undertake labour work for relocation in temporary homes (Fothergill & Squier, 2018). The loss of homes, belongings, crops, and food supplies made it harder for families to manage their finances (K.C & Hilhorst, 2022). Moreover, women could not continue their farming immediately after the earthquake because of the rubble on their farms and the fear of another earthquake (Mackintosh, 2022). In many rural areas, local crops are a primary source of food and income; losing those means immediate

hunger and long-term economic and livelihood challenges (Central Department of Population Studies [CDPS], 2015). Overall, the weakening of economic stability, along with the loss of jobs and assets, was expected to have lasting effects which remains unexplored.

Women's access to health service was also affected in the aftermath of the earthquake. Nepal's earthquakes caused major destruction in the health service centres; further inhibiting access to already poor rural healthcare and reducing its quality (Karki et al., 2016). As a result, health facilities could not effectively respond to the increased healthcare demands, and service delivery was disorganised. Consequently, disaster victims, pregnant and post-natal women, were disadvantaged in accessing health services, most commonly in remote areas (NPC, 2015a). The earthquake seriously affected priority health services for women such as family planning, antenatal care, safe delivery services, immunisation, and services to Tuberculosis patients and people living with Human Immunodeficiency Virus (HIV) who needed regular daily medicine under Directly Observed Treatment service (DOTS) scheme (Adhikari et al., 2020).

Many women lived in unsafe and unhealthy temporary shelters for some years after the earthquake. In the 14 districts, approximately 250,000 under five years children and 135,000 pregnant and lactating women were affected by the earthquake (NPC, 2015a). Furthermore, the Nepal Government initiative of a minimum initial service package- which is an initiative to provide for promoting health of the pregnant and post-natal women immediately after the crisis situation such as disasters, epidemics and violence, could not be effectively implemented (Myers et al., 2018). Important determinants were the inadequate staffing employed for the service, weak communication between national and district level stakeholders, under-resourced health facilities, limited attention by the service responders towards gender-based violence, and low awareness of affected communities regarding the gender-based violence services. As a result, the needs of the wider population and particularly those of women could not be met (Goyet et al., 2018; Myers et al., 2018). This demonstrates how vulnerable populations, especially in low-resource settings, are exposed to multiple layers of risks and wellbeing consequences when the healthcare system is fragile or incapacitated by a disaster.

Even though the reconstruction of the healthcare facilities were completed years after the earthquake, women in Nepal encountered various gender-related obstacles when accessing healthcare, which was further intensified by geographical, financial, sociocultural factors. These include difficulties in traveling alone to seek care, the unavailability of female healthcare providers, limited control over household resources like money for treatment, and long distances to health (MoHP, 2018; WHO, n.d.). As women continued to cope with the destruction of the built environment and the health impacts of the earthquake on them, the COVID-19 pandemic caused additional burden on survivors' ability to handle the major disruptions (Adhikari et al., 2020). Because of the channeling of resources and other efforts to contain the virus, the healthcare system was stretched. This further disrupted services to other vulnerable populations such as women (Dahal et al., 2020; Pokharel et al., 2021).

Therefore, from the evidence, it is evident that Nepalese women are at risk for long-term wellbeing influences due to the traditional patriarchal culture and limited access to health care services during the immediate and mid-term period of hardships after the earthquake (Thapa & Pathranarakul, 2019). Although women are encouraged to participate in the post-disaster response and recovery process, they find attending disaster risk reduction programmes difficult (Sthapit, 2015). The perception that women are weak and incapable of dealing with disaster has supported a sense of inefficacy and inability in Nepalese women, hindering their ability to overcome the impacts of the disaster (Tearne et al., 2021).

However, some studies have suggested the importance of women's unique capacities for recovery and resilience after the earthquake. Bhandari (2023) argued that women and marginalised groups can drive the resilience-building of communities if given the appropriate support. Overall, equitable economic growth can lead women out of their disadvantaged conditions and increase their resilience. Post-disaster recovery will, therefore, be more effective and sustainable if women's social inclusion and fair resource allocation are acknowledged as one of the key guiding principles of implementation of disaster recovery strategies (Thapa & Pathranarakul, 2019). Therefore, it is of utmost importance to monitor the affected communities, promote research on women's empowerment, and collaborate with government and non-

government key stakeholders. Periodic assessment and understanding of women's wellbeing as a priority in disaster preparedness and disaster recovery will help the implementation of effective support services for women (UNDRR, 2019). This approach will help in promoting the wellbeing and overall quality of life of the female survivors affected by the earthquake.

Understanding the long-term influences following a disaster on women's wellbeing and their healthcare utilisation is important; whilst the affected communities underwent reconstruction and reorganisation of their life, and tried to cope with recurrent disaster impacts, they struggle for adequate health care support in short and middle- term after the earthquake. This might have long-lasting influences on the wellbeing of women (Kienzler & Sapkota, 2019). Subsequently, throughout the recovery process, women's wellbeing needs to be monitored and fully understood in context to support them in keeping themselves physically and emotionally sustained for the long-term after the earthquake (NPC, 2015b).

There is only limited research available on this topic which aims to understand women's long-term wellbeing after the disaster. Methodologically, constructivist case studies are rarely conducted to explore women's wellbeing following the disaster over the long-term. Therefore, by identifying meaningful insights from women who survived the earthquake and health professionals' perspectives in context, knowledge is constructed that serves as an initial platform to support the national policy and program in disaster preparedness, management recovery, and resilience. Such knowledge can help guide both short-term interventions and long-term strategies to support women's wellbeing in post-disaster contexts. The findings can also be helpful for the community social work services in providing support to women impacted by disaster in this area and in areas beyond the Nuwakot district. For example, the findings may be incorporated into local disaster management plans by including gender friendly rescue materials for women in disasters. Furthermore, the study findings can serve as baseline data for future researchers interested in exploring the long-term influences on women's wellbeing following the natural hazard event. The research can also provide an initial platform for Nepal's national disaster risk reduction and management authority to provide much needed evidence of the felt concerns of the women and their views on what is needed.

It means that national funds allocated for disaster risk reduction can also be used to offer targeted and gender friendly support that meets the needs of the people in both rural and urban areas, including relief information materials and long-term psychosocial and financial support services to women.

Research Aim and Questions

Research Aim: To understand women's long-term wellbeing in a Nepalese community following the 2015 Nepal earthquake.

Research Questions:

1) How do women living in a Nepalese community experience their long-term wellbeing following the 2015 Nepal earthquake?
2) How has women's wellbeing been influenced over the long-term following the earthquake?

Research Methodology

This study employs qualitative research methodology to address research questions. It is grounded in the philosophical paradigm of constructivism by and follows the constructivist case study approach Lincoln and Guba (2013). Specifically, the study adopts the procedure recommended by Robert E. Stake as a reference for conducting the research (Stake, 1995). The case study thus employs an integrated approach to address the influence on the wellbeing of women survivors following the 2015 earthquake.

Overview of the Chapter Outline of Thesis

The current thesis outlines the progression of my research through a methodological framework employed to systematically investigate the subject matter, from problem identification to reporting findings. The thesis is structured into nine chapters.

Chapter One: Introduction

Chapter One has provided background to the research and discusses the significance of the study. The chapter also described my positionality by explaining how my interest in

the subject stems from my personal experience of the earthquake and by providing information on my educational and professional background. I have also described how Nepal's geography and its socio-economic and political situation make it particularly vulnerable to the devastating effects of earthquakes.

Chapter Two: Literature Review

Chapter Two provides a narrative review of literature related to research questions. The review of literature is particularly focused on the impact and consequence of earthquakes on survivor women and determinants of long-term wellbeing after the earthquake.

Chapter Three: Methodology

This chapter outlines the philosophical underpinnings of the study. Thus, concept of constructivism Lincoln and Guba (2013) and case study methodology by Stake (1995) are discussed. The chapter further highlights the reasons for choosing the constructivist paradigm and the case study methodology for answering my research questions.

Chapter Four: Methods

Chapter Four describes the different methods carried out to systematically conduct the study. By following the Stake's (1995) methodology, the chapter describes and justifies the data gathering plan, recruitment process, sampling strategy, and data collection procedure used. Ethical considerations are discussed, including informed consent and confidentiality, data analysis procedures, and the process used for maintaining the rigour and trustworthiness of the study.

Chapters Five, Six, and Seven: Case Study Findings

These chapters present the major findings of the study. Chapter Five- The case study findings provide the direct interpretation of the review of the documents related to the case and description of the physical context of data collection setting. Chapter Six presents the understanding of survivor women's experiences of their wellbeing after the earthquake, which is summarized in five themes. Finally, Chapter Seven presents the health service providers' perspectives of healthcare services availability and utilization

by women in Nuwakot. The chapter concludes by converging the data from various sources.

Chapter Eight: Case Study Assertions

In this chapter, commonalities and links from the findings of the study from document review, focus group discussion, and individual interviews are interpreted together and presented as assertions about the case.

Chapter Nine: Discussion

Finally, the thesis concludes with the discussion chapter which draws together the findings, assertions and available literature. The limitations of the study, implications, and recommendations for further study are also discussed in this chapter.

Chapter Two Literature Review

Introduction

The literature review presented in this chapter critically evaluates what is known about women's wellbeing in the initial years after a natural disaster and the factors that influenced their wellbeing over the long-term. The review also identifies the gaps in the research. The reviewed literature is reported in a narrative style to support readers in experiencing and constructing their understandings about the topic. For constructive case study research, the narrative review approach offers greater interpretive flexibility, allowing for the integration of individual insights and constructs based on the synthesis of existing literature (Bourhis, 2017). In the context of this study- where understanding of both the short- and long-term impacts of disasters are essential and where diverse types of disasters are considered- this approach helped establish the context and background of research area and highlighted the gaps in literature.

The review begins with a broad overview of the long-term impact among the survivors after natural disasters. Next, it considers how the immediate physical, psychological, and socio-economic wellbeing of women is influenced by natural hazard events. While initially reviewing the literature, it was apparent that women's experiences during and shortly after disasters, along with contextual factors, were related to their longer-term outcomes and experiences. Therefore, the literature relating to both the short- term and long-term impacts is discussed in this review. For the review, only literature related to natural disasters in South Asia and Southeast Asia is included. The reason for this is that the impact of disasters is specific to the physical, social, and cultural context in which they occur. This focus on South and Southeast Asia helped me situate the problem of interest about how women in Nepal were particularly vulnerable to significant impacts on their wellbeing after surviving a disaster. The review also highlights the adaptive strategies used by survivors after the life-threatening events that supported their effective recovery and resilience over the long-term.

Literature Search Strategy

This literature draws from research information pertinent to women's wellbeing in the aftermath of natural hazard events. As discussed in Chapter One, when short-term impacts of disasters are discussed, this tends to refer to a period covering the initial stages and up to two years after the event. Mid-term impacts refer to those impacts experienced between two and five years later, while long-term impacts refer to those impacts that are experienced five years or more after the event (Noy & duPont IV, 2016). Literature pertaining to both the short and long- term is included in this review.

The search was conducted using the databases Medline, ProQuest, Scopus, and Google Scholar using the following terms: *impact, influences, wellbeing, women, girls, natural disasters, earthquake, disaster survivors, South Asia, Southeast Asia, resilience, recovery*. The search was limited to research published between 2004 and 2025. The search was also limited to full-text articles, theses, and dissertations written in English. Given that this review process employed a narrative review methodology, predefined inclusion and exclusion criteria were not applied. Retrieved literature was manually reviewed for its relevance to answering the research questions. Finally, a comprehensive review of the relevant literature was presented. Overall, 32 international studies and 32 studies that focused on the Nepalese context were included in the review. Appendix E provides the details of reviewed literature, including the timing of disaster occurrences, authors, research objectives, and methodologies.

Impact of Disasters among Women in South Asia and Southeast Asia

South Asian and Southeast Asian countries are particularly vulnerable to natural hazard events such as earthquakes, floods, storms, and droughts (Nakasu & Amrapala, 2023). An evidence-based disaster risk assessment of Southeast Asian countries revealed that Thailand has a greatest economic damage risk, and Indonesia has the highest mortality caused by disasters. However, the highest impact of disaster among survivors was found in the Philippines (Nakasu & Amrapala, 2023). In the Philippines, 87% of the population reported on their experiences and the impact of disasters such as earthquakes, flooding, and tropical storms in the last five years (Vigers, 2024).

The negative influences of disasters on wellbeing are consistently reported to be higher among females in disaster-affected Southeast Asian countries. Mortality related to disasters is higher among girls and women (Oxfam, 2005). This vulnerability is related to women's gender roles, greater domestic responsibilities, and limited access to economic and healthcare resources (Fatema et al., 2021; Plan International, 2021). After the 2004 Indian-Ocean Tsunami, analysing secondary data form Indonesia, Sri Lanka and Indonesia, Oxfam (2005) noted that tsunamis hit women harder than men, because men were frequently engaged in fieldwork, placing them away from home during critical times. In contrast, women were typically at home caring for children. Consequently, when disasters strike, women lose crucial moments attempting to gather and protect their children, which increases their vulnerability during the event. Mortality among the female population was also higher than that of men in the Cyclone Gorky disaster and flood of 1991 in Bangladesh, with 90% of deaths among women (Plan International, 2021). The same pattern can be observed for different disasters. For example, 75% of the fatalities reported in relation to the Indian Ocean Tsunami that occurred in 2004 were women and children (Oxfam, 2005), and 55% of deaths following the 2015 Nepal Earthquake were females (OSOCC, 2015).

Beyond the impact in terms of mortality, impacts on physical, psychological, and socio-economic wellbeing of women was evident in various studies after the disasters. Oxfam (2005) study on women's vulnerability to natural disasters noted that, after the 2004 Indian Ocean Tsunami, impacts on women's wellbeing continued during the initial rescue phase of the disaster because the survivor women had more difficulties in registering for social and government aid from relief agencies. Additionally, relief measures failed to provide both culturally appropriate clothing for Muslim women and adequate sanitary pads and kits to manage menstrual hygiene. These issues encountered during the rescue phase increased women's discomfort, which prevented them from positively adapting to the post-disaster situation (Trieb, 2015). Similarly, a systematic review by Fatema et al. (2021) highlighted that women's health and wellbeing during the immediate post-disaster period was poor among all the disaster-prone countries in South and Southeast Asia. The reasons identified were gender inequalities and expectations imposed on women. For instance, women are generally

left at home to take care of children and family members, which makes it harder for them to reach places of safety during disasters.

The powerful earthquake in Nepal in 2015 was also caused widespread damage and destruction of life and properties, affecting many parts of the country. The earthquake caused a serious threat to women both during and after the earthquake. However, as noted in the work by Oxfam (2005) and Fatema et al. (2021), women's health and wellbeing were not a specific focus in disaster zones, and women's health, which was already compromised, worsened markedly during and immediately after the earthquake (Thapa & Acharya, 2017). As a result, the basic needs of women were not met immediately after the disaster. Women in traditional Nepalese society faced significant constraints and vulnerabilities, making it difficult for them to protect themselves or seek help. Therefore, women's physical, psychosocial, sexual, and reproductive health was compromised in the short term after the earthquake in Nepal (Fothergill & Squier, 2018; Thapa & Acharya, 2017).

Even though relevant literature on the Indian Ocean Tsunami, Hanshin-Awaji Earthquake, Japan, and Bam Earthquake, Iraq, suggested that survivors' wellbeing is affected in the long-term (Ardalan et al., 2010; Kar et al., 2014; Tanaka et al., 2019), very few studies have been conducted in Nepal to assess the wellbeing of women after the earthquake. Of those studies which have been completed, those studies by K.C et al. (2019) and Sapkota (2018) have provided deeper and holistic understandings about the women's experiences in their social and cultural contexts within the first two years after the earthquake. A human wellbeing study conducted with adult survivors 10 months after the 2015 earthquake revealed that wellbeing was significantly associated with the degree of destruction after the earthquake, access to physical and social infrastructure within the communities, and sociocultural determinants (Sapkota, 2018). This study revealed that females had lower levels of subjective wellbeing than the males. After the earthquake, six months to 2 years later, some studies were carried out to assess the physical and mental health vulnerabilities among survivors in earthquake-affected communities, which also identified the gendered based vulnerabilities (Adhikari Baral & K.C, 2019; Dahal et al., 2018). Even though these studies' quantitative findings raised general concerns for women's health, little in-depth, qualitative research has been

conducted exploring women's detailed accounts of the diverse and interconnected ways in which the earthquakes influenced their wellbeing. A limited number of studies offer insights into women's perspectives and experiences of their wellbeing in the short-term following disasters (Bengts, 2016; Rajbhandari, 2016; Tearne et al., 2021). The following section examines these studies with respect to the impact of disasters on the physical, psychological, reproductive health and socio-economic wellbeing of women in Southeast Asia, including studies conducted in Nepal within two years after the 2015 earthquake.

Physical Health Impacts of Natural Disasters on Women

Physical trauma and injuries are common effects from disasters that can lead to longer-term health concerns. Cook et al. (2008) critically highlighted the long-term impacts of natural disasters on physical health of people in affected communities, such as pain and chronic disability following physical injury, chronic systemic illness, and effects of malnutrition. Traumatic spinal cord injury is one of the major physical consequences of earthquakes which carries high rates of morbidity and mortality in the long run and thus affects not only the physical, but also the emotional and social wellbeing of the survivor (Bhattarai et al., 2018; Groves et al., 2017). A prospective cohort study on adult earthquake survivors by Sudaryo et al. (2012) assessed the injury, disability, and quality of life in three phases: immediate, three months, and six months after the 2009 earthquake in Indonesia. The findings revealed that women who sustained functional disability of limbs due to injury shortly after the earthquake reported longer-term pain and discomfort that negatively impacted their quality of life. Similar findings were reported in the studies which quantitatively assessed the neurological outcomes immediately after the 2005 earthquake in Pakistan (Rathore et al., 2007). A cross-sectional study conducted five years after the Bam earthquake in Iran revealed significant associations of severe injury with dependence for activities of daily living with poor physical health among female survivors (Ardalan et al., 2010). These findings, therefore, suggest that injuries and poor physical wellbeing among the women earthquake survivors might have enduring influences on their wellbeing over the longer term.

Indeed, physical injuries have been identified as prominent issues that affected Nepalese women's wellbeing shortly after the earthquake. Along with human losses, the disaster caused more than 20,000 physical injuries (Groves et al., 2017). A qualitative case study by Bengts (2016) one year after the earthquake identified that more women died or became injured because of the gendered responsibilities. Since the earthquake occurred around lunchtime on Saturday, women were mostly inside the house preparing lunch. Meanwhile, many males were working outside in the field or enjoying their leisure time on the weekend. Therefore, more women than men were trapped and injured in collapsed houses (Bengts, 2016). Bengts' account aligns with Groves et al.'s (2017) finding that the earthquake caused a considerable number of spinal injuries. Many of such injuries occurred amongst women with a ratio of 1.3:1. Eighty one percent of these cases sustained paraplegia that caused pressure ulcers. Although significant improvement was seen in patients' functional outcomes during the rehabilitation phase, there was a call for follow up studies on the long-term functional outcomes for these patients (Groves et al., 2017). This finding suggests that the burden of physical injuries that impacted women's functional mobility was high. However, the way physical injuries and subsequent concerns affect women's wellbeing over the long-term is unknown.

Mid-term studies on the wellbeing of earthquake survivors with physical injuries found similar patterns to those in the short-term studies. A study conducted by Bhattarai et al. (2018) two years after the Nepal earthquake identified psychosocial factors affecting resilience in adult survivors with earthquake-related spinal cord injury. Moreover, survivors who experienced long-term physical impairments were identified as being at risk of developing depression. While the study population included both male and female, the study findings revealed that, those women who were physically injured and many of whom also experienced the death of their loved ones, described their experiences as frightening and exhibited post-traumatic stress symptoms. This suggests that physical injury and disability sustained at the time of an earthquake can lead to mental health problems among women even a few years post-event (Bhattarai et al., 2018). This finding points to the relationships between physical impairment and psychological concerns among female survivors, suggesting that these concerns are not discrete and are affected by many interconnected factors. However, there remains

limited knowledge about how such factors shape women's lives in the long-term in the Nepalese context. In particular, qualitative insights into how women navigate daily life, sustain livelihoods, and manage family responsibilities when either they themselves or their family members are living with long-term injuries after the earthquake are largely absent from the literature.

Mental Health Impacts of Disasters on Women

Along with physical impacts, the influence of disasters specially the natural hazard events on mental health and wellbeing are inevitable, and such concerns are more commonly observed among the women (Fatema, 2020; Fatouros & Capetola, 2021; Makwana, 2019; Nolting et al., 2025). Besides the death of loved ones, disasters create stressors that impose acute distress and anxiety. These mental health concerns are insidious and have a general effect on the quality of everyday health and wellbeing of the survivors (Adhikari et al., 2017b). The most commonly reported psychopathology among disaster survivors is post-traumatic stress disorder (PTSD). This is followed by depression and anxiety disorders, particularly in populations that have suffered major losses (Makwana, 2019).

Women are more likely to experience negative mental health outcomes in comparison to men, with women being 83% more likely to report PTSD over the long-term (Nolting et al., 2025). A systematic review by Fatema et al. (2021) revealed that out of eight retrieved studies, women were more prone than their counterparts to suffer from depression, anxiety, and common mental disorder in immediate and long-term post-disaster phases. Similarly, a descriptive survey assessing the prevalence of PTSD among survivors 18 months and 30 months after the 2005 Kashmir earthquake in Pakistan revealed that women were more vulnerable to post-traumatic stress in comparison to men (Ali et al., 2012). Most recently, a meta-analysis of 95 research articles by Nolting et al. (2025) showed that females survivors exhibited higher rates of PTSD and related conditions following natural disasters. These disparities are attributed to post-disaster stressors such as increased caregiving burdens, economic instability, disrupted social networks, and increased vulnerability to gender-based violence. Additionally, stigma surrounding mental health often delays women's help-seeking behaviours,

compounding the long-term psychological impact (Nolting et al., 2025). Similarly, in their thematic analysis of 15 studies published between 2004 and 2020, Fatouros and Capetola (2021) identified the following three themes as major cause of mental health consequences among women after natural disasters: rigid gender beliefs and roles of women; limited women's involvement and empowerment in leadership and political affairs, and policies and practices which are not gender friendly across low and middle income countries.

Nepalese women also struggled with their psychological wellbeing during the aftermath of the earthquake disaster. A study conducted nine months after the 2015 Nepal earthquake revealed that PTSD was prevalent among 24.1% of adult survivors. PTSD was higher among the women (Adhikari Baral & K.C, 2019). Another follow up study was conducted 20 months after the earthquake among women who were either pregnant or post-natal mothers during the earthquake to evaluate their post-traumatic stress (Kvestad et al., 2019). The findings revealed that twenty months after the earthquake, there were elevated levels of stress symptoms amongst earthquake survivor mothers. The mothers reported negative impacts of the earthquakes in terms of exposure to traumatic events and everyday life. The negative impacts were seen in terms of food security, employment, and the economy. Additionally, injury and death of family members along with collapse of house were significant source of distress for the mothers (Kvestad et al., 2019).

Recently, a meta-analysis was carried out specifically to assess the post-traumatic stress disorder among the survivors of the 2015 Nepal earthquake (Paudel et al., 2025). The studies included in the meta-analysis were all conducted within two years of the earthquake in 2015. The findings highlighted that female survivors were twice as likely to suffer from PTSD than male survivors. This large gender disparity is consistent with findings of other studies on disaster survivors in Southeast Asia (Fatema et al., 2021). All studies included in Paudel et al's (2025) meta-analysis highlighted that women were worried about the economic hardships they had been experiencing because of the consequences of the earthquake. Many women experienced fears that an earthquake would occur again, along with behavioural problems such as increased anger, forgetfulness, and sleep disorders (Paudel et al., 2025). Since the reviewed studies were

conducted short-term after the disaster, it is unclear whether such mental health concerns would be resolved or become exacerbated over time. Paudel et al's (2025) findings offer only limited insights into women's specific wellbeing concerns over longer time frames. Additionally, most studies in the review were quantitative in nature, using surveys that were not sufficiently validated with local populations, and addressed only discrete aspects of psychological wellbeing.

Safety and security issues have also been identified as contributing to emotional imbalances among women following the 2015 earthquake in Nepal. Bengts (2016) case study involving rural and marginalised women a year after the Nepal earthquake suggested that many women were worried about their safety, security, and privacy needs. Most of the time, because of repeated aftershocks, women were concerned about how to bring food for their children and provide a safe place to live for their families. Women were scared that the incident could occur again and harm their children and family members. They were anxious that they would be raped or kidnapped if they had to stay at temporary homes. The fear had caused the women to be psychologically traumatised (Bengts, 2016). However, as Bengts' (2016) study focused specifically on Dalit women, who are ethnically marginalized communities of Nepal, its findings may not be generalisable to the broader population of women affected by the disaster Furthermore, little is known about whether such psychological impacts persisted over the long-term or how these safety related fears shaped women's broader wellbeing beyond the immediate aftermath of the disaster.

Disaster Impacts on Reproductive Health of Women

Natural hazard events have also been shown to significantly impact on women's reproductive health. Studies suggest that, in the event of natural disasters, physical trauma, mental stress, and environmental factors can affect the reproductive health of women (Afzal et al., 2024; Fatema et al., 2021). According to Plan International (2021), after the 1991 flood in Bangladesh, there were increased sexual and reproductive health problems among female survivors of the flood. One of the reasons for that was that the post-disaster relief measures were not gender friendly. Inner garments were not provided for survivor women. Moreover, sanitary pads were not available, making it

difficult to manage their menstruation hygienically. Therefore, most young girls and women suffered from perineal rashes and urinary tract infections because of unhygienic practices during menstruation (Plan International, 2021).

Reproductive and sexual health issues also emerged as a pertinent issue in a systematic review of 38 studies on low- and middle-income countries recently conducted by Afzal et al. (2024). This review also included studies conducted after the 2015 Nepal earthquake. In line with the Plan International (2021) report, the evidence from Afzal et al. (2024) suggested that the issues were caused by the non-availability of menstrual hygiene kits including sanitary pads, together with the scarcity of clean water and sanitation after the disaster event. Additionally, the contraceptive needs of reproductive aged women were unmet, leading to unplanned pregnancies. Moreover, some studies in this review also suggested decreased fertility amongst women associated with the occurrence of natural calamities such as earthquake and drought. Afzal et al. (2024) found the reasons behind these consequences as reduced physical capacity, increased mental stress, and unavailability of contraceptive measure, although these reasons were not clearly established by the studies within the review. Similar findings were reported in a narrative review report by Nagaratnam (2018), which included studies from the Southeast Asia region, covering the period between 2008 and 2017. Nagaratnam's (2018) review revealed that there was a decrease in the fertility rate of women after the natural disasters causing decreased quality of life among the women. The physical damage to the environment, injuries, and death of family members elevated the post-traumatic stress among women. This was thought to have a negative, long-term impact on the fertility rate of reproductive aged women (Nagaratnam, 2018).

According to a systemic review, in the low- and middle-income countries of Asia and Southeast Asia, the disaster effects on pregnant women caused challenges in all aspects of care during the prenatal, intrapartum, and postpartum periods (Fatema et al., 2021). Another systematic review done in low-and middle income-countries concluded that women's reproductive health is affected after any type of natural disaster. Most commonly, displacement because of the natural disasters cause women to miss their regular check-ups and vaccinations, leading to an increased risk during delivery and post-natal care (Afzal et al., 2024). Fatema's (2021) review suggested that, in Nepal,

after the 2015 earthquake, the number of antenatal care and post-partum care visits decreased over the first two years because the priority of the health system was shifted from general public services to the emergency medical and trauma management services after the earthquake. Similarly, Adhikari's (2021) retrospective analysis after the 2025 earthquake revealed that visits were impacted by damage to health care facilities with a reduction of public health services and number of healthcare professionals in the affected region.

In Nepal, studies conducted within two years of the 2015 earthquake also showed that the reproductive health concerns in immediate aftermath also applied to women in Nepal (Brunson, 2017; Sthapit, 2015). A qualitative study conducted six months after the earthquake revealed that women faced a wide range of reproductive health challenges which included fear for the foetus's wellbeing in pregnancy, birth complications, and breast-feeding challenges (Brunson, 2017). These challenges occurred in combination with vulnerability in meeting basic needs such as lack of safe shelter, food, clothing, or clean water (Brunson, 2017). According to the United Nations Population Fund, 93,000 women were pregnant at the time of the 2015 Nepal earthquake, with an estimated 10,000 delivering each month thereafter. Among them, 1000–1500 women were at risk of pregnancy-related complications who required emergency obstetric care (United Nations Fund for Population Activities [UNFPA], 2015).

Those women who were pregnant at the time of the 2015 Nepal earthquake were concerned about the health of their foetuses (Brunson, 2017). However, these fears appeared to be rooted in cultural beliefs about the earthquake rather than in practical concerns about a lack of obstetric support. The study findings by Brunson (2017) reported that one woman reported having ended her pregnancy with a fear that, because of the shaking and repeated aftershocks, an unhealthy baby would be born. Furthermore, the same study findings reported that some women did not attend prenatal check-ups as they faced difficulties in reaching the hospital (Brunson, 2017). From Brunson's (2017) study, it was identified that women's reproductive wellbeing was substantially affected in multiple and complex ways in the short term, and that these effects likely had an impact in the longer term, although this has not yet been clearly

established. Such concerns might pose an additional burden for women, beyond the effects of the earthquake.

Issues with menstrual hygiene management like those noted in the literature pertinent to Southeast Asia (Alam & Rahman, 2014; Fatema et al., 2021) were also evident in the post-disaster recovery period following the 2015 earthquake in Nepal. Despite hygiene being a prominent issue related to women and girls of reproductive age (UNFPA, 2015), menstrual hygiene management was often ignored in the rescue phase in Nepal. Neglected gender hygiene and sanitation needs during the rescue and recovery phase had a significant short-term impact on survivor women in Nepal (UNFPA, 2015). A mixed-method study designed to assess menstrual hygiene management among women and adolescent girls in the immediate aftermath of the Nepal earthquake revealed that 42.8% of women and girls who menstruated within the first week of the earthquake used unsanitary clothes because of the unavailability of sanitary pads. Women and girls completely depended on the absorbent textiles available within their households without the knowledge about its hygiene and health risks (Budhathoki et al., 2018).

Significant disparities existed in gender-specific relief support for women survivors immediately following the earthquake in Nepal. Meanwhile, Rajbhandari (2016) and Singh (2021) similarly noted that relief materials and their distribution immediately after the 2015 Nepal earthquake were not sensitive to gender-specific needs such as menstruation supplies, access to water, toilet facilities, and sanitation. There were only temporary toilets in most of the short-term shelters constructed after the earthquake. Most of the women reported that they had difficulty changing their pads, and no water or sanitary napkins were available in the toilets. Therefore, women felt insecure performing their regular hygiene and elimination needs. Because the bathrooms were temporarily made with no door locks, the women went unbathed for several weeks, which posed risks to their reproductive health (Rajbhandari, 2016; Singh, 2021). However, whether such concerns were improved in the long-term is currently unknown.

The cultural customs and rituals followed by different communities in Nepal posed additional reproductive health risks among survivor girls and women. The Bengts (2016) study, which focused on the immediate aftermath of the earthquake, shed light on the

complex ways in which culture-specific understandings can inadvertently pose risks to women's wellbeing. The study highlighted that, especially among those Nepalese of Hindu faith, young girls who menstruate for the first time go through complex and elaborate cultural rituals, staying in seclusion for days or weeks before they are bathed and integrated again within the routine of a household. Similarly, Rajbhandari (2016) noted that during the stay in temporary homes, communities that followed these norms often kept their menstruating girls in unsafe places in the name of seclusion. Menstruating women and girls who were already prohibited from taking part in religious activities, such as visiting temples or worshipping gods, were struggling to maintain their untouchable state in small temporary shacks. This practice added emotional hardships, especially among young girls (Bengts, 2016; Rajbhandari, 2016). The social exclusion and the absence of hygienic conditions, especially during menstruation, contributed to added trauma among earthquake-affected girls and women that had a significant impact on their physical and psychological wellbeing (Bengts, 2016; Rajbhandari, 2016). However, until now, it is not known whether these social cultural practices continued in the longer term after the earthquake and whether this experience has affected young women's wellbeing over the longer term.

Disaster-Related Socio-Economic Impacts Among Women

Major disasters have a significant impact on social-economic wellbeing and social relations (Adhikari et al., 2017a; K.C et al., 2019), but the ways in which women are impacted is often indirect and multifaceted. A systematic review of the post-disaster impact among different countries in South and Southeast Asia highlighted that significant psychosocial problems were evident years after the calamities within 63% of 16 reviewed studies. The most common socio-economic consequences following a natural disaster were loss of job or income generation activities and limited social support, although the impact of such consequences on women specifically was not teased out in the review. Nonetheless, the same review suggested that in the case of Nepal, inadequate access to healthcare facilities due to poverty caused women to be more vulnerable to anxiety and depression (Fatema et al., 2021). Additionally, depressive symptoms were predominant amongst survivor women who were the

income earner of the family and could not work because of injury, poor physical health, and loss of employment after the earthquake (Kvestad et al., 2019).

The 2015 earthquake in Nepal damaged about five million houses.Two million people were displaced, with many people being obliged to stay in makeshift temporary housing. Living in these makeshift homes and uncertainty over the possibility of permanent settlement was a major psychosocial burden among survivors (Adhikari et al., 2017a). Additionally, the burden of post disaster stress and anxiety was higher among women and among the survivors who sustained severe housing damage and property loss (Adhikari Baral & K.C, 2019; Dahal et al., 2018). Living in a tent or temporary settlement was strongly associated with the development of psychosocial problems among older adults. Survivors reported that they were most distressed about their material loss, as everything they owned was destroyed in the earthquake. Findings also suggested that recovery efforts were not a sustainable solution to address the losses (Adhikari et al., 2017b).

Another major socio-economic impact after the earthquake noted in the literature was a rise in male migration (NPC, 2015b). Brunson's (2017) ethnographic study in Nuwakot suggested that male migration affected pregnant and postnatal women in a variety of ways. Most of the participant women's husbands were working abroad to earn for their families and those women who were single at the time of the earthquake, experienced more stress (Brunson, 2017). Furthermore, while the study was conducted, many families were still living in temporary shelters. The findings of Brunson's study highlighted that women did not start building house for 2-3 years because of the financial constraints (Brunson, 2017). These short-term economic hardships underscore the interconnected factors contributing to long-term adverse impacts on women and their wellbeing.

Gender-Based Violence Among Women After Earthquake

The influences of disaster on women survivors included higher incidences of gender-based violence, because of food insecurity creating psychological tension, reduced income-generating opportunities, and increased substance abuse among men (Afzal et al., 2024). In their systematic review, Afzal and colleagues (2024) highlighted the delayed

and indirect social impacts of earthquakes and other natural calamities during the rescue and relief phase. Disaster-affected women faced both intimate partner violence as well as external violence. External violence arose in the form of sexual harassment when women tried to access relief services such as food or shelter (Naz et al., 2018). In the absence of male family members due to the disaster-driven migration, the left-behind women were particularly vulnerable to risk of external violence. A study in Pakistan after the 2005 earthquake revealed that the women felt more at risk of sexual harassment and sexual violence in their temporary homes. The reasons behind this were overcrowding and lack of privacy in temporary toilets (Malik & Khalid, 2015).

Because of the socio-economic hardships, Nepalese women similarly faced gender-based violence during and in the short-term aftermath of the earthquake. The post-disaster needs assessment by the Nepal Government found that women and girls were much more impacted during initial rescue and recovery phase because of existing gender inequality, decreased economic assets, limited access to resources, and the burden of domestic duties. These concerns then posed a further risk of violence in the recovery phase of the earthquake (NPC, 2015a). Notably, based on their recent qualitative study in three districts affected by the Nepal earthquake, Basnet et al. (2022) concluded that cultural and socio-economic factors were interrelated with women's and girls' experiences of violence during adversities. Thus, a year after the earthquake, increased incidence of being threatened and abused, and increased domestic violence in earthquake camps were reported by survivor women (Basnet et al., 2022).

Post- earthquake, women living in unsafe shelters, shared shelters among males and females, overcrowding, and a lack of privacy in temporary housing particularly exposed girls to the risk of sexual violence. This issue of inadequate temporary housing post-disaster and an increase in sexual violence was also evident following a recent earthquake in rural Far Western Nepal (Jajarkot) on November 3, 2023, that had a magnitude of 6.4 on the Richter scale. A report by women rehabilitation centre, Maiti Nepal (2024) revealed that there were 161 gender-based violence cases and 113 cases of sexual and reproductive health problems in the area affected by this recent earthquake. These findings suggested that, despite the regular needs assessment, the

relief and recovery strategies after the disaster events targeted to women are still lacking in Nepalese context.

A rise in the trafficking of young girls and children because of the economic crisis was another critical issue of concern in the short term after the 2015 Nepal earthquake. Basnet et al. (2022) findings suggested that children were at risk of trafficking since they were separated from their families because of destruction and displacement. Many parents were persuaded by traffickers to hand over their children with false promises of food, education, and a better life ahead. There were reports that young girls who belonged to poor families were most commonly targeted by the traffickers (UNFPA, 2015). Maiti Nepal, a leading NGO working against human trafficking in Nepal, reported that 5,700 vulnerable girls were intercepted at the Nepal and India border within the first year after the earthquake. The figure was about double the number recorded in the year before the earthquake (Basnet et al., 2022). Women are more likely to become reluctant to talk about sensitive issues such as violence and sexual assaults, a phenomenon known as “gender blinding” in the context of disaster concerns. These silent issues cause unexpressed tensions among the disaster affected women, resulting in negative physical and psychological health outcomes (Plan International, 2021). Therefore, gender-based inequalities and socio-cultural norms that discriminate against women and girls tend to be deeply rooted in the Nepalese context, increasing the potential for long-term gendered wellbeing vulnerabilities.

Post- Earthquake Adaptive Strategies among Women

Natural disasters often lead to significant psychological distress, with anxiety and stress being common, immediate reactions. However, survivors also demonstrate various coping strategies that help them adapt over time. Norris et al. (2008) described stress adaptation as a process through which survivors manage transient stress reactions. Longitudinal studies following the Great East Japan Earthquake, 2011, and the New Zealand Canterbury Earthquake, 2010, suggest that adverse psychological effects tend to diminish over time due to survivors’ adaptive responses (Prayag et al., 2021; Shiba et al., 2022). However, gender differences in coping after a natural disaster are evident in the studies conducted in South and Southeast Asia. For example, a study by Naz et al.

(2018) after the flood in Bangladesh revealed that males were more economically driven, seeking employment, reconstructing their physical assets, and accessing the formal aid that was available after the disaster. In contrast, women tended to rely on household and community-based strategies, including emotional resilience, social networks, and religious faith, However, the long-term effect of these strategies on women's wellbeing remains underexplored.

The following section critically evaluates the coping strategies commonly employed by women survivors of natural disasters. The identified strategies include drawing on family and community based social support, religious coping, individual perseverance and self-strength, and engagement in post disaster reconstruction. While these approaches appear to be beneficial, their applicability relevant to the Nepalese context has not yet been explored.

Social Support

Social support defined as assistance from family, neighbours, and community members plays a vital role in post-disaster recovery. It enhances perceived self-efficacy and fosters emotional resilience (Bhattarai et al., 2018). Social support aids coping by assisting with problem solving, helping each other against adversity, and positive reappraisal and community participation, which are significant factors for positive post trauma adjustment, and which promote positive psychological health and wellbeing (Cofini et al., 2015). Studies suggest that post-disaster, women's psychological wellbeing is tied to their social support, and the ways this support enables them to cope. For example, Tanaka et al. (2019) found that women who maintained strong familial and neighborly ties experienced better recovery outcomes after the Great Hanshin-Awaji Earthquake. Similarly, Ahmed (2018) reported that adolescent girls and young women in Pakistan continued to suffer trauma eight years after the 2005 earthquake, but with family support being a critical factor in their wellbeing. In their work with survivors of the floods in Bangladesh, Nahar (2025) documented that women relied heavily on community networks, especially when male family members were absent. However, Nahar's (2025) study focused on short-term coping, and its relevance to long-term wellbeing remains unclear.

After the earthquake in Nepal, studies focusing on the role of social support in long-term wellbeing are scarce. Panday et al.'s (2021) qualitative study revealed that, for the female-headed families, it was more difficult to get relief aids from the government. These women lacked close links with government or non-governmental agencies, and, as a result, could not seek assistance to secure relief materials or timely funding for affected families. Therefore, for most women, bonding and bridging social capital such as emotional and financial resources provided by their families and communities, was crucial immediately after the 2015 earthquake (Panday et al., 2021). Similarly, Luce et al. (2021) reported that perceived social support moderated psychological distress among Nepal earthquake survivors. Adhikari Baral and K.C (2019) and K.C and Hilhorst (2022) also suggested that promotion of social support activities amid a stressful atmosphere could help alleviate the stress and enhance resilience among the Nepali women post-earthquake. Yet, the lack of qualitative studies focusing specifically on women's experiences limits deeper understandings about the ways in which social support contributes to long-term wellbeing after the earthquake in Nepal.

Religious Faith and Practices

Religious and spiritual practices are commonly used coping mechanisms in disaster contexts (Jang et al., 2018; Ladd & McIntosh, 2008). According to Jang et al. (2018), survivors often practice prayer and worship to overcome their sufferings. These practices can provide emotional comfort and a sense of purpose. These religious rituals involve inward communication or conversation with the power recognised as divine. When a person has a feeling that God responds, it improves their mood and enhances the sense of purpose during times of stress (Suvedi, 2021). A systematic review conducted by Jung & Han (2022) underscored the positive role of religious customs and rituals in post-earthquake adaptation. Survivors who adhered to these practices were found to cope more effectively with adversity, often interpreting their survival as divine intervention and viewing the disaster experience as part of a spiritual journey (Jung & Han, 2022).

In the Nepalese context, religious faith holds significant cultural importance. Although limited in number, studies conducted following the 2015 earthquake have reported that

survivors engaged in religious and spiritual activities as short-term coping strategies. These activities included prayer, worship, belief in divine assistance, and charitable acts performed in the name of God. Notably, findings indicated that religious coping mechanisms were more prevalent among female survivors (Adhikari Baral & K.C, 2019; Suvedi, 2021). However, contrasting evidence was presented by Jang et al. (2018), who assessed the relationship between religious behaviours and mental health among Nepalese survivors in temporary tent villages. The findings highlighted that the survivors adopted lower post-earthquake prayer frequency after the earthquake and had a high score of behavioural problems, internalisation, and somatic symptoms. All reviewed studies in Nepalese contect evaluated religious coping through quantitative measurements. These findings highlight the need for more nuanced, qualitative research to explore the role of faith-based practices in women's long-term recovery processes.

Individual Perseverance as a Protective Factor

Existing research highlights the importance of individual perseverance and self-reliance in supporting earthquake survivors' emotional recovery and adaptation to adversity. Based on a repeated cross-sectional study which aimed to understand long-term wellbeing and social support of disabled people after the New Zealand Canterbury earthquake in 2010, Bourke et al. (2022) suggested that personal qualities such as self-reliance and control substantially contribute to emotional wellbeing and assist survivors in re-evaluating their priorities following a disaster. Similarly, Jung and Han (2022) systematic review, noted that survivors often engage in a reflective process, reassessing their lives and cultivating a deeper understanding of personal values and meaning. This coping strategy enables individuals to adjust positively to repeated disasters and ongoing hardship. Jung and Han further highlighted that, although negative emotions such as fear and anxiety are common after the earthquake, they are frequently balanced by positive emotions as survivors feel lucky and grateful that they were alive (Jung & Han, 2022). This emotional balance plays a crucial role in psychological resilience.

Survivors can also experience a shift in values, where many things that had previously seemed important become less significant compared to the importance of survival and

maintenance of close family relationships (Prayag et al., 2021). Collectively, these findings suggest that disasters can catalyse meaningful changes in building self-reliance, fostering emotional growth and resilience. However, the extent to which individual perseverance and self-reliance might contribute to the long-term, positive wellbeing of women in Nepal following the 2015 earthquake remains unclear.

Women's Participation in Disaster Responsiveness

A growing body of research highlights that women play a pivotal role in disaster resilience and recovery (Islam et al., 2016; Mawby & Applebaum, 2018; Nair, 2018; Thapa & Pathranarakul, 2019). In the broader South Asian context, Islam et al. (2016), through a qualitative case study of disaster survivors in Bangladesh, found that women's active involvement in disaster management particularly at local levels significantly enhanced community resilience. Women organised informal groups, often coordinated by non-governmental organisations, to manage household recovery and acquire essential skills. The study emphasised that women became increasingly prepared and resourceful in the face of recurrent floods, especially in the absence of male family members However, the research did not examine whether these roles were sustained or institutionalised, nor did it explore the long-term implications for gender equity (Islam et al., 2016).

Similarly, the association of Southeast Asian Nations advocated for a gender-responsive framework in disaster response, drawing on the Women, Peace and Security agenda for disaster affected countries in South-east Asia. Following a review of major natural hazards in Asia-Pacific, and in consideration of the gendered impact of natural disasters in women's wellbeing, an evidence-based action plan was developed for upscaling the women's resilience after disasters (Nair, 2018). The plan emphasised the role of informal social networks led by women, which are rapidly activated during crises to secure basic needs.

The recommendations of this policy framework by Nair (2018) align with a few studies examining women's involvement in self-help groups in Nepal. This evidence suggests that women in Nepal are increasingly involved in civic, community, and family matters in the years since the earthquake (Khatri et al., 2023; Mawby & Applebaum, 2018; Thapa

& Pathranarakul, 2019), although there is limited information on how this relates to their own wellbeing and whether such changes are widespread. A recent, in-depth study by Khatri et al. (2023) explored how women leaders from mothers' groups described women's coping strategies during the earthquake. The findings revealed that traditional female household roles such as cooking, feeding, and caring were extended to rescuing and providing emotional support to injured family members during the 2015 earthquake disaster. These extended roles contributed to health promotion, safety, wellbeing, and sustainability. Similarly, Mawby and Applebaum's (2018) report on women's roles in disaster recovery revealed that many Nepali men work outside of the country and that the majority of post-earthquake work was left to women. Therefore, these women have led the reconstruction, finding resources for their families, providing first aid to those injured in the quake, seeking relief aid, building temporary shelters, and rebuilding houses.

However, on a positive note, these approaches were found to be effective in supporting wellbeing and promoting resilience among women. Thapa and Pathranarakul (2019) observed that some Nepalese women had begun participating in decision-making related to domestic and social issues. Women's groups addressed pressing concerns such as male alcoholism and have demonstrated increased confidence in mobilising around post-disaster development initiatives. While these roles contribute meaningfully to both health and livelihood outcomes, the intersection of women's professional engagement in disaster responsiveness with broader gender dynamics remains underexplored. Importantly, it remains unclear how women's participation in disaster responsiveness intersects with their long-term wellbeing and the structural inequalities they face. This gap underscores the need for further research to examine the gendered dimensions of disaster recovery and resilience in Nepal.

Summary of Literature Review

The literature review presented in this chapter critically examined the impacts of natural disasters on the wellbeing of women, with a specific focus on the women of South and Southeast Asia, and Nepal in the context of the 2015 earthquake. Through the narrative review, it was found that disasters cause enduring consequences on women's wellbeing

during the initial and mid-term after the event and it is possible that the influences on the wellbeing can persist for years, after the initial traumatic event. Particularly in developing countries, where women are disproportionately affected due to entrenched gender roles, limited access to the resources, financial constraints, and systemic inequalities, the long-term wellbeing after the disaster needs to be explored.

In the context of the 2015 earthquake in Nepal, women were found to be more vulnerable to being significantly affected by the earthquake in comparison to men because of their gendered responsibilities and socio-culturally defined norms and customs. The reviewed articles have also shed light on the shorter-term impact of the earthquake on the physical, psychological, reproductive, and socioeconomic wellbeing of the survivor women in Nepal. Economic hardships, displacement, and absence of male family members increased the risk of gender-based violence and trafficking. Despite the challenges, women across Southeast and South Asia regions were found to employ diverse coping strategies rooted in social support, religious faith-based practices, and community engagement. From the review, it emerged that social support through family, neighbours, and community groups can play a critical role in fostering resilience. Nepalese women have also been found to have contributed to post disaster recovery and resilience.

Research Gap

Most studies reviewed were conducted within the first two years following the 2015 Nepal earthquake or other disasters in the Southeast and South Asia region, primarily focusing on the immediate and mid-term physical and psychological impacts on female survivors. While these studies highlight the multifaceted consequences of the disaster, there is a notable lack of follow up studies, and a lack of recognition of context-specific influences and concerns. International evidence suggests that disasters can have long-term effects, however, studies examining the holistic and enduring impacts on women's wellbeing in the Nepalese context are lacking.

From the narrative review, it was evident that socio-cultural factors-including gender roles, customs, and rituals-have been shown to influence women's post-disaster health and wellbeing, yet these dimensions are insufficiently addressed in existing research on

Nepalese context. Socio-economic stressors such as economic hardship, male migration, and increased vulnerability to gender-based violence also require deeper investigation to understand their long-term implications.

The review also highlighted methodological gaps in this field. Much of the existing literature relies on quantitative approaches which often fail to capture the nuanced and lived experiences of women in context. Qualitative studies, which took place immediately after the earthquake, have been conducted by researchers, most of whom have not directly experienced the earthquake themselves, which could potentially limit the insights gained. Additionally, these studies tend to rely on one single data collection method instead of multiple approaches that would allow them to triangulate their results, thereby reducing the credibility and richness to their findings. To address these gaps, the present study adopts a constructive qualitative case study methodology to explore the long-term influences of the 2015 Nepal earthquake on women's wellbeing in a Nepalese community. The next chapter will provide a detailed description of the philosophical paradigm informing the study-constructivism, and the case study methodology.

Chapter Three Methodology

This study aimed to explore the long-term influence on the physical, psychological, and socio-economic wellbeing of Nepalese women in Nuwakot following the earthquake in 2015. The study also considered participants' immediate experience of the earthquake as a contributing factor for longer term consequences. The current chapter serves to lay out the theoretical groundwork of the thesis. It establishes the ontology and epistemology underpinning the study and explores my positionality and the implications that arise with my dual roles as a community nurse, and academic and researcher. Thus, I reflect on the constructivist views of Lincoln and Guba (2013), highlighting key conjectures of constructivism relevant to this study. I also explain my choice of methodology, constructivist case study, guided by Stake (1995), and discuss how this approach aligns with my research aims.

The 2015 earthquake was a devastating natural disaster that caused substantial damage and disruption to life and property for many Nepalese people. While the destruction was devastating to all, women were particularly affected as many were left responsible for the family with gendered roles and responsibilities. However, little is known about their experiences in relation to their wellbeing, and even less about how these experiences evolved over the longer term.

A constructivist paradigm of inquiry is considered an appropriate approach to explore the perspectives of women who survived the 2015 Nepal earthquake. In this study, as a constructivist inquirer, I did not research how the earthquake happened nor its cause. Instead, I sought to co-construct understandings about women's wellbeing and the influences on wellbeing for women who were affected over the longer term following the disaster. Although I understand that there would be commonalities amongst the women, I also recognised that the traumatic experience of each earthquake survivor is unique. The meaningful knowledge gained through this research can have important implications for specifying ongoing needs of Nepalese women while supporting their day-to-day wellbeing in post-disaster contexts.

Introduction to Constructivism

Constructivism aims to elucidate how human interpretation is reflected in linguistic, historical, and social contexts. The interpretations of information in constructivist-informed inquiry are acknowledged as being molded by the researcher's views, background, and experiences (Charmaz, 2008). Constructivist researchers put more emphasis on the social world of experience as it is undergone, felt, or lived by the social actors (Lincoln & Guba, 2013, p. 47). Although the human mind creates concepts, models, and schema to provide a particular sense of experience of the phenomena, it is further continuously tested and modified in light of the new experiences (Guba & Lincoln, 1994). To guide the constructivist inquirer, Lincoln and Guba (2013) have presented conjectures that reflect the metaphysical notions informing constructivism: the ontology, epistemology, axiology, and methodology. These conjectures help the readers to see how they come together in the field while the inquiry is being conducted. Here, I present the conjectures of the constructivist paradigm of inquiry relevant to my study.

Constructions

"A construct is a mental realization – "a making real" of an apparent, singular unitary entity or relationship" (Lincoln & Guba, 2013, p. 47). Since constructs are created by individuals, they are purely subjective. While sense-making from various constructs, an individual learns the rich extension of interiority, emotional intelligence, and critical capacity (Lincoln & Guba, 2013). Finally, meanings are created by organising, formatting, interrelating, and interpreting the constructs. The created constructions can be continuously reconstructed on behalf of the new or accumulated experiences. Furthermore, constructions are "true" in a sense that they enable the constructor to cope with the given context as well as its constituent elements (Lincoln & Guba, 2013).

The socio-cultural, historical, political, economic, ethnic, and gender backgrounds of the constructor are important determinants in devising the framework of every construction (Lincoln & Guba, 2013). However, many aspects of construction are often shared between individuals who follow similar socio-cultural values and beliefs even if they are from diverse backgrounds. Therefore, even though constructions are purely subjective,

these constructions can be shared by two or more individuals. When the constructions are accepted among a larger group of individuals, they can become reified over time and enter the sociocultural milieu (Lincoln & Guba, 2013).

The current study was carried out in the Nuwakot district of Nepal which was severely affected by the Nepal earthquake of 2015. Research has shown that the socio-cultural, economic, ethnic, and gendered backgrounds of survivor women shape their short-term wellbeing in post-disaster contexts (Aksha et al., 2019; Fothergill & Squier, 2018). These factors are their daily lifestyle, surrounding environment, religious and cultural beliefs and practices, social support networks, economic status, occupation, education, ethnic background, gender roles, and availability and utilisation of health services are crucial factors. Through constructivist inquiry, I believed that, although the experience of the earthquake and its influence on wellbeing would be unique for every survivor and women with distinct characteristics in a community, there would also be commonalities in their constructions in their efforts to maintain their collective wellbeing. Therefore, those meaningful constructions were collectively created and interpreted accordingly.

The Constructivist Methodology

For a constructivist inquiry, an appropriate methodology involves the investigator involved in the inquiry engaging in sense-making activities (Charmaz, 2008; Denzin & Lincoln, 2011). When an individual encounters any events, it provides a store of sensory memories which are processed into meaningful constructs. During sense-making, the individual utilises the constructive character of the mind. For the constructivist inquirer, the context is made meaningful by the order the individual imposes on any events, situations, or circumstances. The constructivist inquiry includes the meaningful accumulation of signs and symbols which not only involve verbal, but also various other forms of representations such as signs and symbols and verbal and visual clues in the given context. For the investigator, this involves confronting, comparing, and contrasting them within the situational context to derive deeper understanding (Lincoln & Guba, 2013).

The current study thus sought to understand the meaningful experiences women constructed relating to their wellbeing several years after experiencing the earthquake,

and as they may have went about re-establishing and maintaining their wellbeing. As an investigator, I needed to re-construct the meanings that emerged from the women's experiences during the earthquake and day to day life in the longer term after the earthquake as presented by those survivor women. For this, the accumulation of experiences of events, situations, and circumstances following the earthquake were captured through a focus group discussion with women survivors and individual interviews with local health service providers. Additionally, the contextual background of the survivors, including the physical environment immediately after the earthquake and their current living arrangement, was examined. Relevant documents pertaining to the earthquake and its aftermath were also reviewed to enrich my understanding of the broader context of women's experiences. I acknowledge that, as a health professional who was also present during the earthquake, I brought my own experiences to study, and that these played a role in the way I interpreted the information.

Constructivist Presuppositions

This study is informed by relativism. According to Lincoln and Guba (2013), in a constructivist inquiry, the fundamental ontological presupposition is relativism. In human sciences, realities do not really exist but are always relative to the minds of individuals who engage with and contemplate them. Therefore, a single context encompasses multiple realities that reflect the different natures of those involved. Furthermore, the relationship between the knower (investigator) and the knowable (participants) is context specific. The constructivist inquirer and the research participants act together and co-create knowledge in constructing a shared reality. The transaction is mediated by the knower's prior experience and knowledge through their sociocultural status, class, gender, or nationality. Both researcher and participant display and clarify their mutual values while shaping the meaningful construction creating the knowledge (Lincoln & Guba, 2013)

During this process, the values of the investigator and research participants, as well as the values inherent in the particular context, are uncovered and made transparent to create a meaningful construct. Ultimately, the values of stakeholders are fore fronted during the sense-making (Lincoln & Guba, 2013). When both the researcher and

participants engage in co-constructing meaning, the resulting interpretations become clearer and more comprehensible. Furthermore, the constructions and co-constructions emerge from the mutual data generated from conversation between researchers and participants. The co-created constructs carry symbolism and meaning that individuals use to navigate and thrive within their unique contexts (Lincoln & Guba, 2013).

In the current study, values, behaviour, and issues inherent to the survivor women of the 2015 earthquake, along with their context which involved the built environment and the surroundings were explored through focus group discussions, individual interviews, document review, and description of physical context. Therefore, the correspondence and regular patterns were identified from the data, and the meanings are interpreted and constructed from the patterns seen in the data. By going through patterns, reflecting, and triangulating, meanings are co-created and interpreted through a new shared reality (Lincoln & Guba, 2013; Stake, 1995).

Knowledge

For this study, it is important to identify constructivist assumptions about knowledge production. According to Lincoln and Guba (2013), **"**Knowledge is the organised remembrance of experience based on the realisation of primitive experiences and on the sense made of those experiences" (Lincoln & Guba, 2013, p. 55). Knowledge may be a personal end product of sense-making or shared among a group, which then reveals cumulative reconstructions of individual constructs tending towards consensus. Whether individual or shared, the mental manipulation of the meaningful constructions into the new forms, advances knowledge. Knowledge is always context-bound, and as a result, knowledge changes when the context is changed. This leads to modification, reconstruction, or extension of the knowledge (Lincoln & Guba, 2013).

In the current research, new knowledge regarding the long-term influences on wellbeing among survivor women following the earthquake was co-created with me, the researcher, and amongst the women themselves, based on the sense-making from previous experiences in context, and the realisation of those experiences. In light with the concept of constructivism, the knowledge is context specific to the earthquake-affected community in Nuwakot district.

Inquiry

In constructivism, there are three forms of inquiry: research, evaluation, and policy analysis (Lincoln & Guba, 2013). The current study focuses on research. Research is a form of inquiry that aims to generate new knowledge, extend existing knowledge, or revise the knowledge gained from various constructions (Lincoln & Guba, 2013). Constructivist inquiry aims to achieve an improved understanding and extends knowledge on a subject of interest which is accomplished either through the extension of existing constructions, the development of new constructions, or the reconstruction of the meaningful concepts (Lincoln & Guba, 2013).

Constructivist inquiry has two phases or stages: discovery and assimilation of the constructions (Lincoln & Guba, 2013). Both stages are employed in the current study. Discoveries are the mental constructions that describe what is going on in a given context. In the discovery stage, questions can be answered through relevant pre-existing constructions gained from the existing literature or through interaction with local informants or respondents. Through constructivist inquiry, problems are explored, leading to new insights from findings. The second phase, assimilation, is where the new insights are incorporated into existing constructions. In the current study, both stages have been carried out successfully. First, answers to the research questions were discovered from focus group discussion, individual interviews, and document analysis. Subsequently, the answers were assimilated into existing constructs by interpreting experiences through new insights using the reflexive thematic analysis approach.

Relevance of Constructivist Paradigm in my Study

This case study has utilised the constructivist paradigm of inquiry which aligns with the nature of human experience and meaning making. According to Lincoln and Guba (2013), social reality is relative to the individuals involved in a particular context. The proposed answers to research questions in a constructivist inquiry can be either accepted or rejected only by virtue of their pragmatic utility (Lincoln & Guba, 2013). In line with this perspective, the present study gathered information directly from women survivors of the 2015 earthquake while also incorporating contextual data, as recommended by Lincoln and Guba (2013). This included observations of the current

physical environment, interviews with health service providers, and a review of relevant documents. These sources also added insights into the accessibility, affordability, and utilisation of the healthcare services which play an integral role in promoting wellbeing. Through this multi-faceted approach, a collective understanding was developed, informed by the constructs uncovered from inquiry and analysis and the dynamic interactions among them, all of which contributed to the wellbeing of women in the affected community. The knowledge generated through this process offers valuable guidance for efforts aimed at supporting the long-term wellbeing of women in post-disaster contexts.

To carry out the constructivist inquiry, a case study methodology was chosen (Stake, 1995). By employing this methodology, the study aimed to encourage the survivor women to reflect on and express their understandings constructed through the experiences of the earthquake that happened in 2015 in Nepal and its longer-term aftermath. Individuals living in common physical and intellectual surroundings may experience similar harmony or consistency among the constructions held by them, and this harmony is essential for the stability of their own culture (Lincoln & Guba, 2013). Therefore, the understandings of women, as developed during the focus groups, can be of value to the women themselves because their shared experiences can help the women identify their priority needs in future disaster contexts so that they can plan the necessary resources to meet their longer-term needs. Moreover, the findings can be utilised by local government and health offices of the particular community to plan and implement health promotion activities that address both the physical and psychological health of women. These insights can further support efforts to strengthen the availability and accessibility of public health services, ultimately promoting the wellbeing of survivor women. While the experiences shared by the women and healthcare providers are context-specific, they may also offer valuable guidance for other earthquake-affected communities and stakeholders in Nepal in planning both short- and long-term wellbeing strategies for women survivors. The following section provides a detailed justification for selecting the case study approach as the appropriate methodology for conducting this research.

Case Study Methodology

A research methodology provides the research with guidelines for how to collect and analyse their data and makes informed decisions about the design and procedure of the study (Harrison et al., 2017). According to Stanley and Nayar (2023), a methodology is a "theoretical or philosophical orientation of how research should, ought, to proceed given the nature of the issue it seeks to address" (p. 13). For this research, I have employed a case study methodology to find out the answers to the research questions.

There are many ways case studies are referred to in qualitative research. For example, an approach, a methodology, a method, a form of inquiry, or a research strategy (Harrison et al., 2017; Merriam & Tisdell, 2016; Stake, 1995; Yin, 2003). In my study, case study is referred to as methodology, because it guided decisions about the philosophical orientation, research processes, and procedures to use in the study (Leadley, 2023; Wallis, 2024). In a qualitative study, a case study methodology explores a phenomenon within its natural context using a variety of data sources (Stake, 1995). A case study aims to provide understanding, and answers "how" and "why" questions, particularly when the researcher wants to uncover the contextual conditions as they are relevant to the phenomenon under study, and when the boundaries between the phenomenon under study and the social context are not clear (Mills & Birks, 2014).

Overview of the Foundations of Case Study Methodology

As a methodology, case study has a long foundation within diverse disciplines conducted within natural settings (Harrison et al., 2017; Mills & Birks, 2014). Mills and Birks (2014) noted that Charles Darwin's biography back from the early nineteenth century is an example of a case study. Case study research has been applied across a wide range of disciplines, including both traditional academic fields such as economics, law, history, politics, and sociology as well as practical areas like urban planning (Mills & Birks, 2014), education (Merriam, 1998; Stake, 1995), and public administration (Yin, 2003). Within these contexts, researchers have used various methods to explore the case and relevant phenomena. This has significantly contributed to the expansion and application of case studies as a research methodology.

Three seminal authors, namely Yin, Merriam, and Stake, have developed specific procedures to be followed while conducting case study research (Yazan, 2015). While Yin's approach is more focused on positivistic leanings as a method of inquiry in case study (Yin, 2003), Stake's epistemological point of view is oriented towards constructivist or existentialist method, explaining that reality is constructed by individuals through interaction with their social worlds (Stake, 1995). In line with Stake's perspective, Merriam's view of case study is also oriented towards constructivism. However, Merriam's approach is more eclectic and pragmatic, with less discussion of underpinning philosophical understanding. Stake's approach had better congruence with the overarching constructivist paradigm informing my beliefs about the world and knowledge (Merriam, 1998; Merriam & Tisdell, 2016).

Stake's Constructivist Case Study Methodology

Based on the review of the three different case study approaches, I decided to follow Stake's lead and adhere to the procedures recommended in his work. According to Stake, constructivist researchers believe that knowledge is constructed rather than discovered (Stake, 1995). Therefore, constructivist researchers who conduct case study research are interpreters of information, or the gatherers of others' interpretations, and who report this constructed knowledge through their investigation, all the while recognizing their influence on the interpretations (Stake, 1995). Hence, the constructivist paradigm (Lincoln & Guba, 2013) aligns with the case study methodology recommended by Stake in acknowledging the co-construction of understanding. By employing Stake's constructivist case study methodology, I sought to interpret the accounts of Nepalese women survivors of the 2015 earthquake in terms of how their wellbeing was influenced over the longer term.

Furthermore, Stake emphasizes the need to explore the unique context connected with a given case (1995). In seeking answers to the research question, I sought to examine participants' accounts of their experiences to better understand the related conditions which may have affected the survivor women's wellbeing, such as availability, accessibility, and utilisation of healthcare services, their wellbeing concerns, and the adaptive strategies they employed to cope with the adversities during the immediate

and long -term period after the earthquake. Moreover, I understood that these things would likely not operate as discrete variables but were connected. Therefore, understandings about how these contexts affected the women's wellbeing following the earthquake would be constructed by the women through their day-to-day experiences and interactions, their living environment and through their engagement with regular health care services.

Characteristics of Stake's Case Study Methodology

Qualitative case studies are characterised by several distinct features that shape their methodological approach. Stake (1995) outlined four key characteristics that define his qualitative research and that are particularly relevant to the case study methodology: holistic, empirical, interpretative, and empathetic.

A holistic approach is an approach to inquiry where the researcher addresses the interrelationship between the phenomenon and its context (Stake, 1995). This study is holistic in that it aimed to address and explore the interrelated meanings and values that survivor women used in making sense of the experiences they encountered during and after long-term following the earthquake and their surrounding context (phenomena) in terms of cultural customs and beliefs, the built environment and the health facilities they had access to. Furthermore, according to Stake's point of view, empirical research is when research is based on field inquiry and observation. In line with this concept, this thesis was founded on an identified need to seek out the earthquake survivor's lived experiences in their own setting, through field inquiry involving focus group discussions on the ways participants were maintaining their everyday wellbeing following the earthquake, and the analysis of documents and observation of the participant's physical contexts. Additionally, to be interpretative, a researcher interprets the results out of the interaction between the respondents, the researcher, and the context (Stake, 1995). In this study, I sought to interpret the information as derived from my interactions with the survivor women of the 2015 earthquake and their home and healthcare contexts. Lastly, Stake (1995) described empathetic research as a reflection of participants' experiences from the researchers' perspective. Likewise, in this study, I considered that, as a primary researcher, being female and have experienced the earthquake directly,

through the co-construction of multiple realities, I would reflect the survivor women's perspective of their post-earthquake experiences and its influences on their long-term wellbeing through my empathetic lens.

Summary

Chapter three has explained the philosophical stance and the case study methodology that has guided the current thesis. The fundamental sets of values and beliefs, methodology, and methods are based on the constructivist paradigm as defined by (Lincoln & Guba, 2013). The constructivist approach to constructing meaningful realities through interaction with participants and the surrounding context by using focus group discussion, individual interviews, and document review was explored. Accordingly, to construct and interpret multiple realities for understanding the phenomena under study, Stake's (1995) constructivist case study methodology emerged as the most suitable approach. The procedure recommended by Stake (1995) was chosen to examine the long-term influence on wellbeing of survivor women of 2015 earthquake in Nuwakot district of Nepal. By following this methodology, participant's shared experiences and meaningful knowledge and understandings drawn from the analysis can be incorporated to meet longer term needs of survivor women in the various disaster conditions. The next chapter will present the procedural steps for data gathering and analysis according to Stake's (1995) guidelines.

Chapter Four Case Study Method

The previous chapter outlined the philosophical and methodological foundations of this study, explaining and justifying Lincoln and Guba's (2013) constructivist paradigm and Stake's (1995) constructivist case study approach. These principles are reflected in the methods used in carrying out this study. In this chapter, the case, its boundary, and context are described in detail. The chapter then explains the rationale for choosing the data collection setting, and ethical considerations while planning and executing the data gathering procedure. The process of recruiting participants for the focus group discussions and interviews, the data collection methods, and procedures is also explained. It also explains how the collected data were analysed and interpreted. This chapter further outlines the strategies applied to manage power relations, and the approaches used to ensure trustworthiness and credibility of the study.

The Case and the Boundary of the Study

A Case study research focuses on understanding a case and its physical and temporal boundaries (Stake, 1995). While specifically defining the case, Stake highlighted that a "case is a specific, complex, functioning thing" (Stake 1995, p. 2). In addition, Stake also suggested that a case can be an individual or a group of people who share a common concern or activity. Therefore, in this study, the case is women who survived the Nepal earthquake, 2015, and who continued to live in the disaster setting (Nuwakot) at the time of the study. In a case study, once it is determined who the case will be, the case must be bounded. Binding the case is important to decide the inclusion criteria for the selected case (Baxter & Jack, 2008; Stake, 1995). Therefore, in this study, the event 2015 Nepal earthquake has created the temporal boundary of the study. Qualitative case studies methodologies are categorised into three types: intrinsic, instrumental, and collective. Intrinsic case study is conducted when the researcher has genuine interest in understanding the case (Stake, 1995). While conducting this research, I had genuine interest in gaining a deeper understanding of how women in Nuwakot experienced their long-term wellbeing following the earthquake and what factors influenced their wellbeing over the long term. Therefore, this study is primarily an intrinsic case study.

Women who survived 2015 earthquake and were living in Nuwakot were chosen as the case because, in the disaster context, relative vulnerability is greater in females than in males as they have less access to or control over resources such as information, education, health and wealth, all of which are necessary to cope with any hazardous events. Moreover, along with material losses, women and girls also tend to experience more intangible losses in terms of their physical and psychological wellbeing (Fatema et al., 2021; Malik & Khalid, 2015; Nagaratnam, 2018).

The Context

In case study research, knowledge and interpretation about the context related to the case is equally important for drawing the meaningful reality (Stake, 1995). Stake suggests that "the more the case study is an intrinsic case study, the more attention needs to be paid to the context" (Stake, 1995, p. 64). Beyond gathering information about a particular case, interpretation must be drawn from relevant contextual dimensions, such as its historic background, physical setting, and socio-cultural and economic environments (Stake, 1995). Stake (1995) also highlighted the importance of physical context, noting that "to develop vicarious experiences for the reader, to give them a sense of 'being there', the physical situation should be well described (p. 63). Therefore, while formulating the research questions, it was assumed that various contextual factors might have influenced the wellbeing of survivor women in Nuwakot over the long- term following 2015 earthquake. Thus, in this study, context refers to the earthquake event itself, the immediate impacts of the earthquake in Nuwakot, the extent of household damage and subsequent reconstruction efforts over time, the sociocultural and economic circumstances of survivor women, and the availability and accessibility of health services within the selected communities of Nuwakot District. The conceptual structure (see Table 1 below) provides a clear representation of the context related to case and illustrates how data were collected to understand the context. Alongside the data relating to the case, the contextual findings informed the data analysis and contributed to the development of case study assertions through the co construction of meaningful knowledge with survivor women.

Rationale for the Selection of the Study Site

The study was carried out in the Nuwakot district of Nepal. This setting was chosen as the study site because it was one of the most severely affected districts by the 2015 Nepal Earthquake. Therefore, I reasoned that carrying out a study with the women in this setting would allow for rich insight about the issue (Stake, 1995).

As discussed already in Chapter One, this doctoral study expands findings from my earlier research in the same setting which addressed that women had higher post-traumatic stress symptoms than the male survivors ten months after the earthquake. During the data-collection time, I had observed that many male family members were working out of the town or in foreign countries to earn for their family and women were taking care of other family members, children, the agricultural fields, and live-stock. Therefore, my curiosity built as to how women in Nuwakot had been influenced over the long-term following the earthquake in the same community. This aligns with the epistemological stance of Guba and Lincoln, who stated that the process of creating knowledge is always shaped by the researcher's own experiences and prior understanding (Guba & Lincoln, 1994, 2005). Moreover, I already had a relationship with some of the stakeholders in this community, which made it easier for me to plan and gather data from various sources (Stake, 1995).

In line with Stake's case study methodology guidelines, I stayed close to the case and studied it within its own context, while capturing thick descriptions from various perspectives that helped answer the research question (Stake, 1995). The case developed through the dynamic relationship between the context, the participants, and me as the researcher, allowing for meaning to be gradually co-constructed.

Conceptual Structure of the Case Study

Before the collection of data, a conceptual structure was developed with issue statements pertinent to the research questions of the study and information gathered from the literature review and documents related to 2015 earthquake in Nepal. Stake (1995) highlighted the importance of developing a conceptual structure which puts forward what is known in relation to the research question at the outset of the study

Stake (1995). The conceptual structure helps define the boundary of the case, such as specific timeframes or locations and includes topical questions and issue statements that guide data selection and observation (Stake, 1995; Yin, 2003). The issue statements, topical questions, data sources, and data collection methods used in this study are summarised in the Conceptual Structure Table 1. To develop this structure, I reviewed relevant studies, consulted with my supervisors, and formulated issue statements based on research questions. This framework guided the selection of data sources and the development of indicative questions for focus group discussions with women and interviews with health service providers.

Table 1

Conceptual Structure of the Study

Issue Statement
1. *Every woman may have unique understandings about how they perceive their current wellbeing after the earthquake(UN Women, 2015; World Health Organization, 2019)*
2. *Several factors are likely to influence survivor women's health and wellbeing after the earthquake. These factors may include, for example, socio-cultural determinants such as community support, spiritual beliefs and practices, living environment, political system, availability, and utilisation of health services. Gender roles and responsibilities have also found to influence wellbeing in post-disaster context (Global Facility for Disaster Reduction and Recovery, n.d.; Gunaratne & Kremer, 2021; He et al., 2018).*
3. *The initial impact of the earthquake in Nuwakot was severe. This initial impact might have influenced long-term wellbeing among women (Brunson, 2017; Fothergill & Squier, 2018; Rajbhandari, 2016).*
4. *Women in aftermath of disaster are found to have employed various strategies to adapt post-earthquake livelihood such as, accepting help form families and friends, and engaging themselves in religious faith and worships(Jung & Han, 2022; Malik & Khalid, 2015)*

Issue Statements/ Concepts and Number	**Topical Question**	**Data Sources and Data Collection Method**
1. Wellbeing	1.1 What is the meaning of wellbeing for women? 1.2 How have these things (the above question) been since the earthquake? 1.3 How have women's physical, mental, social, and spiritual health been since the earthquake?	The focus group discussion with women survivors
2. How was wellbeing affected?	2.1 What health services are available? 2.2 What health services have the women accessed since the earthquake?	The focus group discussion with women survivors Individual interviews with health service providers Document review Description of physical context
	2.3 How easy are the health services to access? affordability, transport, wait times).	The focus group discussion with women survivors Individual interviews with health service providers Description of Physical Context
	2.4 What are the available support services since the earthquake, e.g., relief support, grant money?	Document review The focus group discussion with women survivors Individual interviews with health service providers

Issue Statements/ Concepts and Number	Topical Question	Data Sources and Data Collection Method
	2.5 How and when was reconstruction of housing/ Healthcare services completed?	Description of physical context Document review- Government policy on providing reconstruction for earthquake survivors
	2.6 What were the support services from International Non-government organization?	Document review
	2.7 How is current physical living environment?	Description of physical context- built environment
	2.8 What has been the main occupation in the family since the earthquake and how occupation was affected after the earthquake?	The focus group discussion with women survivors
3. Earthquake and its immediate impacts	3.1 How strong was the earthquake? How long did it take?	Document review- Government of Nepal Report on Post Disaster Needs Assessment and Recovery Plan of Health and Population Sector
	3.2 What were people doing when the earthquake happened?	
	3.3 Was any of the family members injured?	
	3.4 What consequences did women face because of the earthquake?	
	3.5 What additional roles do women have to carry out since the earthquake?	The focus group discussion with women survivors
4.Adaptive Strategies after the earthquake	4.1 What social support networks have you been using since the earthquake? eg. family, friends, women/mother's group	The focus group discussion with women survivors
	4.2 How have you been able to carry out spiritual/religious practices since the earthquake? How do you link these practices to promoting your well-being?	

Data Sources for Case Study

Case study research requires multiple data sources to capture participants' perspectives and achieve a holistic understanding of the phenomenon under investigation (Stake, 1995). Qualitative data sources may include fieldwork, focus group discussions, individual open-ended interviews, verbal reports, direct observation, participant

observation, and document review (Mills & Birks, 2014; Stake, 1995). Following Stake's (1995) recommendation, data collection was guided by the conceptual structure aligned with the research questions (see Table 1 above). Accordingly, data were collected through four approaches: a) Document review, b) Description of the physical context of the data collection setting, c) Focus group discussions with women survivors, and d) Individual interviews with health service providers

Women's earthquake experiences, their views about their long-term wellbeing, and the influences on their wellbeing after the disaster were explored through focus group discussions. These discussions also examined the adaptive strategies they employed in the years following the disaster. As Stake (1995) noted, the "best data source usually means those that best help us understand the case" (p. 56); focus groups only included adult Nepalese women who survived and lived in Nuwakot at the time of the earthquake and who were 26 years and older at the time of the data collection. This ensured that participants were at least 18 years of age during the earthquake.

In a case study, it is important that researchers seek information from informants who can contribute to a better understanding of the case (Stake, 1995). Considering the focus of the study was on the wellbeing of women, the provision of healthcare was one of the key aspects that needed to be explored, as health is recognized as a vital component of wellbeing (WHO, 1948). While the women's perspectives on the accessibility of healthcare services were addressed in the focus groups, the study also sought to explore the other side of the coin. Hence, representatives of healthcare services were invited to share their experiences of providing health care services to women within the community. Additionally, documents related to the 2015 earthquake along with national and local policy documents pertinent to the provision of health services in the district were reviewed. Finally, the physical context was observed and described to identify environmental aspects that might have affected wellbeing amongst the women. This triangulation of data sources helped facilitate a better understanding of the case and context through the perspectives of survivor women and health service providers.

Development of Indicative Questions

Before the data collection commenced, separate sets of Indicative questions were developed for the focus group discussion (see Appendix F) and individual interviews (see Appendix G). These questions were derived from all four issue statements identified in the Conceptual Structure (see Table 1 above). While developing these questions in alignment with the research questions of the case study, I considered my previous experiences of conducting field research with earthquake affected survivors, reviewed the relevant literature related to the cases, and had regular consultations with my supervisors (Stake, 1995, p. 20).

Ethical Considerations Before Data Gathering

After the finalisation and acceptance of my full research proposal at the university, I received formal confirmation of my candidature from Auckland University of Technology on 14 December 2022. There are many practical and ethical challenges while conducting research during or in the aftermath of disasters. This is particularly true for research involving human participants (Mezinska et al., 2016). Earthquake survivors are a vulnerable population due to the trauma they may carry from the disaster (Mukherji et al., 2014; O'Mathúna, 2010) and as a result, it was particularly important that this study was designed in accordance with the ethical guidelines of the university for working with human participants (Auckland University of Technology [AUT], n.d.). Furthermore, since the data collection was carried out in Nepal, the guidelines of the Nepal Health Research Council also had to be considered (Nepal Health Research Council [NHRC], 2019).

Both the Auckland University of Technology Ethics Committee (AUTEC) as well as the Nepal Health Research Council (NHRC) guidelines focus on respect for the autonomy of the participants, which requires that eligible individuals should participate in the research only if they are eligible to participant in the study, have understood the research purpose and objectives, and provided free and informed verbal and written consent (AUT, n.d.; NHRC, 2019).

Thus, to comply with the requirements outlined by the AUT ethics guidelines the following documents were composed:

1) For focus group discussion
    - Participant recruitment flyer (see Appendix H),
    - Participant information sheet (see Appendix I),
    - Informed consent form (see Appendix J)
2) For individual interviews
    - Participant invitation letter (see Appendix K),
    - Participant information sheet (see Appendix L),
    - Informed consent form (see Appendix M)

AUTEC guidelines were followed while developing these documents (AUT, n.d.). Given that the participants' native language was Nepali, it was essential to translate all documents into Nepali to ensure accessibility and comprehension, taking into account the participants' knowledge and literacy levels. As a native Nepali speaker and an English speaker, I translated all documents to maintain linguistic accuracy and cultural relevance.

Next, I submitted my research proposal to AUTEC for ethical approval along with all the documents required for data gathering. Both English and Nepali translations were submitted for ethics approval. The research protocol was approved by AUTEC on 13 February 2023 (AUTEC Reference no: 23/16) (see Appendix N). Upon receiving ethical clearance from AUTEC, I proceeded to submit the same proposal to NHRC, the accredited body responsible for approving health-related research conducted in Nepal. The NHRC granted ethical approval on 9 May 2023 (NHRC Reference no: 2956) (see Appendix O).

Community Consultation Before and During Data Gathering

An important aspect of field work is community consultation, which involves undertaking research through socio-culturally appropriate research processes and approaching the participants of the study. The purpose of these consultations is to gain informed consent or ask for approval or permission for data gathering as well as seeking advice, suggestions, and feedback for proposed field study (Dickert & Sugarman, 2005; Stake, 1995). Accordingly, regular consultations were held with key stakeholders in Nuwakot. As the principal investigator, I initiated these consultations after finalising the

research topic and prior to recruitment and data collection. This involved frequent visits to the health office and discussions with relevant authorities from the health department of the Bidur Municipality, Nuwakot, to align the study with local needs and expectations.

The first visit took place after the acceptance of my initial proposal and formal offer of place, when I visited the public health officer at Bidur Municipality of Nuwakot to explain what the study was about, who the potential participants were, and how I intended to recruit them. I also sought to obtain information about the correct procedure for getting formal permission for data collection and about the health service workers working in primary healthcare in the Bidur Municipality, Nuwakot. On this first visit, the public health officer was positive about the study and its significance. The officer explained that after the formal approval of the full proposal, it would be necessary for me to submit a formal written request seeking permission to gather data from women and health service providers along with a short study protocol and that they would then provide formal permission for data collection. This process aligns with Stake's (1995) recommendation that case study researchers provide "a brief written description of the intended casework" when seeking permission (p. 57).

While refining my data collection process for my full research proposal, I needed broader information about the study setting. I organized another consultation with a public health inspector and the public health officer of the Bidur Municipality, and another consultation was done in October 2022. The officials helped me narrow down the area where I should look for participants. They suggested that I collect data from two wards—ward 2 and ward 3, which were more severely affected during the earthquake. After that I consulted with the chairpersons of these two wards. While I was engaged in all these consultations, the authorities of the health department of the Bidur municipality as well as the ward chairpersons expressed their full support for the study and agreed that this study to understand survivor women's long-term wellbeing would be useful and relevant for the health sector.

After the ethical approval of the study from AUTEC and NHRC, I submitted the copy of my ethical approval letters along with a formal request for data collection, endorsed by

my lead supervisor (see Appendix P), to the Health Department of Bidur Municipality. In response, the Public Health Officer issued a formal letter of support granting permission to conduct the study (see Appendix Q). Additionally, written permission was provided to collect data from health personnel working under the Health Service Department of Bidur Municipality, Nuwakot, Nepal (see Appendix R). Stake (1995) also emphasised that in settings where consultations are primarily oral, any written requests and permissions should be formally documented and stored as part of the case study records.

Data Gathering Procedure

Following approvals from both AUTEC and NHRC and formal permission from the health department of Nuwakot, the data gathering procedure was started. For effective data gathering in field-observation case study, Stake (1995) recommended a set of guidelines. Although my data gathering plan did not include the observational method, the participant recruitment, focus group discussion, and individual interviews required me to stay in the field for three weeks. The procedures I followed in the field from gaining access to the participants and gathering of the data followed Stake's (1995) guidelines in line with the research aims and the conceptual structure. The data gathering process in Nuwakot District started with the recruitment of participants and ended with conducting focus group discussions with survivor women and individual Interviews with health service providers.

Focus Group Discussion

Focus group discussions were carried out with the earthquake survivor women to explore their experiences and perspectives about issues pertinent to their wellbeing during and after the earthquake, including their utilisation of primary healthcare services and health promotion activities and how they saw these services as affecting their wellbeing. Although Stake (1995) did not suggest focus group discussion for data gathering, this approach was chosen based on the concept of constructivism that, for useful sense-making, small groups of respondents can be formed to reflect the composition and interests of similar or affected groups (Lincoln & Guba, 2013).

Focus group discussions, as described by Liamputtong (2011), are structured sessions that leverage group dynamics to efficiently gather rich insights. Unlike individual interviews, they capture the interactional aspects of collective social practices (Denzin & Lincoln, 2011). This method is particularly valuable in research with women, as it facilitates the exploration and validation of their lived experiences through shared narratives embedded in cultural contexts (Denzin & Lincoln, 2011). Case study researchers have effectively employed focus groups to examine women's experiences with violence, disasters, and healthcare utilisation (Gul & McGee, 2022; Rajkumar et al., 2008; Shrestha-Ranjit et al., 2020).

Conducting focus group discussions also has some limitations. Dominant participants may take over the discussion, resulting in findings that reflect only a few voices and potentially reducing the validity of the data. Participants may withhold information if they are uncertain about how the data will be used or feel embarrassed to share their experiences, particularly when discussing sensitive topics (Liamputtong, 2011). These risks can be reduced by building trust early, handling sensitive topics carefully, and managing effective group size and composition (Liamputtong, 2011; Rivera, 2019). In this study, I mitigated these limitations by carefully considering the inclusion criteria, developing trusting relationships with participants and maintaining effective group dynamics throughout all the focus group sessions.

Inclusion Criteria for Focus Group Participants

In an intrinsic case study, the central objective is to understand the case itself, therefore, the case is pre-selected. Accordingly, the first criterion for case selection is to identify cases that are most likely to contribute to a deeper understanding of cases and develop meaningful assertions (Stake 1995). Guided by this consideration, the following inclusion criteria were adopted for participant selection:

- Women who directly experienced the 2015 Nepal earthquake and continued to live in Nuwakot following the earthquake.
- Women who were aged 18 years or older at the time of the earthquake.

Sampling Strategy for Focus Group Participants

For the focus group discussion, a purposive sampling strategy was adopted to ensure that those participating in discussion are well placed, based on their experiences, to provide insights into the topic of interest (Morgan, 2019). This approach aligns with Stake's explanation of case selection- where feasible, cases should be selected based on their accessibility and willingness to engage in the research inquiry (Stake, 1995). In the purposive sampling, the researcher chooses the participants based on the characteristics possessed by them (Rivera, 2019). Purposive sampling is particularly appropriate for focus group discussions when the aim is to obtain in-depth understanding of participants' experiences and perspectives (Morgan, 2019; Peek & Fothergill, 2009). In disaster research, purposive sampling can facilitate the recruitment of participants with relevant experiences and knowledge, thereby supporting an in-depth understanding of the case under investigation (Rivera, 2019). Similarly, in this study, purposive sampling of the women who met the above-mentioned inclusion criteria enabled recruitment of participants who could provide relevant information to answer the research questions.

Participant Recruitment Process for Focus Group Discussion

After receiving approval for the study from all stakeholders involved, as stated earlier in ethical considerations, the participant recruitment flyer was developed and approved by AUTEC and NHRC. The flyer featured the title and a synopsis of the study, participant inclusion criteria, and my contact number, and was prepared according to AUTEC guidelines.

I first visited health office of Nuwakot and conducted a group meeting with the public health inspector who was in charge of the health posts of Bidur Municipality and FCHVs. Since FCHVs do home visits and conduct regular meetings with the local mother groups[3], these were key people who could help in the participant recruitment process for the

[3] The mother's group '*Aama Samuha'* in Nepal refers to voluntary groups formed in every local community to raise awareness of issues related to women and relevant social matters.

focus group discussion. With the help of FCHVs, I went around the valley and to the homes of potential participants, to purposively select the participants. For instance, FCHVs directed me to the homes that included women who met the inclusion criteria. I personally distributed participant recruitment flyers and participant information sheets together to the potential participants. Moreover, to gain the trust and confidence of the participants and find more potential participants, I also attended social and religious gatherings in the communities. This enabled me to meet with the wider female communities and distribute the flyer and information sheet.

The information sheet provided details regarding the title and purpose of the study as well as potential risks and benefits associated with participating in the study. For those potential participants who could not read by themselves, I read and explained the information to them. These potential participants were given two weeks' time to decide whether or not they would like to participate in the study. Women directly contacted me via phone to express their interest to participate in the study. The first 20 participants who agreed to participate were recruited.

Focus Group Number and Size

In focus group research, the number of focus groups is usually decided first, and then participants are allocated into each group (Rivera, 2019). Although there is no universally agreed number of focus groups, many scholars contend that three to five groups are usually adequate, because additional groups rarely produce meaningful new insights (Morgan, 2019; Peek & Fothergill, 2009). Therefore, in this study, it was decided to run four focus groups, in line with Morgan's (2019) suggestion that, as a rule of thumb, three to five sessions may be enough for each variable under investigation. However, if groups are segmented by gender, class, race, or age, then more groups would be required (Morgan, 2019). In this study, I sought to understand the case of specific gender- all female groups who were 18 years of age or above at the time of the earthquake. Therefore, four focus groups were planned accordingly.

Choosing the correct number of participants in a focus group is a principal element in facilitation of effective discussion. Morgan (2019) suggested a need for smaller groups to support a higher level of engagement in the topic of interest. When a group size is 4-

5, it allows each participant to equally contribute to the discussion. In contrast, with a large number of participants, it is possible that the extroverted participants dominate the discussion and other participants may choose not to actively participate (Morgan, 2019). As a result, the findings may not be representative of the whole group, which can diminish the internal validity of the study. Moreover, small sized focus groups are found to facilitate an increased sense of privacy and reduce any fears of embarrassment among participants, particularly in disaster research (Peek & Fothergill, 2009). Therefore, for this study, each focus group comprised five participants.

Allocation of Study Participants to Focus Groups

The focus groups were structured according to women's ages, which also recognizes that at different ages, particular wellbeing concerns may be a focus for women, including, but not limited to, factors such as childbirth, household roles, relationships, child-care, menstruation, and menopause (Bhandari, 2023). Peek and Fothergill (2009) suggested that participants are more comfortable and more likely to share insights into their experiences when the group of people are more like them. In contrast, mixed groups may lead to domination of one social group over another, distorting the results of the findings (Peek & Fothergill, 2009). In the context of Nepal, for example, focus groups that include both mothers-in-law and daughters-in-law may hinder open and honest dialogue. Given the deeply rooted cultural hierarchies and intergenerational power dynamics within families, younger women may feel reluctant to share their perspectives in the presence of elder female relatives (Shrestha-Ranjit et al., 2020). To support insights into experiences amongst women of particular ages, women of similar ages were allocated into the same focus group. So, the age group of women in the 1st focus group discussion was 26-30, women in the 2nd focus group discussion were 31-40, women in the 3rd focus group discussion were 41-50, and women above 50 were in the 4th focus group discussion.

Focus Group Setting

In a focus group discussion, it is of utmost importance that the location for the group discussion should be accessible and comfortable (Shrestha-Ranjit et al., 2020; Sim & Waterfield, 2019). While deciding the venue with FCHVs and the chairperson of the

mothers' group of respective wards, they suggested that the community halls would be an appropriate setting to conduct the discussion. This recommendation was based on the fact that most of the participating women were active members of the mothers' group and were already adapted to attending regular meetings in these places. Therefore, focus group discussions were planned to be conducted in the community halls of the respective wards.

Conducting the Focus Group Discussion

After completion of participant recruitment and finalization of the venue, with the help of female community health volunteers, I personally met with the participants who had contacted me and expressed interest individually at their homes and provided the consent form. The procedure for gaining consent is explained in detail in a separate section below. Spending time with the women and letting them tell me about their village helped establish rapport between us. After this meeting and completion of the consent form, participants were invited to attend their allocated focus group discussion at the given time and venue.

Before the discussion was started, each participant's brief demographic data such as age, marital status, level of education, and employment status were gathered, by asking one by one, using the structured form in first part of indicative questions. This data was collected in a separate space in the hall, maintaining privacy of each participant. The signed informed consents were collected from the participants, and they were provided with a brief verbal overview and explanation about the session.

After collecting the demographic data, all participants were seated in the round table arrangements. A round table arrangement was chosen, because it fosters a sense of equality among participants, encourages open interaction, and ensures that everyone is visible to one another, thus creating a more inclusive and participatory environment (Nehyba et al., 2023). Each focus group discussion started with the greeting "Namaste"- this is the common greeting in the Nepalese community, spoken while joining both hands together at the chest and performing a slight bow. This gesture shows respect and supports participants to feel at ease with the seating arrangements and informal group interactions.

With the participants' permission, I started audio recording of the session. Only the participants and the researcher were present during the entire group discussion. As a facilitator, I made a conscious effort to maintain group dynamics throughout the discussion (Liamputtong, 2011)- for example, participants were welcomed and asked to keep their phones in silent mode, with the option to step out if necessary. I encouraged active listening and ensured equal participation. Open-ended questions were used to facilitate free-flowing conversation, allowing participants to share diverse perspectives without external influence (Denzin & Lincoln, 2011). Manual note taking was done to record the key issues emerging in the session which were considered key factors for the analysis and interpretation of the data, including facial expressions, postures, and gestures. These field notes later supported deeper interpretation during the thematic analysis, enriching my understanding of the participants' perspectives (Simons, 2009).

The discussion was interactive, with participants expressing their views comfortably. Each focus group discussion lasted from 60-90 minutes. Evidence suggest that for focus group discussions, 60 to 90 minutes is ideal, although some studies extend to 90–120 minutes when discussing complex topics (Liamputtong, 2011). Observations during the sessions confirmed that the venues were indeed accessible and that participants felt comfortable engaging in the discussions. At the end, a group summary was presented, and all the participants agreed upon the key points of the discussion. Light refreshment - tea and snacks were provided after each discussion to acknowledge their time and contribution. Providing food and drinks helps participants feel valued and supports equitable power dynamics in research settings (K.C & Hilhorst, 2022). Thus, all four focus group discussions concluded in a facilitative and respectful environment.

Interviews with Health Service Providers

For an intrinsic case study, understanding the complexity, nuances, and shared meanings, as well as the contextual factors of the case is important to gain multiple perspectives and knowledge (Stake, 1995). Particularly in a qualitative study, semi structured interviews, which are interactive in nature, allow the researcher to explore and construct multiple dimensions of knowledge and understanding around a phenomenon (Creswell, 2014; Stake, 1995). The interviews in my study sought to gain

and aggregate multiple perspectives and knowledge relating to the case and aimed to support thick description, discover linkages, and obtain explanations. For this study, individual interviews were conducted with health service providers to identify the availability, accessibility, and affordability of public health services in the Nuwakot district, with a special focus on women's health and wellbeing after the earthquake.

A semi structured interview protocol is shaped by the research question and the conceptual framework. Therefore, these provide clear ideas, perspectives and experiences of the participants to understand the phenomena under study (Galletta, 2012). However, a key limitation of interviews is that they are time consuming, requiring considerable effort for planning, conducting, transcribing, and analysing the data. Additionally, interviews provide limited anonymity, particularly in face-to-face settings, which may discourage participants from openly discussing sensitive issues. This can contribute to social desirability bias, where participants provide responses, they perceive as socially acceptable rather than fully reflecting their experiences or views (Roulston, 2021).

Inclusion Criteria for Individual Interviews

For gaining insights into the health service providers perspectives on how women endeavored to access and utilize the health services over the long-term following the earthquake, it was decided to recruit health service providers who are working in different level of health care delivery system of Nuwakot- Provincial Level, local level and Community level and directly involved in providing health services to the communities in Nuwakot. Given that there was frequent turnover of health care professionals, it was not mandatory that these providers had been involved in the care and rescue of earthquake survivors during and immediate after the earthquake.

Sampling Strategy and Sample Size for Interviews

The aim of the interviews was to explore health service providers' perspectives on health care services targeted to women in Nuwakot. Therefore, the health service providers were purposively selected according to researcher judgement that, the providers at provincial level, local level and community level can provide the adequate information

regarding accessibility, availability and utilization of health services by women residing in Nuwakot district following the 2015 earthquake.

Considering that only small number of providers were in these roles in Nuwakot district, it was decided to include four service providers -one at the provincial level, one at the local level, and two at community Level. This sample size was considered appropriate as the participants held key positions and provided information-rich accounts relevant to the research questions. This approach was consistent with the concept of information power by Malterud et al. (2016) that a smaller number of participants can be sufficient when participants possess substantial knowledge and experience related to the case under study. Furthermore, in this study, health service providers served as important informants providing contextual and triangulating perspectives rather than being a major participant group. Among the four participants, one was a male Medical Doctor working in the Provincial hospital, next was a male public health inspector, and two were female FCHVs working at the community level. All the health service providers performed vital roles to promote health and wellbeing of women at different service levels within the health facilities following the earthquake.

Participant Recruitment for Individual Interviews

To approach the service providers for participation in the study, I sent both the general participant invitation letter (see Appendix K) and the participant information sheet (see Appendix L) to the public health supervisor at the health office of Nuwakot. The supervisor then sent the invitation letter to potential service providers in relevant roles. Unlike the focus group participants, who were invited personally by me, the individual interview participants were invited through a written invitation letter because the numbers of service providers working in two selected roles were very few. Therefore, to maintain their confidentiality, they were invited through the health department. One medical doctor, one public health inspector, and two FCHVs, who contacted first for voluntary participation were chosen by the public health officer and then provided me with the name and contact numbers of the participants who agreed to participate. After getting the names of the participants from the health office, I contacted them and met

them to provide informed consent. During this first meeting, the time and venue for the interview was finalised.

Developing Indicative Questions for Interviews

When conducting a case study, "the purpose for the most part is not to get simple yes and no answers but description of an episode, a linkage, an explanation"(Stake, 1995, p. 65). Therefore, an effective interview needs to be well-phrased with questions and appropriate probes for good responses. Similarly, Roulston (2021) highlighted that, in qualitative case study research, it is important to ask good questions in the right sequence to generate rich data. To facilitate the interview process, indicative questions (see Appendix G) were developed based on the issue statements and conceptual structure (see Table 1 above). Stake (1995) emphasised the importance of practising the interview process, at least in the form of a mental rehearsal to be familiar with the interview guiding questions. For this purpose, a practice interview with a health service provider was conducted with a friend of mine, who is in a similar position working in a hospital in Pokhara, my hometown. This practice session helped me to reflect upon the interview guide, which needed a slight change in the sequence of indicative questions. The practice interview also helped me to enhance my listening capacity, avoid asking leading questions, and develop effective use of probes.

Conducting the Interview

Interviews with two health service providers were conducted in their respective offices during the break times, and the interviews with the FCHVs were conducted in the meeting hall of the health post. Before each interview, the signed informed consent form was collected from each participant. Then, demographic data regarding age, sex, and years of experience in their professional role were collected using the structured form in first part of indicative question for interviews with health care providers (see Appendix M). With the participant's permission, interviews were audio recorded, and brief notes were taken to capture contextual details. The semi-structured nature of the interview schedule provided a flexible framework that ensured alignment with the research questions while allowing for in-depth exploration. The interview was more like a conversation which facilitated a co-constructed dialogue between the researcher and

participants, enabling richer insights (Lincoln & Guba, 2013; Stake, 1995). Each interview lasted approximately 30–45 minutes. This duration was considered appropriate for exploring participants' experiences in sufficient depth while maintaining engagement and minimising participant fatigue. Qualitative research literature commonly recommends interview lengths of 30–90 minutes for semi-structured interviews, as this timeframe allows researchers to build rapport, probe participants' perspectives, and gather detailed data effectively (Ahmed, 2025).

Ethical Considerations during Data Collection

Process of Gaining Informed Consent

As stated earlier in the section- Conducting the focus group discussion, I first approached FCHVs to personally meet each participant and give them an informed consent form. I ensured that all participants fully understood the study's purpose, procedures, and their rights, including the voluntary nature of participation, and that they had a chance to ask questions. For those unable to read the form, verbal explanation was provided. Participants were given information regarding the objectives of the research, their role in the study, and how the findings would be used. They were also informed that they had the right to withdraw from study at any point without providing reason. All participants confirmed that the information was clear and comprehensible, and each participant provided written consent by signing the form.

For the individual interviews with the health service providers, all the participants confirmed that they understood the information in the consent form. They completed and returned the signed consent form before the interview began.

Maintaining Privacy and Confidentiality

Although participation in the study was entirely voluntary, protecting the participants' privacy and confidentiality is vital when researchers need to carry out research with human participants (NHRC, 2019). To maintain privacy, focus group discussions were conducted in a community hall and only involved the researcher as a facilitator and the focus group participants. Morgan (2019) suggested that neutral places are best for focus group discussion because participants will feel secure and more open in what they say.

The interviews with two health service providers were conducted in their respective offices and only involved the interviewee and interviewer. Additionally, interviews with two FCHV's were conducted separately in a meeting hall of the health post with the presence of interviewer and the participant only.

To ensure confidentiality of information provided during focus group discussions, participants were initially invited to select pseudonyms. However, they all expressed comfort with researcher-assigned names. Given the possibility of overlap with real names within their communities, an alternative coding strategy was adopted. Each focus group was labelled sequentially (FGD1 to FGD4) based on the order they were conducted, and participants were assigned identifiers (P1 to P5) according to their clockwise seating arrangement. For instance, "FGD1, P5" refers to the fifth participant in the first focus group. This coding convention was consistently applied during transcription, data analysis, and presentation of findings in the case study report. The transcription procedure used are discussed in greater detail in the section- Data transcription below. A specific confidentiality concern in focus groups was the potential for participants to share information about one another outside the discussion. To mitigate this, participants were reminded before each session not to disclose any shared information externally. This reminder was also included in the participant information sheet (see Appendix I).

For individual interviews with health service providers, coding was based on role and interview date, using identifiers such as HSP1, HSP2 for health service providers and FCHV1, FCHV2 for female community health volunteers. These codes were used throughout the transcripts and thesis and will be maintained in future publications. All participants' contributions are acknowledged anonymously in the thesis, and same procedure will be followed in any subsequent dissemination of findings.

Data Sharing and Data Storage

The data management guidelines of AUT were followed for data sharing and storage (AUT, n.d.). Only the members of the research team had access to the transcripts of focus group discussions and interviews. Participant information was not discussed with anyone other than my supervisors. All participants' information was kept in a password

protected computer and physical data were kept in a locked cupboard. In the computer, separate folders were created for each focus group discussion and interview, containing those transcripts and audio files. The hard copies of the informed consent forms were all scanned and saved in a separate folder.

These separate folders of audio recordings, transcripts, and informed consent were transferred into one drive file with the security password of my primary supervisor and will be stored for six years. All research related data on my laptop are password protected and will be stored securely for six years after completion of this project. After six years, all data associated with this project will be destroyed according to the AUTEC guidelines (AUT, n.d.).

Prevention of Re-traumatisation

During data collection, participants had to recall the devastating impact of the earthquake, which risked bringing back memories of hardships they faced during and after the event. Therefore, taking part in the study could have been quite upsetting for the participants, causing emotional repercussions. Evidence suggests that collecting data with the post-disaster survivors can cause re-traumatisation (Mezinska et al., 2016; Weiss, 2021). To minimize the risk, as presented in conceptual structure (see Table 1 above), questions related to the wellbeing following the earthquake were asked before asking about the earthquake experience. Therefore, there was less chance of potential trauma. Additionally, the use of focus group discussions as the data gathering choice aimed at minimizing the potential for re-traumatization. Existing literature suggest that disaster-affected women often respond positively to group setting such as a focus group where they can share experiences and support one another (Mukherji et al., 2014; Rajkumar et al., 2008; Shrestha-Ranjit et al., 2020).

Despite these precautions, one distressing incident occurred while conducting the second focus group discussion. A participant became emotional while recounting how her three-month-old son was buried under a collapsed wall during the earthquake. Although the child sustained only a minor injury, the memory remained vivid and triggered significant emotional distress. While discussion was ongoing, she cried remembering the incident. In response, I paused the discussion and offered the option

to withdraw. However, she chose to continue, stating that she was feeling better. The same day evening, I visited her and her family to ensure her wellbeing, and there was not any sign of ongoing distress. As a registered nurse, I was prepared to respond appropriately to emotional distress. I provided the participant with contact details for the nearest health post offering mental health service, in case she would need this service. Another participant in the same group disclosed ongoing mental health concerns, and I advised her to seek support from the local health post. Mezinska et al. (2016) suggested that researchers must be able to identify distressing situations during data collection and provide appropriate support where necessary. No distressing incidents occurred during interviews with health service providers. All participants were provided with my contact details should they have any future queries or need support.

Ensuring Researcher's Safety

Throughout the research process, ensuring the researcher's safety was as important as ensuring the safety of participants. Alessi and Kahn (2023) contend that researchers conducting studies on traumatic events must remain attentive to any emotions that surface throughout the research process, from planning through implementation. Because I was collecting data from women who had witnessed and survived near-death experiences during the earthquake, I recognised that listening to their accounts could be emotionally distressing, and I therefore prepared for this risk before data collection began. As a registered nurse who had previously conducted research in the same community, I was experienced in managing difficult situations and emotional challenges. Although I sometimes felt emotional while listening to the women's stories, I remained calm and composed throughout the discussions. After each focus group discussion, I debriefed with my supervisors, reflecting on the women's narratives. Keeping a reflexive journal further helped me process my emotions and regain balance when I felt emotionally unsettled. Moreover, I also had access to a dedicated psychological counsellor at my university in Nepal and was prepared to seek counselling if needed. However, the data collection process proceeded without any safety issues and emotional discomfort.

Researcher's Positionality and Managing Power Relations

During fieldwork and data gathering with rural communities, challenges can arise in managing power relations due to the researcher's positionality in terms of their cultural, educational, and gender background (K.C & Hilhorst, 2022). Upon entering the community for data collection, being a woman, a native Nepalese, and interactions with participants in the Nepali language facilitated dynamic focus group discussions, and women engaged in conversations with considerable depth. I could understand the local language, pick up on non-verbal cues, and was familiar with the religious and cultural connotations and expectations of the community. However, there were additional potential influences on the data collection with regard to my position as a researcher, such as being a woman, my upbringing in an urban environment, and my educational and professional status. I realised that these aspects positioned me as an outsider in the community setting while engaging with the participants.

I first identified this potential issue during my personal contact with the participants throughout the recruitment process. The women expressed curiosity, asking, *"You are a woman with a family, and you are living in the city- how will you manage to come so far from your home and stay here for two weeks during your data collection? Will you be comfortable conducting fieldwork in this rural area?* This statement reflected Nepalese cultural norms, whereby women living in rural areas as homemakers were surprised to see a woman like me work away from home. These questions prompted me to reflect on how my position as a woman and my urban residence might affect my interactions with the female participants. Additionally, I experienced potential power imbalances related to my educational and professional status. One woman asked, *"You are an educated person, but we are uneducated, how can we help you and give you what you have expected?*" This query made me consider how my identity as an educated lecturer and researcher positioned me as the one with power over the research process.

Therefore, before collecting data, it was necessary to position myself within the "local context" to gain the trust and confidence of the participants and manage these power relations. Stake (1995) believed that the researcher needs to be able to interact with the phenomenon they research. These interactions shape activity, experience, and the

researcher's interpretation of the case under study. This aligns with the epistemological stance of Guba and Lincoln (1994, 2005), who argued that the process of creating knowledge is always shaped by the researcher's own experiences and prior understanding. The intent is, however, to lessen the distance between the researcher and the participants, allowing the researcher to gain an insider view of the phenomenon and motivation to seek deeper understanding of reality (Stake, 2006).

As a registered nurse in Nepal, and with my exposure to various communities during fieldwork as a university lecturer, I endeavoured to put participants at ease and assess their level of comfort to manage power imbalances. During the participant recruitment and data collection period, I stayed within the community. I went around the village and spent considerable time with the women to build relationships and trust. I carefully considered the clothing that I wore to align with their culture. In Nepal, particularly in village communities, people are very welcoming and, as a sign of respect, routinely offer food, tea, and snacks to visitors, and I accepted the offers. I also participated in some religious and social gatherings to gain the women's trust. This type of community engagement helps build effective power dynamics between the researcher and participants (Ayrton, 2024; Karnieli-Miller et al., 2009). I clearly explained to them that I was comfortable conducting this research in a rural area, sharing information about my travel experiences in rural Nepal during previous community field visits with students while working as a nursing lecturer, and my field exposure for three weeks during my Master of Nursing thesis.

I restated to the women the objective of my doctoral thesis and its significance. I explained how their shared experiences and cooperation would benefit the study process and could help shape health services. While doing so, I stated, "*your knowledge and experience in the context of adapting yourself to the post-earthquake situation and maintaining wellbeing is wider than mine. Therefore, I am here to learn from your meaningful experiences.*" Giannetto et al. (2026) suggested that research participants should be viewed as experts rather than as vulnerable individuals. It was therefore important to recognise and uphold participant's dignity at every stage of the research process. To support this, I respectfully emphasised the importance of women's knowledge and experiences, which helped to maintain an equitable power relationship.

I used my communication skills effectively to determine when to pause, redirect, or discontinue conversation during each focus group sessions. Throughout the study, the women and health service providers were reminded that they were not required to share any information they preferred to keep private. In this way, this approach served as an avenue to enable the women's voices to be heard and valued, and it allowed to minimize power differences between me, as a researcher, and the participants.

Document Review

In terms of document analysis, Stake (1995) highlighted that documents related to the case and its context can serve as substitutes for direct observation, offering valuable insights into activities the researcher could not witness firsthand. In other words, carefully selected documents can act as key repositories and indicators of the case. It has also been stated that various sources of documents can help the researcher uncover the meaning of the subject of inquiry, develop a better understanding, and discover insights relevant to the research problem (Merriam, 1998). Additionally, document review and analysis can provide a strong source of data to explore additional reality of the context that focus group and interview participants may not know about (Bowen, 2009). Since the earthquake happened eight years before data collection for this research started, documents from the time were used to gain an understanding of the impact the quake had on Nuwakot, its communities, and the recovery efforts over time. These are the insights that could not be fully captured through focus group discussions and interviews.

Literature from other disaster affected countries indicate that the wellbeing impacts of earthquakes can persist long after the event, particularly for individuals who suffered injuries, property loss, displacement, and delays in reconstruction (Sannabe et al., 2020; Shiba et al., 2022). For women, these long-term outcomes are often shaped by the initial experiences during the emergency and early recovery phases, due to gendered vulnerabilities and unequal access to resources (K.C & Hilhorst, 2022; Mackintosh, 2022). Based on the evidence, while developing the conceptual structure and issue statements for this study (see Table 1 above), it was reasoned that these immediate impacts might have shaped the long-term wellbeing of women after the 2015 Nepal

earthquake. Therefore, the conceptual structure with issue statements and topical questions provided guidance on what information will be sought from the document review. Therefore, documents offering essential insights into women's unique challenges and resilience in post-earthquake contexts were reviewed. For selecting the documents, I collected the publicly available documents in the internet searches in relevant websites using predefined keywords related to post-disaster impact and needs assessment particularly related to women of Nuwakot district.

Inclusion Criteria for Document Review

The documents I decided to include were purposively selected and prioritized based on their relevance to research questions and their importance in understanding the context of the case study. Therefore, documents included- survey reports with statistics of injuries and deaths in Nuwakot, survey reports on initial impacts of earthquake among women in Nuwakot, evaluation reports on health services provided in aftermath of earthquake, newspaper articles and reports on post-earthquake reconstruction efforts followed by health and social security policy documents pertinent to the 2015 Nepal Earthquake and its aftermath. In total, 22 documents were chosen as they related to the issues stated in Conceptual Structure (see Table1 above).

Document Review Procedure

Initially, the health care delivery system of Nuwakot was discussed (Issue statement 2.2, 2.4) and the post-disaster impact and needs assessment survey report in the 14 most affected districts, including Nuwakot, was reviewed (issue statement 3.1, 3.2, 3.3, 3.4). As housing and health systems are one of the important determinants influencing the wellbeing of people, I included documents related to Nepal's, National Reconstruction Authority with support from international governmental organisation initiatives for housing and health systems reconstruction in Nuwakot (issue statement 2.5, 2.6). In addition, I reviewed the relevant national health policy and evaluation documents related to the current progress in the healthcare delivery system in Nepal, focusing on women's health after the disaster (issue statement 2.3). Finally, I also included policy documents related to Nepal's preparedness for future disaster events. The inclusion of document review has allowed me to triangulate the findings for my case study research

and contributed to the rigour and trustworthiness (Bowen, 2009). Table 2 provides the list of selected documents and its type for review**.**

Table 2

Documents Retrieved for the Case Study

Documents	Title	Document Type
Nuwakot and Its Healthcare Delivery System		
Nuwakot Statistic Office (2017)	Nuwakot District Profile	Report
Ministry of Health and Population (2024)	Healthcare Delivery System of Nepal	Nepal Annual Health Report (2024)
Nuwakot Statistic Office (2017)	Healthcare Delivery System in Nuwakot	Report by Statistic Office of Nuwakot
Ministry of Health and Population (n.d.)	Minimum Service Standards: Health Posts	Checklist for minimum service standards for health post
Housing and Health Service Sectors Damage and Reconstruction Documents in Nuwakot		
Central Department of Population Studies (2015)	Nepal Earthquake 2015: A socio-demographic impact study	Report: key findings
National Planning Commission (2015a)	Post-Disaster Needs Assessment	Report: key findings
National Planning Commission (2015b)	Post-Disaster Needs Assessment	Sector report
Onsite Operation Coordination Centre (2015)	Nepal Earthquake District Profile-Nuwakot	Overview of earthquake impact in Nuwakot
Trishuli Hospital (2024)	About Trishuli Hospital, Nuwakot	Hospital website
Basnyat et al. (2015)	Post-earthquake Nepal: the way forward	Journal article: The Lancet
The Kathmandu Post (2016, June 21)	Quake Hit Trishuli Hospital Gets Prefabricated Building	Newspaper article (The Kathmandu Post)
Timsina (2017, March 05)	Migration Plan for District Trishuli Hospital Nuwakot 2016	Presentation slides
New Spotlight Online (2021)	KOICA supported the construction of new building in Trishuli Distirct Hospital	Newspaper article (New Spotlight Online)
The Asia Foundation (2024)	Nepal Government Distribution of Earthquake Reconstruction of Earthquake Reconstruction Cash Grants for Private Houses	The Asia Foundation: Thematic summary report
Karki et al. (2022)	Nayã Ghar (A new house): Examining post-earthquake housing reconstruction issues in Nepal	Journal Article: International Journal of Disaster Risk Reduction

Documents	Title	Document Type
International Support on Housing Reconstruction		
United Nations Development Program (2018)	Rebuilding Nepal: Three Years On	Strategy for earthquake recovery assistance
United Nations Agency for International Development (n.d.)	Post-Earthquake Housing Reconstruction Support	Fact Sheet: United States Agency for International Development
Health Service Sectors After the Earthquake and Federalism		
Ministry of Health and Population: Department of Health Services (2019)	National Health Policy, 2019, Ministry of Health	Policy document
Ministry of Health and Population (2020)	Progress of the Health and Population Sector, 2019/20 (MoHP)	Evaluation report
Barriers to accessing and utilizing health services by women in rural Nepalese Communities		
Ministry of Health and Population (2018)	Gender Equality and Social Inclusion Strategy of the Health Sector, 2018	Strategic report
Nepal's Preparedness for Future Disaster Response and Management		
Ministry of Home Affairs (2019a)	Nepal Disaster Risk Reduction and Management Act, 2017	Act Rules and Regulation
Karki et al. (2016)	Review of effectiveness of the foreign medical team deployment in Nepal Earthquake, 2015.	Research article

Observation of the Physical Context

In intrinsic case studies, the goal is not merely to understand the phenomena but to deeply explore the relevant context of a specific case (Stake, 1995). To facilitate vicarious experiences for the reader, allowing them to feel as though they are there, Stake (1995) advocated for rich, detailed descriptions of the physical setting and surrounding context. These elements are crucial in constructing the realities of the case, as they shape the behaviours, perceptions, and interactions of the individuals involved (Stake, 1995). Therefore, in alignment with Stake's methodology, this study includes a comprehensive description of the physical environment and relevant contextual factors to enhance the reader's understanding of the lived experiences within the case.

I resided within the community for three weeks, spanning from participant recruitment to the completion of data collection. This extended presence allowed for community observation beyond scheduled interviews and focus group discussions. During this period, I closely examined the physical environment, including the participants' homes, all of which were reconstructed following the earthquake. Particular attention was paid to road conditions and the distances women needed to travel to access public healthcare facilities such as health posts and hospitals. While visiting the health posts and hospitals, the availability of services in these facilities were systematically observed and documented in a field diary. These observations provided critical insights into the lived realities of women in the community and helped contextualise their experiences within the broader socio-physical landscape.

Data Analysis and Interpretation

In qualitative case study methodology, data analysis begins with the initial impressions formed during data collection and continues through to the final interpretation (Stake, 1995). Accordingly, the data analysis process in this study commenced with the transcription of focus group discussions and individual interviews. The analysis was conducted using the reflexive thematic approach as outlined by Braun and Clarke (2022).

Data Transcription

Data transcription involves close observation and writing the data through careful listening or watching recordings of an event. This process of repeated immersion in the data can facilitate realisations or ideas which are identified during subsequent stages of data analysis (Creswell & Poth, 2016). For qualitative research that requires translations; to support development of themes in the collected data, it is considered best practice to first transcribe interview data in the original language and then translate this into the target language (Creswell & Poth, 2016; Nikander, 2008).

As Nepali is the first language of the participants, focus group discussions with female survivors and individual interviews with service providers were conducted in Nepali. I, as the primary researcher, transcribed the audio-recorded data. The transcription process took considerable time and effort, as verbatim transcripts were first manually

developed in Nepali using pen and paper due to few resources for typing longer documents in Nepali script. Following manual transcription, I then translated the data into English and typed the translated version. Being both the interviewer and transcriber allowed me to engage closely with the data, enhancing my sensitivity to key themes and areas of interest emerging from the discussions. In line with case study methodology, which values "thick" description (Stake, 1995), I also incorporated visual observations, non-verbal cues, and field notes into the transcription process to enrich the interpretation of the data (Creswell & Poth, 2016).

After completing the transcription process, I contacted two health service provider participants via email and shared copies of their interview transcripts. This allowed them to review the content for accuracy and provided an opportunity to add, clarify, or remove any information. Participants were also invited to contact me if they wished to make further contributions. No modifications were requested in response, and the transcripts were retained as originally transcribed. Since the other two service providers- FCHVs were unfamiliar with email communication, follow-up phone calls were conducted to validate their interview transcripts. During these calls, I gave a verbal summary of each transcript and asked if they agreed with the content or wished to make any changes. Participants did not request any modifications. The transcripts were not shared with focus group discussion participants due to the risk that participants may disclose the other participant's information (Liamputtong, 2011). This approach was in line with the procedures taken to protect participants' identity as detailed in the ethics application approved by both AUTEC and NHRC.

Data Analysis of Focus Group Discussion and Interviews

In this study, reflexive thematic analysis (RTA), as outlined by Braun and Clarke (2022), was used to generate conceptual insights from the participants' narratives, collected through focus groups and interviews. RTA involves identifying and interpreting patterns of meaning within qualitative data, and it aligns well with Stake's (1995) approach to case study analysis. Stake (1995) noted that, "the nature of the study, the focus of the research questions, the curiosities of the researcher pretty well determine what analytic strategies should be followed: categorical aggregation or direct interpretation" (p. 77).

A central feature of RTA is reflexivity, whereby researchers draw on their prior knowledge, experiences, and social position to critically engage with and interpret the data (Braun & Clarke, 2022). This approach acknowledges that researchers' values, beliefs, and contextual understandings shape how participants' experiences are interpreted. RTA is therefore compatible with the constructivist paradigm that informed this study (Lincoln & Guba, 2013). Stake's (1995) constructivist case study approach similarly emphasises direct interpretation, in which researchers develop explanations and construct meaning from their observations and understanding of the case. Through this interpretive process, researchers move beyond description to generate deeper insights into the phenomenon under investigation (Braun & Clarke, 2022; Stake, 1995).

Analysis of the transcripts from both the focus group discussions and the individual interviews therefore followed Braun and Clarke's (2022) six phases of reflexive thematic analysis, while also incorporating the analytic features proposed by Stake (1995). Braun and Clarke (2022) explained that these phases are not linear but are an inductive process of visiting and revisiting the data, initial ideas, codes, and themes. The detailed phases followed for the reflexive thematic analysis in my study are discussed below.

Phase 1: Familiarising myself with the dataset: The analytical process in my study commenced at the very beginning of the focus group discussions and interviews. At that point, I made some notes about the discussions and interviews and, shortly after, wrote a brief summary for the participants, which helped me to initiate early engagement with the data. Following each session, I listened to the audio recordings to further immerse myself in the content and begin forming preliminary analytical ideas and insights. Additionally, transcribing the data by relistening to the audio and translating the data by myself significantly contributed to enhancing my familiarity with the material, allowing for a deeper understanding of the data (Braun & Clarke, 2022; Stake, 1995).

Phase 2 Coding: This stage involves a fine-grained way of systematically generating codes from the dataset (Braun & Clarke, 2022). Within the constructivist approach, sense-making starts from a sensible and systematic coding process. Themes do not emerge from the data but are constructed from smaller units which are interpretative (Braun & Clarke, 2022). The coding phase helped me in conceptualising the data and

sense making through reading and rereading the data, deep thinking, and understanding the meaningful patterns across the data (Stake, 1995).

Coding was done manually using Microsoft word. This was because I wanted robust analysis and deeper insights into my data. My focus was on developing conceptual rather than descriptive codes, meaning that I first highlighted the codes and generated the code label (Braun & Clarke, 2022). The main technique I utilised to generate codes was to highlight the key wordings by using "text highlight color" in Microsoft Word and writing a code label in the comment box. As I continued coding the data, I moved back and forth between the discussions and interviews, making notes on the previous transcript as well as the transcript I was currently coding. I also had regular discussion with my supervisors which supported me to remain open to new understandings about the data, and to work iteratively to revise the codes. These approaches helped enhance the rigour of the process by allowing me to refine codes, compare interpretations, and remain attentive to emerging patterns across the dataset (Braun & Clarke, 2022).

Phase 3: Generating the Initial Themes: In reflexive thematic analysis, a theme is meant to capture shared meaning, united by a central organising concept (Braun & Clarke, 2022). While generating themes, I explored the expression of shared or similar ideas or meanings across the different datasets of focus group discussion and interviews. This idea of clustering similar codes together aligns with Stake's (1995) idea of categorical aggregation. By clustering the initial codes together, I was able to construct preliminary themes. I created a table in Microsoft Word with initial themes in one column, the code labels, the codes in the second column, and the corresponding data that illustrate the theme in the next column. Figure 3 features an example of how an initial theme was constructed from categorical aggregation of the patterns from the dataset.

Figure 3

Example of Categorical Aggregation of Patterns from Data Set

Preliminary theme	Code label	Quotes
Problems are part of life		FGD 2, P3, P.2, L. 46- ..... and if something or some problem tries to disturb me, I do not give up, I feel that many bad times hit us during our lifetime, but I always boost up my morale... I do not give up.
	Facing challenges with strength	
	Faded stress and worries with time	
	Increased self-morale	
Power of community	Help from friends	FGD 2, P3, P.11 L.246 -.....with the fact that we were alive, we had cooperation with each other at that time. If I had something, I shared it with others and others shared with me. Even inside the tent, we shared whatever we had with each other. We felt like, the world and the situation is like this, anything can happen at any time. We also saw lots of deaths of our neighbors. Then we felt that, this is the hard times of whole country, so we should face it. So, we lived together with our community helping each other and survived the hard phase.
	Cooking and eating together	
	Sharing food stuffs	
	Sense of help and support	
	Sharing is caring	

essibility: Investigate

As my study was an intrinsic case study, the focus was on understanding the case in depth. In some instances, direct interpretation was necessary for theme development. For example, the need to maintain cultural rituals during menstruation and its impact on women's wellbeing was evident in a specific age group. Therefore, the choice between categorical aggregation and direct interpretation was guided by the research question and the aim of making meaningful sense of the case (Stake, 1995).

Phase 4: Developing and reviewing themes: I reviewed the generated themes in terms of coded extracts within a specific dataset as well as across the entire dataset to generate a thematic "map of analysis." Braun and Clarke (2022) highlighted that, while reviewing the themes, it is important to go back and forth between the datasets interactively to guide engagement with the data. As before, this process was supported through regular discussions with my supervisors. Actively moving back to the previous phases enabled a deeper understanding of the meaning across the entire datasets. While constructing meaningful themes that tell a compelling story about the important patterns of shared meaning across the dataset, Stake (1995), I manually drew a visual map of themes for the whole dataset. This process helped me identify potential themes and subthemes (see Appendix S and T).

Phase 5: Refining, defining, and naming themes: Within a reflexive thematic analysis framework, themes are not passively discovered but actively constructed through a process of sense-making (Braun & Clarke, 2022). Stake (1995) described this process as interactive and recursive, highlighting the necessity of engaging deeply with participants' accounts and continuously reflecting, to formulate interpretations and generate the understandings required to address the research question. While doing so, at times, I needed to proceed backwards for a while. Some initial themes were discarded, some split into new themes, and some retained as final themes. For instance, while analysing the interview datasets with health service providers, I realised that I developed topic summaries rather than the themes. I revisited my coding, recorded across all, and developed new themes which provided meaningful answers to the research question. During these phases, after I wrote up my initial themes, regularly checking and discussing my interpretations and ideas with my supervisors helped me reflect on previous approaches, generate new ideas, and finalize the names of the themes. For each theme, supporting quotations and detailed descriptions were developed. The final themes for both focus group discussion and individual interviews were developed in a refined map.

Phase 6: Writing case study report: This phase focused on translating the refined themes into a coherent and transparent interpretation. The findings of the reflexive analysis are presented through the case study report in a structured document that communicates the analytical findings to the readers. While authoring the report, a detailed account of themes, data extracts, and interpretative commentary are provided. The final analysis of the focus group discussions and individual interviews is presented in Chapters Six and Seven, respectively.

Researcher's Reflexivity in Research Process

Reflexivity in the research process is a core principle of constructivist case study methodology (Lincoln & Guba, 2013). With this approach, a researcher must continually examine personal assumptions, including those shaped by historical background, political views, social position, gender, and cultural upbringing. These factors can

influence both how the study is conducted and how the data are understood and interpreted (Olmos-Vega et al., 2023).

While conducting this research, my identity as a female healthcare worker, my understanding of the cultural context of women, and my personal experience of the earthquake facilitated a deeper understanding of the community and supported the development of trusting relationships with participants. At the same time, my prior knowledge of the research setting and previous experience of conducting data collection within the same community had the potential to introduce personal assumptions and biases into the research process, thereby influencing the analysis and interpretation of the findings. To minimise this bias, I continuously examined my own understanding at every step of the research process. I reflected on my ideas by maintaining a reflective journal and engaged in regular feedback sessions with my supervisors. During the data collection phase while residing in Nuwakot, I maintained regular contact with my supervisors, reflecting on my experiences with interviews and focus group discussions. During the data analysis phase, my primary supervisor revisited my initial coding, double-coded the transcripts, and critically examined my assumptions. Supervision sessions that provided feedback on data analysis and interpretation were particularly valuable. The themes and interpretations were regularly checked to ensure they faithfully represented participants' perspectives. Continually revisiting key points discussed with supervisors throughout the data analysis and interpretation stages helped ensure that the co-construction of meaning and understanding of the case was accurately captured.

Document Review and Analysis

I analysed most of the documents using direct interpretation, a constructivist approach that supports inductive reasoning (Lincoln & Guba, 2013) and is particularly effective in case study research (Stake, 1995). This method allowed me to interpret contextual information and integrate insights from the documents with data collected during focus group discussions and interviews. To achieve this, I read through the documents with my research questions and topical information questions from the Conceptual Structure (see Table 1 above) in mind. I highlighted the relevant content in the documents and

made notations. The documents I examined provided valuable background information and served as evidence of past events relevant to the case (Lincoln & Guba, 2013). The findings from the document analysis are presented in Chapter Five.

Case Study Report

I have presented the analysis of data from both Document review, focus group discussion, and participant interview in the findings chapters as a case study report Reference Stake here. This approach is consistent with advice from Lincoln and Guba (2013), who argued that the case study format is an effective way to convey the outcomes of a constructivist inquiry. As Stake (1995) suggested that for an intrinsic case study, more attention should be paid to the context; the case study report started with Chapter Five Case Study Findings. This chapter commences with findings from the document review, setting the stage to the case by exploring the initial impact of the earthquake on women living in the Nuwakot district along with the recovery and reconstruction that took place in Nuwakot over a period of eight years following the disaster. Following Stake's (1995) suggestion that the physical context related to the case should be well described in a case study report, incorporating my observations, I have also provided a detailed description of the data collection setting, ward 2 and 3 of Nuwakot district, describing the built environment, the geographical context, the availability of public health services for women supported by the document review. Finally, the case study report presents the focus group discussion findings and interview findings in Chapter Six and Seven, respectively.

Developing Assertions

After completing the initial analysis of the focus group discussion data, interview data, and documents, I conducted a final, multi-data analysis using abductive reasoning to develop assertions. These assertions are closely aligned with my research questions and the key issues of the case (Stake, 2010). Following Stake's (1995) guidelines, I systematically searched for patterns, connections, and consistencies across the entire dataset. This involved repeatedly reading the case study report and using colour coding and manual notations to highlight emerging themes and potential assertions which I discussed with my supervisors. I then interpreted these core findings in relation to my

research questions to construct the final assertions. According to Stake (1995), these assertions help validate the already made naturalistic generalisations of the case study report.

Strategies Followed to Enhance Rigor and Trustworthiness of Data

For qualitative research, Guba and Lincoln (1994) recommended various strategies to enhance the trustworthiness of study findings that ensure that reliable conclusions are drawn. In the current thesis, Guba and Lincoln's (1994) strategies have been considered to enhance the trustworthiness and credibility of the study, including data triangulation, prolonged engagement, member checking, and peer debriefing.

Triangulation

In this study, data triangulation involved gathering data from multiple sources and methods. The use of multiple sources and methods of data collection are helpful in increasing the trustworthiness and quality of a case study (Stake, 1995). For instance, data was collected, not only from focus groups with the adult women who survived the 2015, but also from health service providers through individual interviews. Moreover, a document review was conducted, and a description of the physical context relevant to the research questions was also compiled. The document review and observations helped shed light on and confirm points discussed by the women and health service providers.

The data triangulation from multiple sources and methods facilitated my interpretation of findings by using different but converging lines of investigation which serve to enhance the accuracy and credibility of the findings (Stake, 1995).

Prolonged Engagement

Prolonged engagement is the investment of adequate time by a researcher to become familiar with the socio-cultural setting of the study population, and to build trusting relationships with participants (Denzin & Lincoln, 2011). I had previously conducted field research in the same location. Therefore, I was familiar with the socio-cultural background of the study participants, which helped the development of trusting relationships with the participants. I also had regular contact and visits with community

stakeholders for consultation regarding the study. Moreover, I stayed within the community for one week during the participant recruitment period and two weeks during the data collection period. I distributed the participant recruitment flyers by myself and clarified any queries of the potential participants. This sustained engagement helped build rapport and trust, which, in turn, enhanced the credibility and depth of the data collected (Lincoln & Guba, 2013; Stake, 1995).

Member Checking

The credibility of the data collected can be appropriately tested by careful checking of interpreted data with relevant data sources (Guba & Lincoln, 1994; Stake, 1995). For the focus group participants, to maintain participant confidentiality, focus group discussion transcripts were not shared with participants, as access to the transcripts could potentially reveal information contributed by other group members (Liamputtong, 2011). This approach was consistent with the confidentiality provisions specified in the ethics applications approved by both the AUT Ethics Committee (AUTEC) and the Nepal Health Research Council (NHRC). Therefore, at the end of each discussion, I summarised the important points discussed, and they agreed with the summary of information they provided. For health service providers, transcript checks were conducted (see the section: data transcription), and no modifications were requested.

Peer Debriefing

Peer debriefing further helps to maintain data credibility which establishes overall trustworthiness of the findings (Guba & Lincoln, 1994). In debriefing, a researcher discusses the progress of the investigation with an expert in the field. This process begins with the first stage of inquiry, where it includes discussions on issues related to preliminary data collection and initial analysis. This process confirms that the findings and interpretations are honest and worthy (Guba & Lincoln, 1994). Throughout the study**,** there were regular consultations and meetings with my supervisors. Since my primary supervisor had independently read some focus group discussions and interview transcripts. Therefore, when I suggested preliminary codes and themes, the mutual understanding of the data helped in refining the suggested codes and themes. This approach has enhanced the credibility of research.

Summary

This study aimed to understand the wellbeing of women in a community of Nuwakot district in Nepal following the earthquake in 2015. In this chapter, I have described and critically considered how the study in this thesis was guided by the case study methodology as explained by (Stake, 1995). Based on the issue statements and conceptual structure which guided the data collection methodologies, I prepared an interview guide for the focus group discussion and interviews. Then, data was gathered through four focus group discussions, each involving five survivor women, and four face to face interviews with health service providers. In addition, documents related to the 2015 earthquake along with national and local policy documents pertinent to the provision of health services were also reviewed. Observations of the physical context were done which further provided information about the context of the case. While gathering the data, the ethical guidelines of AUTEC and NHRC were followed and measures were taken to support parallel power relations with the women residing in the Nuwakot district. Collected data were transcribed in Nepali and were later translated into English. This case study used steps from the reflexive thematic analysis approach to gain an in-depth understanding of the phenomenon under study. The trustworthiness and credibility of the gathered and analysed data was maintained through data triangulation, prolonged engagement in the study setting, and with participants, member checking, and peer debriefing. The study findings are presented in the subsequent chapters.

Chapter Five Case Study Findings

Document Review and Description of Physical Context

The previous chapter discussed methods I used to gather data. This chapter provides detailed findings of the context related to the case, derived through document review and observations and description of the physical context.

Document Review

The initial section of the chapter begins with an introduction to Nuwakot district and its healthcare delivery system. It then highlights the context specific immediate impacts of the earthquake on the physical, psychological, and socio-economic wellbeing of women in Nuwakot. The review of the documents related to the immediate impact was carried out because of the relevance of the immediate impact to their longer-term wellbeing. This section then examines the changes that had occurred since the earthquake, focusing on the reconstruction of houses and health service sectors, and the development and implementation of policy initiatives. Furthermore, it also presents information from the review of documents related to constraints on effective healthcare utilisation by women in rural communities, by focusing on a Nepal government's strategic analysis of gender equality and social inclusion in healthcare. This strategic analysis particularly presents the barriers and facilitators for rural women in health care accessibility and utilisation.

Nuwakot District: An Overview

Nuwakot District, one of the 12 Districts of Bagmati Province, Central Nepal, covers an area of 1,121 km^2. Located approximately 70 km from the capital, Kathmandu, it is about six-hours travel by road from my hometown, Pokhara. The district has a population of 263,391 with females comprising 51% (NSO, 2021). Agriculture is the main source of livelihood, supplemented by income from family members working abroad. Nuwakot is known for its rich cultural heritage and hilly terrain, making it an important destination for tourism (Nepal Structural Diary, 2025). The district consists of 10 rural municipalities, two municipalities, and 88 wards in Nuwakot. About 58% of the population identify as

Hindu, and 20% of the population live below the poverty line. Men typically bear responsibility for earning household income through jobs or working abroad, while women engage in housework, cattle rearing and agricultural labor. The district faces limited access to advanced healthcare services, with people often traveling to Kathmandu for any specialized treatment. The district is highly vulnerable to natural disasters, particularly landslides during the monsoon, and was severely affected by the 2015 earthquake (Nuwakot Statistic Office, 2017).

The Healthcare Delivery System in Nuwakot

As discussed earlier in Chapter One (see Figure 10), the healthcare delivery system of Nepal also applies to Nuwakot. Public healthcare in Nepal is delivered through both government and private sectors. At present, in Nuwakot, there is one tertiary level provincial hospital (Trishuli Hospital), one district health office, three primary healthcare centres, 64 Health posts, 31 birthing centres, 4 urban health clinics, 172 Primary health care outreach clinics, and 1123 female community health volunteers. The Bidur Municipality, one of the two municipalities of Nuwakot, consists of the province hospital, six health posts, and four urban health centres. Healthcare is also provided through private hospitals and polyclinics; however, these are mostly located in urban areas (Nuwakot Statistic Office, 2017).

The hospital in Nuwakot, which was previously a district hospital, is now a tertiary level provincial hospital located in Bidur Municipality of Nuwakot. It is a 50-bed hospital that provides preventive, curative, and rehabilitative services to the people in Nuwakot. Besides the Nuwakot District itself, the catchment area of the hospital covers large areas of Rashuwa and Dhading Districts and the total patient turnover is more than 200 per day (Trishuli Hospital, 2024).

Health posts in Nuwakot are the first institutional contact point for providing basic health services to the local communities (MoHP, 2024). These community level health facilities only operate during office hours and significantly lack the trained healthcare professionals for comprehensive service delivery. Regular women's health services provided from the health posts are safe motherhood and maternal and child health services, safe delivery by skilled birth attendants (SBAs) in birthing centres, iron

distribution to adolescent girls studying in schools, and sanitary pad distribution to menstruating girls who attend school (Nuwakot Statistic Office, 2017).

Disruption to Nuwakot Health Service

Following the earthquake and after the promulgation of the new constitution in 2015, the healthcare service delivery systems have played a crucial role in delivering health services to the women residing in the Bidur Municipality of Nuwakot District However, up to 90% of all health facilities in Nuwakot were destroyed or seriously compromised (Basnyat et al., 2015). The single tertiary level 50-bed Trishuli hospital was fully damaged. Three weeks after the earthquake, only the emergency department was partially operational, while the indoor services and the outpatient department were still not fully nonfunctional. Additionally, many of the primary healthcare centres, health posts, and sub-health posts have been completely damaged. Table 3 below identifies the damage sustained by the health services centres (OSOCC, 2015).

Table 3

Number of Health Facilities reported as Damaged in Nuwakot

Facility Type (Total)	Fully damaged	Partially damaged
Hospital (1)	1	-
Primary Health Care Centre (6)	-	1
Health Post (52)	30	20
Ayurvedic Facilities (8)	6	2

Note. This table was reproduced from Onsite OSOCC Assessment Cell, Nuwakot District Profile. The OSOCC assessment cell also produced this data based on secondary data from multiple sources, including the Government of Nepal, UNDAC, United Nations Agencies, non-governmental organisation and media sources. [Adapted from] Nuwakot District Profile, OSCC Assessment Cell, 2015. [In the public domain]

The Immediate Impact of the Earthquake on Women of Nuwakot

The Government of Nepal conducted a post-disaster impact assessment from May to June 2015 in the 14 most affected districts, including Nuwakot. This mixed method post-earthquake study used survey and focus group discussion seven months post-earthquake and assessed the impact of the earthquake on socio-demographic determinants of health and wellbeing (CDPS, 2015). Given that initial experiences shape

long-term wellbeing outcomes, the immediate impacts on women identified in these assessments are examined below.

The Earthquake Was a "Hard Hit" in Nuwakot

The April 25, 2015, earthquake severely affected 14 of Nepal's 77 districts, resulting in 8,864 deaths and 21,156 injured (Karki et al., 2016). Nuwakot was among the hardest-hit districts with 1,112 fatalities, 57% of which were female. Government estimates indicated that 93.3% of households sustained complete destruction and required full reconstruction, while remaining structures were partially damaged .

The Life of Women in Temporary Homes

Because households were fully destroyed by the earthquake, affected populations resided in makeshift tents, often accommodating 30-40 people per shelter, due to the severe housing shortage (OSOCC, 2015). Later after 2-3 months, the survivors were shifted to galvanised shelters; each family comprised one temporary home. However, the shelters were not enough for the joint families which is common in rural Nepal. Seven months after the earthquake, 65% of temporary dwellings remained inadequate, increasing disease transmission risks. Women encountered higher psychological stress due to overcrowding, lack of privacy, poor access to water, sanitation, and hygiene facilities, combined with food insecurity (CDPS, 2015). This was further evidenced in the researcher's master's thesis findings, which documented that even ten months after the earthquake, many survivors were still residing in temporary zinc galvanised shelters and animal sheds, with reconstruction efforts yet to commence (Adhikari Baral & K.C, 2019) (see figure U5 in Appendix U).

Food Stock and Livestock Losses and its impact on Livelihood

As discussed earlier, families in Nuwakot rely highly on agriculture and food stocks for their livehood. The earthquake caused substantial losses in food stocks and livestock. Stored food supplies were only sufficient for a few months. Post earthquake, only 28.8% of survivors achieved year-round food sufficiency from agricultural production, with women-headed households experiencing the highest food insecurity. Coping mechanisms included consuming less preferred foods and borrowing from social

networks such as relatives from other cities and some supplies from Non-Governmental Organisations (NGOs) and International Non-Governmental Organisations (INGOs) (OSOCC, 2015).

Impact on Education, Employment and Occupation

After the earthquake, for approximately two months, all schools in affected districts including Nuwakot was closed by the department of education. While the schools started operating temporary structures, parents had continuous fear of aftershocks and safety concerns (CDPS, 2015). Additionally, the focus group discussion of this mixed method study report by Central Department of Population Studies (2015) revealed that Nuwakot and three other districts reported increased labour migration, especially male family members, to address financial hardship. This necessitated bank loans for travel, which further compounded the economic burden. Females who were left behind to care for families faced additional burden of care responsibilities during this crisis period while schools were closed (CDPS, 2015).

The Gendered Impact of the Earthquake on Women and Girls in Nuwakot

In line with literature findings pertinent to Nepal after the earthquake, there were increased gendered risk among women and girls in Nuwakot immediately after the earthquake. The key findings of the government's needs assessment highlighted that inadequate water, sanitation, and hygiene (WASH) facilities posed challenges for menstruating women and girls (OSOCC, 2015). While trafficking of poverty-driven girls to India was already documented in Nuwakot in 2013; following the earthquake, trafficking risks intensified due to the economic burden, compounding pre-existing vulnerabilities (OSOCC, 2015). Approximately 62% of female respondents reported feeling insecure while sleeping in temporary shelters or damaged homes, with 32% experiencing difficulties during menstruation and while changing clothes. Among 3,000 households, 8.9% reported gender-based violence post-earthquake (CDPS, 2015).

Impact on Maternal and Child Health Services

In Nuwakot, maternal and child health services were severely compromised. Following the earthquake, after seven months, antenatal visits had decreased compared to pre-

earthquake levels, and only 6.7% of 126 pregnant women from affected districts secured adequate rest space and warm clothing. Many could not access post-natal follow-up care due to health facility damage (see figure U8 in Appendix U). Findings also revealed that some women delivered their babies in cattle sheds which posed risks to both mother and children (CDPS, 2015). Pregnant and postnatal women received inadequate nutrition, as they had to rely on biscuits and noodles with low nutritional values. Delayed housing reconstruction forced postnatal women and newborns to endure harsh winter conditions in tents, compromising timely medical treatment, delivery care, and newborn support. Routine childhood immunisation services were also disrupted (CDPS, 2015).

In 2023, Nepal experienced another significant earthquake; this time, the epicentre of the earthquake was in Jajarkot District, which is like Nuwakot District in terms of its geographic and demographic composition. The earthquake occurred eight years after the 2015 earthquake, however, the impact of this earthquake on women was similar. The post-earthquake needs assessment survey conducted in Jajarkot highlighted that women faced heightened vulnerabilities, including limited access to hygiene facilities, shelter, and protection services. Findings revealed that no gender-specific relief or support mechanisms were implemented (Giri et al., 2024; Reliefweb, 2024). Although needs assessments are carried out in every disaster context to inform disaster response and recovery planning, gaps in policy implementation remain evident. This underscores a recurring challenge in translating gender-sensitive assessment of needs into actionable and sustained support for women in disaster contexts.

Nuwakot Health Sectors and Housing Reconstruction After the Earthquake

Various international projects helped the Nepal Government to improve long-term disaster resilience by financing the construction of health facilities. As per the report by the National Reconstruction Authority, about 1200 health institutions needed full reconstruction after the earthquake. The UNDP worked closely with the Government of Nepal, offering both technical and financial support for reconstruction efforts in Nepal's most severely affected regions as part of its recovery initiative (UNDP, 2018).

Hospital Shifts from Tarpaulin Tents to a Prefab Building

Before the earthquake, Trishuli Hospital was the only Tertiary level hospital in Nuwakot which provided a range of services, including preventive, curative, and rehabilitative care, across 19 blocks. Among these blocks, 14 were destroyed by the earthquake. The remaining five blocks required major repairs (Trishuli Hospital, 2024). Since reconstruction was slow, the hospital, which initially operated under tarpaulin tents immediately following the disaster, continued the services from its temporary set-up for fourteen months. During this period, essential health services, including emergency care and inpatient services, were delivered through the tents and in parts of the damaged building (Timsina, 2017). Notably, Trishuli Hospital was the first among those with total structural collapse to move from a tarpaulin shelter to a permanent, prefabricated facility (The Kathmandu Post, 2016). This prefabricated building was constructed through a collaboration between the German INGO and the Ministry of Health. The new, 17-room facility primarily focused on maternal and child health services, including a birthing unit, labor room, delivery room, neonatal stabilization room, pre-and post-natal rooms, and an autoclave unit (Trishuli Hospital, 2024). As such, the primary emphasis during reconstruction was focused on providing services for women and children.

Trishuli Hospital Reconstruction: "Building Back Better with Better Services"

Nepal's reconstruction strategy for health infrastructure after the 2015 earthquake was started with the theme of "Building Back Better with Better Services". For the health service sectors, it was not just about building stronger, earthquake-resilient structures but also providing better services. The hospital was constructed with the help of the South Korean Government under the Project- "Post-Disaster Health Services Recovery Program in Nuwakot." It took about seven years after the earthquake for the Trishuli Hospital of Nuwakot to be built back better to provide service from its permanent earthquake-resistant building. The national daily online news portal Spotlight Magazine reported that the then Health Minister inaugurated the newly constructed District Hospital Nuwakot on 2021, December 6; six years and eight months after the earthquake. The Government of the Republic of Korea officially handed over the newly constructed Trishuli District Hospital to the Nepal's Ministry of Health and Population on the Nuwakot Hospital premise at the end of 2021 (New Spotlight Online, 2021).

Housing Reconstruction: "Baliyo Ghar"- Strong House

In addition to the reconstruction of health service sectors, housing reconstruction became a top priority for the Government of Nepal following the 2015 earthquakes. The “Build Back Better and Safer” approach was specifically for housing reconstruction (Karki et al., 2022). The Government of Nepal implemented this project through the National Reconstruction Authority. The finance was managed by the World Bank through a multi-donor trust fund. This approach enabled other development partners to pool resources and undertake foundational work such as a housing damage survey and implementation of an owner-driven approach to housing reconstruction (World Bank Group, 2020). The owner-driven support means the families who lost their homes in the earthquake would receive partial financial support with technical guidance on how to build an earthquake-resilient house.

This owner-driven approach adopted by the National Reconstruction Authority was coordinated with international non-governmental organisations to implement the “Safer Housing Reconstruction” initiative. Under the “Build Back Safer” theme, the United States Agency for International Development (USAID) contributed $23 million to support the development of earthquake-resilient housing (USAID, n.d.). National Society for Earthquake Technology-Nepal (NSET), developed and implemented this five-year project to provide training and technical assistance to construction professionals and homeowners in Nuwakot, Dolakha, and Dhading Districts (USAID, n.d.).

The Government of Nepal provided grants of NRs.300,000 (approximately US$ 2200) per household for fully damaged houses and NRs. 100,000 (approximately US$ 750) for seismic strengthening of partially damaged buildings. Grants were distributed in three tranches: first upon agreement; second after the foundation and base floor were completed; and third, upon construction completion. A total of $9.6 million was contributed by USAID Nepal to the World Bank's Earthquake Reconstruction Multi-Donor Trust Fund. This fund supported the government-led beneficiary eligibility assessment and cash grant distribution. Beneficiaries were the households that had been assessed for damage and confirmed eligible for reconstruction (USAID, n.d.).

For each family, bank accounts were opened for first tranche deposits. However, cash withdrawal proved problematic, particularly in remote areas, where long queues caused delays of several days. The overall process of applying for and accessing the grant was cumbersome and exhausting (Karki et al., 2022). Additionally, the government grants were insufficient to start and complete reconstruction, and beneficiaries lacked access to low-interest loans. Remote areas faced additional challenges including high transportation costs, skilled labor shortages, and increased wages. Thus, several beneficiaries were unable to construct their houses (The Asia Foundation, 2024). Those survivors who were elderly and living separately from their children, people without stable sources of income, extremely poor households, single women-headed houses, and people with disability lagged behind in the reconstruction process. For these vulnerable groups, NGOs later provided an added top-up grant of Nrs.50,000 approximately US $375 to support the completion of housing reconstruction (Karki et al., 2022). While most beneficiaries intended to use grants for reconstruction, some diverted funds to daily expenses. Nevertheless, in Nuwakot, 92% of beneficiaries used reconstruction funds to build houses following the “build back safer” models by National reconstruction authority and supporting International non-governmental organizations (The Asia Foundation, 2024).

The Progress of the Health Sector After the Earthquake

Improving Equitable Health Services

In 2015, after the earthquake, MoHP, Nepal developed the Nepal Health Sector Strategy (2015-2020) based on an evaluation of the progress of health service sectors, to guide the design, management, and implementation of health sector programmes for the next five years (Ministry of Health and Population, 2020). The vision of the MoHP’s (2020) Strategy was “all Nepali citizens have productive and quality lives with the highest level of physical, mental, social, and emotional health” (p.1). This reflects the government’s prioritization on holistic wellbeing for people, including those who were severely affected in the aftermath of the earthquake.

The evaluation report highlighted that, while the country was recovering from the earthquake and making progress towards federalism as explained in the Chapter One,

the COVID-19 pandemic deeply affected the overall management of the health sector and its functions. The report showed that until 2021, some of the reconstruction work was completed with support from NGOs and INGOs were completed. This included the Nuwakot District Hospital and prefabricated structures at 10 health posts in Nuwakot as discussed earlier. However, seven years after the earthquake, the reconstruction of health centres in Rashua, Dhading, Sindhuli, and Makwanpur districts were still ongoing. This highlights how the support of the INGOs facilitated the early reconstruction of health facilities in Nuwakot (World Bank Group, 2020). However, even after the reconstruction was completed, the COVID-19 pandemic and response measures, such as nationwide lockdowns, affected the continuous delivery and utilisation of routine health services in 14 affected districts by earthquake including Nuwakot. Though systemic challenges persist, the current situation has gradually improved, ensuring access to essential healthcare services, especially for remote and rural communities (MoHP, 2024).

Post-earthquake, health services mostly improved in terms of maternal and child health provisions (MoHP, 2020). The number of service delivery sites increased with 620 community health units and 613 urban health centres. Similarly, basic emergency obstetric and newborn care sites were running at all health posts and primary healthcare centres and in 92 comprehensive obstetric and newborn care sites in 72 districts. About 3.3 million people among the 29.6 million population were enrolled in health insurance schemes. An important initiative was the introduction of OCMCs in 77 hospitals in 74 districts, including Nuwakot (as discussed in detail in Chapter One) for counselling and providing support services to the women suffering from gender-based violence. Additionally, social service units were set up in 44 hospitals, and geriatric care in 24 hospitals (MoHP, 2020).

However, many challenges were noted in improving equitable health services for the people after the earthquake. Geographical barriers continued to put constraints on operating comprehensive emergency obstetric and neonatal services in remote and difficult areas. For women, the continuation and utilisation of safe reproductive health services including family planning and maternal health, remained low in the COVID-19

context because of the fear around virus transmission, the lockdown, and restricted mobility (MoHP, 2020).

Current Situation of Healthcare Services after Earthquake and Federalism

As stated earlier in Chapter One, Nepal transitioned to federalism by adopting a new constitution in 2015, bringing many a shared sense of optimism and hope after a decade of political instability, an earthquake, and the border blockade between India and Nepal. Once federalism was introduced, local governments started delivering primary health services under the municipal health offices or the rural municipal health offices. Accordingly, the MoHP, Nepal (2019) formulated the National Health Policy which clearly defined what health services would be offered by the federal, state, and local levels as per the constitution. However, the National Health Policy analysis report suggested difficulty in terms of the quality of services, introducing new initiatives, and employing people with the required technical skills (MoHP, 2020). The key challenges for effective implementation of the National Health Policy are summarized below:

Challenges in National Health Policy Implementation

The important challenges in availing quality health services at all levels in federal Nepal include financial constraints, the lack of people with sufficient skills, the country's topography, and the unavailability of modern equipment and specialised doctors. Additionally, the increase in prevalence of communicable and non-communicable diseases, malnutrition, accidents, and disasters generated by globalisation and changes in lifestyles and dietary habits has hindered effective service delivery. An additional challenge faced by health service sectors is to reduce the level of out-of-pocket expenditure for healthcare. There have been challenges in setting up and operating health institutions in line with the federal system. There were barriers in the effective implementation of the health insurance policy, management of skilled human resources, and maintenance of good governance in overall health sectors through regular monitoring and regulation (MoHP, 2020). Consequently, rural women such as those in Nuwakot faced heightened challenges in accessing and utilizing services.

The Barriers to Accessing and Utilising Health Services for Women in Rural Nepalese Communities

The gender equality and social inclusion strategy of the Health Sector report by (MoHP, 2018) found two key factors for improving healthcare utilisation and wellbeing of women in Nepal. The first principal factor was social inclusion, which, at the time, would have required structural, systemic, and cultural changes to make health services more accessible and fairer to women. The next change the report suggested was women's empowerment in the context of the patriarchal structures that are common in Nepal. The report also highlighted the significant barriers to women's access to health services in rural Nepal, categorized into a) the supply-side, which meant systemic fragility in the service side, and b) the demand-side meaning the barriers women directly experience.

Supply-side constraints include poorly located and inaccessible facilities, shortages of qualified staff, irregular service hours, long waiting times, weak referral systems, and inadequate clinical and sanitary standards, along with discriminatory staff attitudes and poor communication. Demand--side barriers stem from difficult terrain, limited transport and high travel costs, low health literacy and limited information, household financial constraints;- especially women's restricted control over resources and sociocultural norms requiring family approval, compounded by stigma and low -self-esteem (MoHP, 2018). While the report broadly addresses barriers faced by rural Nepalese women, these constraints are similar in the context of Nuwakot's rural villages, where entrenched patriarchal norms and systemic fragility worsen the inequities in healthcare access and utilisation.

Nepal's Preparedness for Future Disaster Response and Management

Role of District and Local Disaster Management Committee

According to the Disaster Risk Reduction and Regulation Act 2017, a district and local disaster management committee is formed at each district and local level for the emergency and long-term response to any disaster. The key responsibilities include the provision of regular training on disaster management to local-level officials, employees, volunteers, social mobilizers, and communities. The key function also involves raising awareness at ward levels for all communities, formulating disaster-related plans and

programs in coordination with district and national-level policies, and mobilizing for an immediate response after disasters. One of the most principal functions of the committee is to conduct regular drill exercises for future disaster response and develop an information system on disaster management and early warning systems at the local level to make them operational (MoHA, 2019a).

Health Sector Future Disaster Preparedness

Every year, natural disasters and public health emergencies invite greater challenges to the health sectors. In 2015, the post-earthquake response stretched the capacity of the health sector exposed certain limitations in health systems and capacity, especially regarding emergency preparedness and disaster response. The country's disaster readiness lacked adequate preplanning. During the earthquake, the health facilities were overloaded with patients. Moreover, damage of health facilities caused significant lack of space causing delay in post-earthquake rescue. One of the important drawbacks was the lack of training relating to effective and appropriate health service delivery in post-disaster scenarios. This was demonstrated in survivors accounts who complained about the delayed response of the government in the immediate rescue, safe demolition of damaged houses, and timely reconstruction of damaged infrastructures. The health workers pointed out the need to maintain a stock of basic logistics and a proper workforce for dealing with emergencies (Karki et al., 2016).

To summarize, Nepal continues facing significant challenges from major disasters, such as the catastrophic earthquake of April 25, 2015. As a result, long-term and sustainable efforts are essential to tackle the risks of earthquake hazards in the country. It is crucial for the government and other stakeholders to allocate substantial resources and effort towards preparing for and responding to both anticipated and unforeseen emergencies. Addressing these issues now will help prevent the human and economic costs of inaction from becoming severe, unmanageable, and costly.

Description of the Physical Context of Nuwakot district

This section describes the physical context of the data collection site, specifically Wards 2 and 3 of Nuwakot district. Initially, I am providing a reflection of my initial visit to Nuwakot during my Master of Nursing data collection. Next, I am providing an overview

of how I started my trip and secured accommodation for my data collection period of my doctoral Thesis. This will be followed by an overview of the physical context of Wards 2 and 3 of Bidur Municipality, including the geographical terrain and housing. It then describes the health facilities and key services delivered to women of Nuwakot following the earthquake and during the period of data collection for this case study.

Reflection on Field Visit to Nuwakot for Master's Thesis (2016)

Before moving forward to the context of data collection of my doctoral thesis, I want to briefly reflect upon my field visit in Nuwakot during my master's thesis data collection, which took place approximately ten months after the devastating earthquake in February 2016. At that time, the impacts of the earthquake were still deeply visible. Most houses were damaged, and many families were living in temporary metal shacks (see Figure U5 in Appendix U). Some people were sheltering in cow sheds, as the small temporary house was not enough for the big families. I also experienced spending the night on one of these sheds during my data collection time. The historical Nuwakot Durbar (Nuwakot Palace), built in the 18th century, was also destroyed by the earthquake (see Figure U1 in Appendix U). Housing reconstruction was not started for the survivors, and the families sustained poor living standards in temporary housing. This experience shaped my understanding of the region's vulnerabilities and resilience, and it deeply influenced the way I approached my current research. The following sections describes the built environment I observed during my stay in the data collection setting, highlighting the geographic contrasts between the urban and rural valleys, and the varying levels of accessibility to healthcare and other facilities.

Description of Field Visit to Nuwakot for Doctoral Thesis (2023)

Overview of my Visit to Nuwakot

Nuwakot is approximately six hours by vehicle from my hometown, Pokhara city. Since I was traveling to a rural valley, my husband accompanied me on this field trip as a source of support.

During the field research, I reconnected with some community members I had interacted with during my visit for my master's thesis and during my community

consultation while preparing for data collection for the present study. These established relationships facilitated my stay at Nuwakot during the data gathering period. We were able to find suitable accommodation near the data collection site. I resided in a hotel of Bidur municipality during the participant recruitment and data collection phases. Recruitment took place from 8 to 14 May 2023, followed by data collection from 21 May to 5 June 2023. Since the timing of the visit was in pre-monsoon season, it brought unpredictable weather patterns, with frequent rains and muddy roads. While the conditions were occasionally challenging, they did not affect the scheduled timings for the focus group discussions and interviews.

The Built Environment

Bidur Municipality comprises 13 wards. The women who participated in this study are from wards 2 and 3. In ward 2, households in the valley near the municipality office are in a developed urban area characterised by flat terrain. These homes are close to both government and private hospitals and benefit from well-paved roads and accessible public transportation (see Figure U12 in Appendix U). An urban health centre serves as the primary facility for delivering basic healthcare services to the local population. The houses in this urban area are predominantly modern concrete structures.

The hilly belts of Bidur Municipality had houses with a blend of traditional and modern features. On the way, I could visit the region's most popular historic place Nuwakot Durbar Square- a historic palace constructed prior to the unification of Nepal and locally known as the Saat Tale Durbar, meaning "Seven Storied Palace." The palace remained under reconstruction at the time of my visit, eight years after the disaster (see Figure U1 & U2 in Appendix U).

In Ward 2, I saw that several homes had been reconstructed in clustered settlements following the earthquake. Most of these houses featured red-colored roofs made of galvanised zinc sheets, creating a visually cohesive housing style across the community. When I asked about the reason for this uniformity of the houses, an FCHV explained that a local development committee, dedicated to preserving heritage near Nuwakot Palace, proposed naming the village "Sampada Village," meaning asset, as a symbol of unity and cultural preservation. While seeing the community, I felt that this consistency in housing

not only enhanced the aesthetic appeal of the village (see Figure U4 in Appendix U) but also reflected social cohesion and a shared sense of identity among the people.

During the participant recruitment phase, accompanied by one of the FCHVs, I had an opportunity to visit the community and meet them in person, which offered valuable insights into women's daily lives, responsibilities, and local traditions. I personally met potential participants and distributed the recruitment flyer and information sheet. During this time, the women in the community were very welcoming. As part of the local tradition of hospitality, women offered us tea and some snacks, which is a customary gesture of welcoming guests in Nepalese communities.

While observing the surroundings, I noted that many houses had been built after the earthquake. Outside each house was a toilet, a cowshed, and a small kitchen garden where families were cultivating seasonal vegetables (see Figure U4 in Appendix U). Many of the families had male family members working outside the valley, leaving the women primarily responsible for caring for children and elderly family members, attending to livestock, growing vegetables, and managing household tasks. Overall, cattle rearing was a common practice among all the households of Nuwakot District. Every family raised cows, goats, and chickens (see Figure U7 in Appendix U). Cooking for family members and caring for livestock was an important responsibility of women in the community.

The houses were scattered across the landscape, with large stretches of farmland in between. Seasonal crops were growing; however, much of the farmland was empty. Data collection took place during May-June, which is the season for rice plantation, meaning that the fields were being prepared for rice sowing. Comparing and reflecting about the settlements with my previous visit seven years earlier, I recalled that many women had been living in small metal shacks, which seemed very inconvenient and uncomfortable for them. In contrast, I perceived that the reconstructed homes now provide significantly improved living conditions for women and their families (see Figure U4 & U5 in Appendix U).

Roads and Transportation

During my field visit for the present study, it was noted that the main road connecting various wards to other parts of Nuwakot and neighbouring districts was paved. However, many local roads remained unpaved, consisting primarily of mud and gravel. These roads are particularly challenging during the rainy season in Nepal, the period of my visit, as they became muddy and slippery (see Figure U14 in Appendix U).

Access to regular public transportation was limited, especially for residents in the hilly regions, where only two to three public buses were operated daily within that route. A health post was generally located within a 30-minute walking distance for most households. However, the nearest hospital was approximately one and a half hours away on foot. Even reaching the health post posed difficulties due to the poor road conditions, which worsened during the rainy seasons (see Figure U10 and U14 in Appendix U). Comparatively, Ward 3 was slightly more developed than Ward 2 in terms of housing and geographical infrastructure. The main road in Ward 3 provided access to the district hospital and was serviced by buses at regular intervals.

Accessibility and Availability of Health Services

Bidur Municipality comprises a tertiary-level district hospital which is the only government hospital in the entire Nuwakot District. During the fieldwork, I visited the government hospital, health posts and urban health clinic in Wards 2 and 3.

The hospital had been reconstructed following the damage caused by the earthquake, The final construction was completed only in 2021, after 6 years of earthquake. Emergency services are available 24 hours a day (see Figure U9 in Appendix U. The hospital also offers various outpatient department (OPD) services focused on women's health, including treatment for general physical conditions, reproductive health, and mental health issues. In-patient services are available for both men and women requiring hospitalisation. Additional services, including laboratory services, radiological and ultrasound imaging, and maternal and child health services such as family planning and childhood immunisations. I also noted that access to the hospital and its services was relatively easy for people living within the valley. However, for those living in remote

hilly areas with unpaved roads and limited public transportation options as described earlier, accessing health services was significantly more difficult.

The health post in Ward 2 was also reconstructed following its destruction in the 2015 earthquake. From the hotel where I lived during data collection, the health post was approximately a 20-minute walk via a muddy, unpaved gravel road (see Figure U10 and 11 in Appendix U). The facility included a medicine dispensary staffed by one Community Medical Assistant and one Auxiliary Nurse Midwife who handled patient records and dispensed prescribed medications. These medicines were provided free of charge, sponsored by the Government of Nepal. An outpatient department (OPD) was also operational, and patients were examined by a community medical assistant. Registered General Practitioners were only available in the hospital.

The facility included a birthing unit for conducting normal deliveries, although this service was only available during the daytime only. A laboratory was also present, staffed by a laboratory assistant; however, it was temporarily non-operational due to a shortage of essential supplies and reagents as mentioned by the accompanying FCHV. While general services and medications were free, laboratory tests incurred affordable fees, as the lab was managed by the local government based on community needs. Additional services included a room for maternal and child health, family planning, and childhood immunisations.

Despite the relatively large infrastructure of the health post, what I found was that, in line with MoHP's (2020) report on progress on Health and Population Sector 2019/20, the health post offered limited services due to constraints in staffing and resources. This highlighted the gap between physical infrastructure and service delivery capacity in rural healthcare settings.

Chapter Summary

This chapter has presented the contextual background necessary for an in-depth understanding of the case. Following the earthquake, the Nuwakot community received housing and health service reconstruction aid from government and international non-governmental organisations; however, reconstruction took considerable time to

complete. Comparatively housing reconstruction had improved living conditions of women in terms of safety. Comprehensive health services were available through district hospitals while basic health care was provided at local health posts. However, people living in the hilly areas were found to have faced challenges in accessing and utilising these services due to limited public transportation, poor road conditions, distance, and costs. The next chapter will present detailed findings from focus group discussions conducted with survivor women.

Chapter Six Case Study Findings

Focus Group Discussion

This chapter presents the findings from focus group discussions conducted with women who survived the 2015 Nepal earthquake. The analysis draws on their perspectives to address the research questions: What were women's initial experiences of the earthquake, and how have they been influenced in the long-term following the disaster? The chapter begins with an overview of the demographic characteristics of participants, followed by presentation of the major themes and subthemes constructed through the analysis.

Demographic Characteristics of Participants

The first phase of the study involved four focus group discussions with 20 women who survived the 2015 Nepal earthquake. Before starting the discussion, demographic information about the participants was collected. The age of women ranged from 25 to 65 years. Most of the participants (18) were married; one was a divorced single mother, and one had never been married. Among the 18 married women, 11 were living with their husbands. The remaining seven reported that their husbands were working away from home- three in another city and four abroad. Of the women living with their husbands, five stated that their husbands were engaged in jobs or daily wage work. Husbands of two women ran their own businesses, a cafe, and a grocery store, while four were primarily involved in agriculture.

When asked about their current occupation, fifteen women said that they were homemakers and relied on their husband to provide for the family. However, some of these women were also engaged in small-scale household farming and animal rearing, such as cows, goats, and hens. Three women identified agriculture as their main occupation, and one helped her husband in running a coffee shop. Eleven women were living with the wider family, in a multi-generational household. All women aged 40 and above lived with their children and grandchildren, while those aged 20-39 typically lived with their elder in-laws and children. Nine women lived in nuclear families. Literacy levels varied according to age groups. Most women aged 40 and above could not read

or write, while those aged 20–39 had received some formal education. In total, six women had no formal education, nine had basic education (grades 1–8), and five had completed secondary education (grades 9–12). About their religion, 19 participants identified themselves as Hindu and one as Christian.

The Findings from Focus Group Discussion

The thematic analysis of the data from the focus group discussion resulted in the following five major themes and subthemes:

Earthquake Experiences: Initial Trauma and Suffering

- Surviving near death experiences
- Witnessing the destruction and braving the risk
- Life in temporary homes
- Burden during housing reconstruction
- Neglecting health needs
- Carrying the load of added responsibilities
- Grappling with menstruation
- Fearing pregnancy outcomes

Women's Perception of Current Wellbeing

- Multiple fears and concerns in managing health
- Women employed holistic approach in shaping wellbeing
- Improved housing and living conditions shaped positive wellbeing
- Women have enduring fear of recurrent disasters and possible consequences
- Long-term burden on women and families as they lost their occupation

Post-disaster Adaptive Strategies

- Power of community
- Power of spirituality
- Problems are part of life
- Cultivating financial management among women

Practical Accessibility of Health Services in Promoting Wellbeing

- Delays in accessing the health services
- Women's reliability on private health services
- Understanding the health insurance
- Expecting better health services

Fear and Uncertainty on How to Act in a Future Earthquake

- Earthquake awareness and safety precaution needs
- Concerns on immediate response needs in disasters

Earthquake Experiences: Initial Trauma and Suffering

The 2015 Nepal earthquake caused immediate impacts on women's physical, psychological and social wellbeing. At the time, almost all households were destroyed, women had traumatic experiences related to injury to themselves and/or to family members. Women were also traumatised by closely seeing relatives, friends, and neighbours die. Life while living in temporary homes was miserable, as they struggled with managing basic needs. Eight years later, these ordeals remained vivid in women's minds. Women conveyed their sufferings as if the earthquake had happened recently, with every misery still fresh, suggesting that the traumatic incident had long-term influences on women's wellbeing.

Surviving Near Death Experiences

When the focus groups were held, it had already been eight years since the 2015 earthquake. However, the event was still fresh in minds of all the survivor women. Most said that during the earthquake they had been close to death and explained their feelings about surviving the disaster. One 26-year-old woman described her traumatic experience of being buried by the earthquake:

> *I was buried, semi-conscious, not fully asleep, but not able to get up, not even able to think. People who rescued me said that they had not expected me to be alive when they took me out... When I was conscious and looked around, the houses were all destroyed, some were broken, some completely collapsed, and the road also collapsed. I had a cut on my head. I was wearing a white dress; it was completely red with blood and dust was all around. That was a very dreadful time to remember. And at that time, I remembered that people used to talk that a big event will happen in Nepal and Nepal itself will be destroyed, and what struck in my mind was that today is the day that Nepal will be destroyed.* (FGD4, P2)

The above quote reflects the woman's fright of being alive, even whilst being so close to dying in the earthquake. She was severely traumatised by the event. She further detailed her long-term distress:

> *…. they dressed my wound, it took time to heal, the scar is still there, my body was hurting even later…. At that time, I was really stressed. Even now, when there is a small earthquake, I think it will cause harm, but to be honest, fear has lessened with time.* (FGD4, P2)

This woman's trauma continued for a long time after the disaster. Along with the scarring, which was a reminder of surviving the physical injury, the incident impacted her emotional health. Despite surviving, woman remained fearful of future earthquakes. Her fears were enduring.

The earthquake also caused suffering among women when family members were injured. On the one hand, women were relieved that, despite injury and damage to property, their families had survived the event. On the other hand, they bore the responsibility for taking care of their injured family members, all the while living in tents which were continuously rattled by aftershocks. A 48- year- old woman described her husband's severe injury and her suffering while caring for him:

> *My husband was severely injured when our village house, which was made up of bricks and wooden pillars, collapsed. I heard a voice saying "uh, uh" and he was my husband. Then, I screamed for help and with the help of two people, we took him out.... When my husband was taken out, everyone was saying he was no longer alive, I also thought the same, and then he was taken to hospital. That scenario is still fresh in my mind…both his hands were fractured, and he had injuries all over his body; more lacerations in his back. He had to lie in an upright position for about one month, until the wounds on his back were healed. I fed him soft porridge (jaulo) and soup until his recovery. Because of delayed treatment, the fractured hand is still mis-aligned.* (FGD2, P1)

When the earthquake happened, many of the village houses were old and made up of *itta* [mud bricks] and wooden pillars called as *kachi ghar [weak house] w*hich could not withstand the shaking, causing death and injury when they collapsed. This woman, as the primary caregiver, handled supporting her bedridden husband's feeding and hygiene for months. Despite efforts to ensure his survival, the mis-aligned fractured hand remained an ongoing reminder of the earthquake. The women sustained added workload and challenges caring for injured family members, with recovery being long and slow.

Witnessing Destruction and Braving the Risk

Although the women survived the event, they had seen the destruction from very near and had panicked for the safety of their family. While no participant reported that anyone in their immediate families had died, everyone said they experienced house

collapses, deaths of relatives, and property loss. Nearly all women described the incident as terrifying. A 65–year–old woman described her experience vividly as follows:

> *Our house was also fully damaged because of the earthquake…. All four sons were at work. At that time, my grandchildren were small; one grandson was only 5-6 months old. However, when we realised it was shaking because of the earthquake, we managed to come out of the house with the kids on time and did not let anything happen to them…. In our area, 4-5 people from same family had died and they were buried in their own house. It was near my home, and they were my relatives too. Also, my nephew and niece both passed away. It was very scary to see dead bodies.* (FGD3, P3)

Despite the emergency, and the situation being very scary, women prioritised the safety of small children and family over their own, striving to save vulnerable family members from harm.

Since the earthquake occurred on Saturday at midday, some women were working outside in their fields, and others were tending livestock. Women did not stand back in shock, thinking about their own safety, but rushed to ensure family members were safe. One participant ran to her collapsing house to save her child:

> *When the earthquake happened, my eldest daughter was five years old. I had gone to feed our farm goats in a nearby jungle. Suddenly I realised that the ground was all shaking, and trees were also shaking. At the same time, I saw that the nearby houses were collapsing because of the earthquake. I remembered that my daughter was alone inside the house. I panicked and rushed to my house. It took me 10-15 minutes to reach home. When I reached home, my mother had already taken my daughter outside. However, I felt like my heart was going to burst because of a panic attack and I felt severe stress.* (FGD1, P2)

The women in rural Nepal are multitasking with distinct roles and responsibilities. Besides caring for family at home, women work hard on farms, growing crops and tending livestock, typically leaving their children in the house. When the earthquake struck, women worried more about family than themselves. They were frightened for the safety of their young children back home and terrified about whether the continuous aftershocks had caused harm to them. The sudden destruction caused by the earthquake created terror.

Life in Temporary Homes

The initial trauma of women continued during their stay in tents and temporary shelters. Women in the focus groups mentioned having trouble finding a safe place to live after the earthquake. Some shared experiences living in cowsheds. When I visited Nuwakot nine months after the earthquake, many families were living in temporary shelters made up of zinc and some families were living in cowsheds (Adhikari Baral & K.C, 2019). Most women lost their family home and sought temporary housing so as to provide shelter for themselves, their children, infants, and older or sick relatives. However, women mentioned that they had trouble finding a safe place to live. In the following excerpt, one of the participants describes how she felt unsafe in tents and cowsheds:

> *There were more impacts during that time. We had to live in cowsheds, under tents as well as open yards. There was fear of tigers and thieves. We used to fear something might happen to us or to our family.* (FGD1, P1)

Until the women were provided with tents, they had to live in the open field, because there were continuous strong aftershocks and they could not go back to their damaged house to live in. Extreme weather exposure while living in temporary shelters worried women greatly in terms of safety and security risks.

While many of the participants shared the experiences of their grim life in temporary shelters after the earthquake, some women quite mentioned a different perception of living in temporary houses. One 50–year–old woman described feeling secure while living in the temporary house:

> *At that time, I thought it was okay to stay in a temporary house (tahara) made up of zinc. My old house was completely damaged with cracks all around and I was afraid to go inside the house with a feeling that something would fall again and make me injured. But in the tahara, it was a zinc roof wrapped all around. I always felt safe while sleeping inside that house instead of sleeping inside the damaged house.* (FGD3, P4)

The earthquake wrecked almost all of the households in Nuwakot. Even if the houses were not fully destroyed, there were cracks and damage in every home. Ongoing fear existed that the cracked houses could collapse anytime, causing injury or death. For women, staying alive mattered most, regardless of whether they had to suffer physically

or emotionally. Hoping to build better futures, women felt safer in temporary homes, thinking that it will not collapse when the aftershock happen.

Carrying the Burden of Housing Reconstruction

During the housing reconstruction women suffered challenges such as labour shortages and financial constraints. Many were compelled to shoulder the primary responsibility for demolishing damaged structures and rebuilding their homes, which intensified their workload and stress. This caused additional burden as highlighted by one 26-year- old participant in the focus group:

> *... we stayed under a tent for about two months and then stayed in a temporary shelter (tahara) for 2-3 years. Our house was severely damaged by the earthquake. Because of this, we had to demolish our damaged house and build a new one but there would be no people available to do the renovation work at that time.* (FGD3, P1)

After the earthquake, it took around two to three years for the women and their families to be shifted to their solid, earthquake- resistant house *(pakki ghar).* Women already responsible for managing basic household needs faced heightened burden of managing their home. This implied "double disaster" among women which worsened their sufferings.

The woman further described that the delays caused by financial shortages occurred because even though the Nepalese government had provided three lakhs Nepali rupees (approximately US $ 2200) for each family whose house was completely damaged by the earthquake, the money was not all provided at once:

> *…The money provided by the government is available in three different instalments…. for us who had a few savings, we could start foundation of the house until we got our first instalment, but it was difficult for those who did not have any saving to start building their house. Because of this financial problem, many people could not start building their house and they did not even get the amount of that instalment.* (FGD4, P4)

For many families, government funds were insufficient for reconstruction. Money was provided on an instalment basis. Since homeowners could not get money until showing foundation work started, arranging reconstruction money was difficult when many lost

jobs due to earthquakes and others were daily wage workers with insufficient savings (The Asia Foundation, 2024)

Neglecting Health Needs

The discussion findings revealed that after the earthquake, women were neglecting their health needs in many aspects. These were related to unavailability of adequate toilets, no bathrooms for regular showering; that posed the hygiene and sanitation-related risks. Additionally, there was a lack of safe drinking water due to the blockage of water sources because of the landslide followed by the earthquake. A 26-year-old woman who, was 18 when the earthquake described her experiences as follows:

> *There was a problem going to the toilet immediately after the earthquake. The toilet which we had before collapsed along with the house. So, we used to go outside in an open place until the temporary toilets were made. It was difficult for us to maintain privacy while bathing*. (FGD4, P2)

Young girls worried most about safety and privacy. Some woman used open fields due to toilet shortages, which was uneasy and uncomfortable.

Another important concern for keeping good health among survivor women during the immediate post-earthquake phase was the lack of drinking water. In Nuwakot, the earthquake directly destroyed the drinking water supply springs. In many places, water sources were affected by landslides, and later, water sources disappeared altogether (CDPS, 2015). Although commercial water jars were available in the shops, most families could not afford to buy them:

> *…. besides this, the water source was also contaminated because of the earthquake and later the source itself dried up…. our cooking utensils were all buried inside the house, even if we wanted to bring it out, there were recurrent aftershocks, and we were scared to bring it out. Therefore, we did not even think of boiling water. At that time, we only thought about saving our lives and filling the stomachs of our child (feeding our children*). (FGD2, P2)

Immediately after the earthquake, water containers were scarce, buried, or inaccessible. Given water shortages, and still in the face of danger, few even thought of water contamination risks. Throughout, women neglected their basic health needs both during and for extended periods of time after the earthquake posing health risks and sufferings.

Carrying the Load of Added Responsibilities

Right after the earthquake, household stocks for cooking were buried inside their houses. Women were stretched with the added responsibilities of finding and fetching food as well as carrying water from far, which was also physically demanding. Women also had taken care of their children, who were particularly vulnerable in the face of unstable surrounding. Caring for injured family members was yet another responsibility for women. These responsibilities put pressure on the women, who felt it was up to them to care and provide for everyone. One young woman aged 26 mentioned the added burden caused by unavailable food stuffs:

> *The houses collapsed along with our food stuff, sister[4]; there was nothing to cook. At that time, even if we had money, we could not buy groceries, as all the shops were closed, no one would open them saying that the earthquake will hit again, all the people who had shops here in the market had gone and lived in the common tent made in the school…. for a few days, the food that was in the house was sufficient. Later, it became more difficult*. (FGD4, P1)

Most Nepali women carry basic household responsibilities like cooking and caring for the older adults and children. For women, the roles and responsibilities became more complicated while living in the temporary houses. Additionally, fetching the water needed for drinking and cooking was difficult, time consuming and physically demanding:

> *Whenever possible, we went 2-3 km away to fetch water and brought it. You know, sister, it is not possible to buy water jars all the time because of our financial conditions. There is a place called Sinchaain, from there we brought drinking water.* (FGD2, P2*)*

The pre-established gender division of labour prevalent in Nepal continued in the aftermath of the earthquake (Bhandari, 2023). Women typically had worked at home being the homemaker, arranging food for family, and taking care of the family members. Most employment and their small-scale businesses halted post-earthquake, making it necessary for the husbands of the survivor women to work abroad earning for families,

[4] Sister- In Nepal, people respectfully call ‘sister’ to the nurse.

compelling women to continue caring for family members. Women carried additional load of responsibilities in absence of their husband which in turn intensified their sufferings.

Grappling with Menstruation

Among many communities of Nepal as well as in the Nuwakot district, menstruating women follow the *chuna- nahune* ritual (the untouchable phase) During this time, women do not enter kitchens, avoid preparing food, avoid touching water sources, and refrain from performing religious rituals such as entering temples and worshipping God (Budhathoki et al., 2018). Since their first menstruation, many women had continued to follow this ritual as their regular custom and norm. Most often older women followed these rituals very strictly. One 50-year- old woman described what it was like to menstruate while living in temporary housing:

> *Those days, there were many problems…the biggest problem was during menstruation. There was always the fear of being touched here or there in the house… on the same day that I was on my periods, I did not even have clothes to change, everyone inside and outside the house was crying, wondering if something had happened to someone. It was a very fearful emergency that happened [due to the earthquake].* (FGD3, P4)

Right after the earthquake, the daily life of affected women changed as they lived in temporary homes. However, following the custom was a priority among the survivor women. Those women who were having menstruation and living in temporary shelters were in continuous fear of being unable to keep their untouchable state. Women felt anxious that that there will be dire consequences if they do not continue these practices.

In addition to continuing their ritual of purity, menstruating women were challenged in maintaining their daily hygiene, meaning they often felt unclean. A 26-year-old young woman who was injured during the earthquake said:

> *I also suffered because of the earthquake, firstly I was injured in the earthquake, and it took time to heal. In addition, I got my period the next day. Before the earthquake, I had a separate room where I could rest and have some privacy. However, after the earthquake, we were living in a small temporary home. The whole family had to stay in the same room- father, mother, brother, which was awkward, especially during my periods. Another thing was that I could not even*

go to buy a pad, all the shops were closed, I used old clothes like pads, and it was very difficult at that time. (FGD4, P2)

This woman uncovered her frustrations when the menstrual needs overlapped with her physical injury. During her menstruation, she randomly used older clothes as pads. The privacy concerns and unavailability of sanitary pads caused additional stress for women preventing women from maintaining emotional stability. Moreover, inadequate hygiene and poor sanitation during menstruation increased the risk of reproductive health problems.

Fearing Pregnancy Outcomes

The initial suffering was intensified among the pregnant women as they had fears related to the outcomes for their unborn babies. Women worried about their fetuses' wellbeing and the possibility of complications caused by the earthquake. A 34- year- old woman who was pregnant during the earthquake reported her fear during and after the disaster:

After the earthquake, I was scared. I was two months pregnant, and everyone was telling me that the earthquake has hit so strong and because of its shaking, it will cause miscarriage. I was stressed and anxious. I was thinking that the miscarriage will occur today or tomorrow… or any other day. I was not sure about the normal continuation of my pregnancy. I could not sleep well because there were continuous strong aftershocks coming. And people used to say that when we were sleeping at the time of an earthquake, the risk of miscarriage increases, so I used to suddenly wake up many times. Again, after two weeks, there was a strong aftershock. At that time, I was sleeping and this time I felt like I would have had a miscarriage which caused me more stress. (FGD1, P2)

Pregnant women faced difficulties during the time of hardships. The woman who was pregnant during the earthquake shared facing continuous tension as she worried about losing her baby. Throughout her pregnancy and postnatal phase, there was continuous fear in her mind until the child was born and met all developmental milestones. Ongoing fear hugely influenced her emotional wellbeing during the entire pregnancy.

In conclusion, the theme discussed in this section captured the initial traumatic phase and the fears and sufferings of women while living in tents and temporary shelters. Women still vividly recalled their near-death experiences and witnessing the widespread destruction in their communities. They described how their sufferings were

unsurmountable, including managing life in temporary shelters, handling menstrual customs and rituals in crisis settings, and enduring inadequate, water sanitation and other basic needs.

Women's Perceptions of their Current Wellbeing

This theme highlights how women saw their wellbeing since the earthquake. Their wellbeing was shaped not only by major traumatic events but also by how they managed stress and rebuild their lives day by day. Women described living with constant concerns about their physical and emotional health, enduring fears about future disasters, and the added burden of ongoing financial stress from lost employment. However, improvements in housing and living conditions after the earthquake positively contributed to their sense of safety. The following sub-themes highlight women's day to day focus on wellbeing after the earthquake.

Multiple Health Concerns of Women

Eight years after the earthquake, the women in the focus groups described experiencing multiple fears and daily worries about managing their health, with health being predominantly related to physical wellbeing. A woman aged 48 years described her current health status as follows:

> *As for me, I am not healthy at all, there are problems everywhere in the body from head to toe, sister. Sometimes I have headaches, sometimes I have pain in my eyes, sometimes I have bone and joint pain, back pain, and stomachache, and these days, I am having breast problems sister.* (FGD2, P1)

The woman dealt with multiple symptoms without understanding their causes, considering herself healthy only when free from pain and discomfort. Her subjective understanding of being pain-free shaped her overall perception of health.

Some women attributed their current health problems to earthquake-related stress. A 55-year-old woman perceived that the stress after the earthquake has been the reason for various ill effects on her health she has been facing:

> *I was healthy before the earthquake, but after the earthquake, I started forgetting everything. Now and then I forget what I am going to say, and I also forget what I am going to eat, I forget where I am going, and I have some*

> *problems with my uterus... I feel very tired and weak every time…. I feel like every health problem that I have now has been caused by the earthquake. There was a lot of stress after the earthquake and the pressure [blood pressure] also increased, and the stress increased my forgetfulness*. (FGD3, P2)

Another woman also linked her skin problems to the earthquake:

> *When the earthquake happened, we were not able to take a clean bath… there were so many problems maintaining our hygiene… since then, I have been having skin problems, those herpes problems, and skin itching, I feel like it is all because of lack of hygiene at the time of the earthquake.* (FGD2, P5)

The perception of the ongoing symptoms to be related to earthquake induced stress suggest the long-term influences on physical health of women' wellbeing.

When asked about whether they discussed these concerns with health professionals, the women said that they had sought advice about these symptoms:

> *Yes, I did seek the advice, sister; the doctor simply said that these symptoms are not directly linked with the earthquake but yes, the lack of hygiene measures may be the cause. He gave me medicine for my problem. However, I still believe these are the after-effects of that time.* (FGD2, P5)

When women sought medical advice, healthcare professionals did not establish direct causal links, yet women maintained a strong personal belief that their illness is an after-effect of the earthquake.

The participants also described that, along with the physical impacts, they had to cope with the psychological impacts in the long-term because of the earthquake. Depression emerged as a major concern, as illustrated in one participant's account of her husband's situation:

> *After the earthquake, people were stressed, and many people went into depression… even my husband suffered from depression…. His business was stopped, and he felt like he could not do anything further. He would not sleep at night, so we went to the hospital for a check-up. There, the doctor said that it was depression, and he is still taking medicine for that problem.* (FGD3, P1)

The above data reveals the practical challenges faced by families directly correlated to the influence on the mental wellbeing of survivors in the aftermath of the earthquake. While the business was adversely affected by the earthquake, the woman's husband felt a sense of hopelessness about his inability to support his family, being the breadwinner

of the family. As a result, he suffered from chronic depression. This impaired family functioning caused long-term stress on women as they had to shoulder the family's responsibilities.

Women Employed Holistic Approach in Shaping Wellbeing

Participants also focused on holistic approaches to wellbeing after the earthquake. The findings highlight the role of social interactions, family bonding, and healthy lifestyle choices in shaping physical and emotional wellbeing of women. One woman aged 29 mentioned the role of family support in positively shaping her wellbeing:

> *I think, I am healthy physically, but mentally I am stressed… according to my feelings. If everyone is good to me and speaks politely to me, then I feel like I am healthy but whenever anyone in my family uses abusive words to me and scolds me, making a loud voice, I get tense, and I tend to think deeply about that matter. This brings up bad thoughts in my mind. I am afraid that my family is ignoring me, and I get the feeling that they will not look after me later.* (FGD4, P5)

The data highlights that this woman considered her physical health to be stable; however, her mental wellbeing is highly influenced by the interaction within her family and society. Her description of her experience of being the target of verbal abuse by family members, saying: "I get the feeling that they will not look at me later," signifies how women suppress their emotional conflict with the fear of being ignored or abandoned by her family. In rural Nepal, many women are homemakers, and those women who do not have independent work are dependent on their family to care for them when they grow old; as a result, conflict in the family can cause worry about being abandoned later.

Self-control and efficacy played an important role in shaping wellbeing, as shown by the following account:

> *About my current health status, what I feel is that I am neither healthy nor unhealthy, sister. My blood pressure is low from time to time, and there is a little mental tension, because of my housework. For this reason, I have been taking medicine for three or four months. And nowadays, I am controlling my mind by myself and do not need to take that medicine. However, I fear that something might happen at any time.* (FGD2, P1)

The data shows the interplay between the physical symptoms in woman and emotional stress of household responsibilities. The pre-existing gendered roles caused psychosomatic symptoms and ongoing distress among women. Even though woman developed personal coping strategies to overcome the stress, despite her efforts, anxiety still persisted due to previous experiences of traumatic events and fear of the incident occurring again.

In her description of the approaches, she performed to keep herself healthy, a 49 -year-old woman stated the key role of family support:

> *I have so many health issues, including sugar [diabetes mellitus] and pressure [high blood pressure]. But I pay attention to what I eat and drink, also I do yoga for an hour and a half in the morning. Also, everything is good at home and there is support from family, that is why my self-confidence is good and so is my health…. At my home, there are my sons and daughters-in-law, grandsons and granddaughters, and my husband is in Kathmandu for his work. Sometimes he comes to visit us and sometimes I go there.* (FGD2, P2)

The woman highlighted the importance of having good family support and increasing self-confidence in staying healthy. Being with family and maintaining a routine lifestyle was key for women's positive wellbeing. Her view was echoed by all other focus group participants that being with family acted as one of the protective factors in enhancing their happiness amidst the adverse conditions.

Improved Housing and Living Conditions Shaped Positive Wellbeing

After the earthquake, keeping good health was essential as well as challenging because of the destruction of houses and long-term living in temporary houses. However, after the reconstruction was completed, transitioning from temporary shelters to permanent, earthquake-resistant homes provided a safer, cleaner living environment, reduced fear, and supported the wellbeing of the women. This sense of improvement is captured in the following account by one of the participants:

> *During the earthquake, we had to live in a cottage, and the toilet was not maintained, but these days…. The main thing we considered was to make a concrete house (pakki ghar), although it is small, it has toilets, and the houses are better than before. We also pay attention to cleanliness so that we will not get any diseases, and we eat healthy food as well.* (FGD1, P5)

Prior to the earthquake, most houses were constructed with mud and stone *(kachhi ghar)* and lacked standard toilets. While women's accounts showed burden during housing reconstruction during immediate phase, post-earthquake reconstruction, although gradual, led to concrete homes (*pakki ghar)* with proper sanitation facilities. Women played a pivotal role in this transformation, actively ensuring that their homes remained clean and hygienic. This shift highlighted increased awareness and prioritisation of environmental cleanliness and its perceived link to health and wellbeing in the aftermath of disaster.

One woman considered housing reconstruction as a contributing factor to lessen her fear of earthquakes and her overall wellbeing:

> *Sister, the reason that fear is less than before is because currently, we have built an earthquake-resistant house. At the time of the earthquake, there were traditional old houses made of stone and mud, and the foundation was not that strong. When a strong earthquake hit, it destroyed houses at once. But now, we have reconstructed our house which is small but a concrete house (pakki ghar) and will not be affected by the shaking of an earthquake. Therefore, we believe that a lot of fear is now decreasing.* (FGD4, P2)

While the fear of earthquakes has not been entirely eliminated, women emphasised that the new homes, constructed with better structural approach to withstand the earthquake shocks, significantly reduced their anxiety. This implied the importance of safe housing not only for physical protection but also for supporting psychological wellbeing in post-disaster recovery.

Enduring Fear of Recurrent Earthquakes

Despite improved living arrangements, women were still worried about being affected by future disasters and were not reassured of safety from future events. The earthquake left unforgettable traumatic experiences that kept them anxious. One participant expressed concerns about possibility of another earthquake and its consequences:

> *At this stage, even if our house is a safe concrete house, I feel like there is no situation where we can be sure that nothing will happen if the same strength of earthquake hits again. Bad things happened then. These days, we also have lots of fear and so we are not sure about our safety…. Sister, we are afraid that these disasters will come along one by one and may cause havoc in our lives. It is not*

only a matter of only my safety, but I am also more worried that my family will suffer more if the earthquake happens again. (FGD3, P3)

The women were not fully reassured by the security provided by the newly built concrete houses. Fear was pervasive, extending beyond personal safety to family wellbeing, reflecting ongoing terror about potential successive disasters. Some participants recounted the experiences of such situations after the earthquake, suggesting some degree of post-traumatic stress symptoms, fearing dark days and rough weather:

I feel a little more scared after that incident, even today, I still fear it will happen again. Sometimes when the day is a bit dark, like the day of an earthquake, [because it was dark and rainy outside on the day of the earthquake], I feel like an earthquake might hit again. (FGD4, P5)

For mothers of dependent children, the psychological toll was even more pronounced:

Yes, I used to run away, too. Almost a year after the earthquake, my baby was born and since aftershocks were coming for about a year, I used to carry my baby and run outside in an instant, even if she was sleeping. The incident was very scary, and I still fear that. (FGD4, P1)

The woman continued to relive traumatic memories long after the event with persistent fear. The ongoing sense of threat, emotional distress, and hypervigilant behaviour, especially among mothers, illustrate how disaster-related psychological impacts extend over time affecting their wellbeing. Moreover, the concerns extended beyond self-to-family safety.

Long-term Financial Struggles

Along with the long-term physical and psychological influences, the earthquake's impact on employment created a lasting economic burden on women's families. After the earthquake, the financial struggles meant that husbands had to work abroad to meet family needs. This is what happed to a young woman aged 26 years who commented the following:

Before the earthquake, my husband was working abroad, but one month after the earthquake, he came to support and live with us and started this hotel business in our place, but the hotel did not run well, and the earnings were not enough. He explained to me that after having children, our expenses were also

> *increasing day by day, which could not be covered by earnings from the hotel. So, he went abroad again, and he is still in a foreign country.* (FGD4, P1)

In Nepalese communities, male family members have a keen sense of economic responsibility for their family, particularly considering the increasing financial demands brought on by raising children (Dulal, 2020). After the earthquake, the failure of their local businesses caused demotivation, compelling primary breadwinners to seek foreign employment, which created additional burdens for women through increased workload at home. Women were burdened by having to manage all aspects of family life and the upbringing of the children without having any assistance or shared responsibility.

In the following excerpt, a 50-year-old woman describes the long-term consequences of the earthquake on her family's livelihood, particularly the loss of their small business:

> *After the earthquake, my husband's business completely stopped. It was a very bad time…we had a money exchange business in Thamel [a busy tourist area in the capital city of Nepal], but after the earthquake, since the house was damaged, the business stopped… we continued paying rent for two years, but the business could not pick up…then he left and came here…. Since then, he has been doing nothing at home.* (FGD3, P1)

This identified the challenging long-term consequence of the earthquake for a family, from initially losing a business to subsequent economic hardships that families had to endure. Woman felt frustrated and concerned about the family's livelihood. Collectively, families experienced both financial and psychological distress, underscoring the broader socio-economic vulnerabilities that persist long after the immediate effects of a disaster have passed.

The earthquake also led to long-term disruptions in family dynamics, including increased substance abuse in some households, as illustrated in the following account:

> *Before the earthquake, my husband worked as a security guard. But he lost his job after the earthquake…. My husband was an alcoholic. However, he worked well before the earthquake. But after the earthquake, he started drinking more alcohol than before. He did not like going to work and lost his job. He continued drinking all day, drinking more alcohol, and his liver was damaged. He has become more chronically ill. I feel more stressed...I must look after my sick husband, children, and their education.* (FGD1, P1)

The quote shows compounding effects of the earthquake, where the loss of employment and increased alcohol dependency led to impaired family functioning. The husband, once the primary breadwinner, became chronically ill due to substance abuse, leaving the woman to shoulder the responsibilities of caregiving, child-rearing, and household management. This finding underscores the psychological and economic strain placed on women. This displays how disasters can exacerbate existing vulnerabilities and create new challenges for family wellbeing.

The theme concluded that women have holistic understanding of health, combining physical, mental, and social dimensions, and wellbeing was linked to family relationships, emotional support, building inner-strength and lifestyle adjustments. However, many women continued to live with anxiety about the recurrence of earthquakes. As women sustained long-term livelihood loss, and suffered economic instability, it caused additional burden with husbands migrating or becoming unemployed. These findings suggest that wellbeing is not only influenced by the major events but also by how women manage stress and their responsibilities over the long-term.

Post-Disaster Adaptive Strategies

After the earthquake, the women adopted various adaptive strategies to cope with stress and anxiety. During discussions, many women said that they had strong support from their community as well as family connections while overcoming the earthquake after-effects. Their faith, together with cultural and spiritual rituals, also empowered them to adapt well to post-disaster situations despite ongoing triggers and challenges. These strategies helped promote their social and spiritual wellbeing. Furthermore, accepting recurrent problems as part of life and empowering themselves with financial management procedures helped women adapt their lives after the earthquake.

Power of Community

Most people in Nepal, especially in rural Nepal, share special bonds and connections with their fellow community members. The mutual help and cooperation enhanced social resilience among the women and their families who survived the Nepal

earthquake in 2015. One woman aged 49 mentioned the positive influence of social coping:

> *With the fact that we were alive, we had cooperation with each other then. If I had something, I would share it with others and others with me. Even inside the tent, we shared whatever we had. We felt like the world and the situation were like this; anything can happen at any time. We also saw lots of deaths of our neighbours. Then we felt that this was a tough time for the whole country, so we should face it. So, we lived together with our community, eating and sitting with each other, and survived the hard phase.* (FGD2, P3)

The quote reflects the determination of women to face the challenges through sharing and caring. Women were grateful for being alive when a period of crisis was affecting the whole country. When woman shared "anything can happen at any time", it signified that the woman was aware that the trauma could be repeated, however, there was a strong willpower to face these challenges with the support and cooperation of each other in the community. This asserted the strength of community bonding and mutual aid in helping women overcome challenges during adversity.

One woman shared that life after the earthquake was tolerable due to the absence of injury and the presence of mutual support:

> *The important thing is that, besides our house being cracked or destroyed, nothing happened to us physically then. If something happened to our near and dear ones, we could be sad and would not be able to eat anything. At that time, our entire village was living like we were living in the same house as our own family. The help and support from each other reduced tension. Therefore, we were able to manage food and accommodation with support from each other.* (FGD3, P4)

Women shared a strong bond, support and understanding among themselves during and after the earthquake. All women were thankful that they survived the disaster, and community members helped each other and lived like a single family. This emphasised the importance of shared experiences and support in providing ease and comfort during difficult phases of life.

Mutual support in the community remains strong today. One woman shared this experience, and the other participants agreed:

> *Not only during the earthquake sister, but we also still have very good cooperation between us in our neighbourhood friends. We live together, helping each other. In our society, when there is either pain or happiness, we are always available to each other.* (FGD2, P2)

This quote highlights that there was a positive social environment in rural Nepalese communities. Women lived with collective support, and a shared sense of community. Community members discussed each other's problems and actively offered support for those in need; this adaptation and coping strategy supported their social wellbeing throughout the years.

Power of Spirituality

Women in Nuwakot were found to be engaged in rituals linked to their faith as one of the adaptive strategies while dealing with life challenges after the earthquake. During the discussion, the women who survived the earthquake acknowledged the power of God for their survival. The women said that they had great faith, believed in God, and prayed regularly. The participants, like the one quoted below, had a strong belief that everything that happens is God's will and they were saved from the earthquake because of their faith in God:

> *Sister, we believe in God and regularly perform religious rituals. For me, being religious and worshipping God, going to the satisfies my soul. When something suddenly happens in our life, we first remember God and pray to save us from that problem. We did the same when the earthquake happened, there is faith that we were saved by God's grace, and this faith gives us self-satisfaction.* (FGD4, P4)

Almost all women showed strong faith in God and God's divine power. Therefore, they utilised religious faith as one of their positive adaptive strategies after the earthquake. The religious beliefs and practices among the women were an important source of strength and comfort during times of crisis.

One woman perceived that her faith contributed to her being spared from the injuries and death:

> *We regularly remembered God in that situation… we have Bhanger Than (Religious place) here, and we constantly remembered and prayed to God during the time of the earthquake. It's because of God's grace we are alive*. (FGD1, P1)

The above quote shows that women have a strong belief in the defensive power of their God. They expressed the belief that their locality and their family were spared during the earthquake because of the blessings and protective influence of their deity (*Bhanger Than)*. Although they had seen devastation and loss of lives, their community remained unharmed. It was the women's belief that their deity had safeguarded them from harm, ensuring their safety.

Most participants revealed that they regularly remember and worship God and they continued these rituals even after the earthquake. They perform daily religious rituals (*puja*) at home and visited their temple to worship their God and connect with their God in a sacred place. One woman explained the role of spirituality in in reducing stress:

> *Our mind feels fresh and lightened with faith in God. By continuously remembering God, and praying and worshipping, requesting to avoid this stressful situation, there is a kind of peace of mind.* (FGD1, P1)

The women believed that faith and worship contributed positively to their overall wellbeing by offering emotional comfort as well as spiritual connection. Overall, throughout the findings, it was revealed that the participant's believed life was a journey full of challenges and that their devotion to God helped them endure and overcome obstacles.

Problems are Part of Life

Acceptance of the recurrent problems was another important coping strategy adopted by the women as many suggested they considered problems to be a part of life. During the focus group discussion, women eventually discussed the hardships they faced during the Covid-19 pandemic, which started at a time when they were still recovering from the earthquake impacts. The women shared their collective experiences of facing recurrent disasters and influences on their wellbeing. However, women also expressed their efforts to overcome the adversities despite facing significant challenges. Women emphasised that they survived the hardships with their will power and internal self-strength. A woman aged 43 described about the initial impact of new crisis while trying to overcome the impact of earthquake:

> *While we were feeling like the earthquake's impacts had been settled and there was peace in our minds, again there was a corona outbreak [Covid-19 pandemic]. We had felt that, by God's grace, we were saved from the earthquake, because of the pandemic, I felt like now I am going to die for sure, sister.* (FGD2, P5)

Post earthquake, women felt that there was a sense of peace and relief with progress being made in terms of house reconstruction and a decreased sense of fear of more earthquakes. However, they eventually faced another crisis due to the outbreak of Covid-19. This repeated hardship caused a new fear and uncertainty in their minds. At some point, women felt disheartened and unable to cope with their problems.

However, almost all participants described using positive coping abilities in the face of new disaster situations as shown in the excerpt presented below:

> *Although having lots of problems during the earthquake and corona, we solved those problems by increasing our inner strength and we are alive now…. In my opinion, problems regularly occur in our life, and it is important to increase your morale and self-confidence… the biggest thing is morale (manobal) should be increased. Whenever any problem hits me, if I give up, I cannot deal with the problem, but if I do not lose courage (himmat) and work with encouragement (haushala), the solution to any problem can be sought. This will also increase our self-strength to face other problems.* (FGD2, P3)

The data presents significant adaptive coping and resilience among the women. The women accepted that encountering problems was a part of their lives; however, self-determination among the women not only helped them face the difficulties at hand but also enhanced their strength to overcome future adversities. Hence, women demonstrated a positive mindset of resilience and inner strength, both of which are essential for navigating life's challenges and promoting positive wellbeing.

Focus group discussion findings also suggested individual preservation among women as they focused on building their current life and being happy with whatever they are living with; rather than worrying about unknown problems. One woman commented on her capacity to remain resilient in the face of numerous and multiple disasters:

> *At that time, I was terrified, sister, but these days, I feel that it is not worth being more stressed to work and worrying about earning and making money. If an earthquake like this hit again, everything will go away. Instead, what I think is that we should be able to enjoy ourselves and be satisfied with what we have,*

> *stay calm, and do our work in such a way that our health and wellness do not suffer.* (FGD3, P3)

The data advocates mindful and balanced approach to life, finding contentment in the present, embracing simplicity, and prioritising health and wellbeing. Over time, women were developing positive wellbeing by reorienting their values and focusing on present happiness rather than dwelling on past trauma or fearing future uncertainties.

Cultivating Financial Management among Women

Along with coping with the aftereffects of earthquakes and other natural disasters, some women said that bad family relationships have affected their overall wellbeing. However, with time they have learned to become economically independent in living their own life, as highlighted by a single parent:

> *When I had just gotten married at an early age (16 years), I had an unhealthy relationship with my husband. I cried a lot, even if I had tried to get a job, but at that time there was no one to care for my little child… however, I was well supported by my mother. In the beginning, my mother and brother helped me to educate my son and provided support for our daily lives. But now I am earning independently by myself, and I am no longer a burden on them. Following the earthquake, I continued my regular procedure of earning and saving. That is why now, I am happy and healthy without tension.* (FGD4, P4)

The data reflects that the woman faced initial difficulties being single woman solely responsible for her child, her financial situation, and feeling burden upon her family. As she was currently self-employed, although small, this financial stability was a key source of her happiness, promoting her overall wellbeing and life satisfaction. She further commented on the ways she became financially independent after the earthquake:

> *I have raised some local chickens and some goats so that I can sell them. Sometimes I go to my neighbour's fields as a daily labourer. Whatever money comes in, I make some savings in the cooperative bank*. (FGD4, P5)

This account illustrates the self-empowerment the participant experienced when she became financially stable as a single woman after the earthquake. The woman shared her hard work and determination to achieve this stability through diversified sources of income and savings. Her experience reflected a shift in women's roles from unpaid

labour to self-earning and becoming financially independent in supporting her family wellbeing.

Additionally, women were involved in community-oriented financial management schemes where they were aware of savings as well as taking some loans at the time of need. A single parent explained how the community saving scheme works:

> *During times of need, I also take out some loans from finance, and I can borrow from the mothers' group as well, especially since this is our group organisation. After joining a mothers' group, we contribute Rs 500 per month as a levy, which serves as our monthly savings. Since we have many members in the group and collect this money from each of them, it accumulates to a good amount. The committee members hold meetings to discuss who is in urgent need of funds and grant loans to those individuals for a specified period with minimal interest. However, this money is essentially our savings.* (FGD4, P2)

The community-based and community-led financial support approach made the women knowledgeable about the importance of savings and effective utilisation of money at the time of need. This approach helped in empowering the women by making them economically independent. These savings and small loans from mothers' group and village development committees have provided much-needed financial assistance during emergency medical needs as well as family crises where immediate funds are essential.

Summarising the theme, over the eight years since the earthquake, women have employed a range of adaptive strategies to manage stress and rebuild their lives. Community solidarity played a vital role in enhancing social resilience as women adapted a “sharing is caring” approach to support each other during and after a crisis. Strong faith in God and religious rituals and spiritual practices they performed after the disaster provided emotional comfort and a sense of protection. Additionally, women strengthened their financial independence by engaging in small-scale income activities such as rearing and selling the cattle and working in farms as daily labourers. These adaptive responses reflect a shift toward self-reliance and inner strength among the women in Nuwakot, Nepal, showing that women’s wellbeing after the earthquake was supported not only through external aid but also through continued religious practices,

social networks, and developing individual perseverance and financial management skills.

Practical Accessibility of Health Services in Promoting Wellbeing

Participants discussed availability, accessibility, and affordability of health services as essential elements in supporting their wellbeing. Women were visiting local health posts for minor illnesses but seeking services from district hospitals for major problems. Some women relied on private services for specialised treatment, though they faced significant financial challenges accessing and utilising these facilities.

Delays in Accessing Health Services

Women reported delays in accessing healthcare due to transportation issues, distance, limited-service hours, long wait times, staff unavailability, financial constraints, and lack of specialised services. While discussing these concerns, one woman, aged 34 years, commented:

> *In case, there are any complications in conducting normal delivery, there is no availability of blood and blood transfusion or emergency operation [Emergency cesarean section] here in the health post, therefore many pregnant women prefer to go to hospital for delivery rather than the health post*. (FGD1, P2)

For women, preference to district hospital rather than health post was largely based on specialized service availability and comprehensive management of health problems. As the women do not want to compromise their wellbeing, they choose to go to higher level health care centres. The same woman described the impact of service unavailability during pregnancy:

> *I have a five-year-old daughter. When I was pregnant, I came here for a regular check-up at 3.30 pm. One of the staff said, "The clinic is about to close now [because the health post closes at 4 pm], and my duty hour is going to be over soon. So, I do not have time for your check-up, you must go to the hospital." At that time, I was in a normal state so I could go to the hospital, but not necessarily everyone is in a normal state, because of an emergency some are not in a state to call the ambulance. It has been much more difficult to get these important services in the nearby health center. It hurts [pida- huncha] when we have to travel far to receive basic health services.* (FGD1, P2)

This finding stressed the challenges faced by a woman in assessing basic maternal service from the health post because of the unavailability of service around the closing hours. Her expression “it hurts” suggested the painful experience of emotional and practical difficulties when essential services at their locality are inaccessible. Traveling farther for comprehensive care is more difficult during emergencies when their health is compromised.

Hospital access was also complicated by transportation barriers:

> *From our place, traveling to the hospital takes one hour on foot. We do not all have our own vehicles. Only 2-3 public buses per day are available, which takes about half an hour. Otherwise, generally, we walk when we are not so ill. In case of emergency, we must call an ambulance or travel by taxi, which is costly.* (FGD1, P4)

The finding displayed the transportation barriers that prevent women and their families from receiving timely medical care, which are likely to be those less financially well off and do not possess their own vehicle. Communities also face the burden of costly taxi services in case of emergencies.

Participants identified long wait times as another issue that created delays while utilising the health services:

> *…the main thing is that the service cannot be taken at once. For example, first, I have to get a token, the queue is so long even to get the token. Then again, I need to wait until the doctor is available. Usually in government hospital, the waiting time is very long. It is said that all the services are available conveniently, with 24-hour service available, but many times there is no doctor or non-availability of some services such as Video X-rays [ultrasonography].* (FGD2, P5)

Women reflected on delays faced while accessing medical care particularly in the government health service centers. These delays not only hindered timely treatment but also caused frustration and reduced trust in public healthcare systems, particularly among women who often bear the responsibility of managing family health needs.

Rising healthcare cost was another important practical issue raised by the women as a barrier for accessing health services. One woman compared the cost of healthcare services in government and private healthcare services:

> *These days, private or government health service facilities are more costly. I believe there might only be differences of around 5-6 hundred [Nepalese Rupees] …. Those who are financially stable and capable can go to a private hospital and get the service on time. However, for the poor who cannot afford it, even government hospital services are expensive. For example, my sister was pregnant and had to undergo a Video X-ray [ultrasonography]. We did it both in a private hospital and a government hospital; the price was the same for the procedure, and it is expensive for us.* (FGD1, P5)

There are hidden costs within public healthcare systems, where consultation fees may be lower, but essential services such as diagnostic tests remain financially burdensome. For economically disadvantaged families, this created a barrier to timely and adequate care, reinforcing health inequities, and limiting access to necessary medical interventions.

In further discussions, one woman emphasised the burden of ongoing healthcare costs on poor families, a concern that was agreed upon by all participants in the group:

> *Like, the person or family who is financially stable [hunekhane] may not feel stress, but those who have to think about what to eat this morning or evening [poor people who live on daily wages] have more stress and extra burden. In addition, those families having chronic patients [sadhai birami bhairakhne] feel more stress because of the high cost of health services.* (FGD1, P2)

These collective statements demonstrated the compounding challenges faced by low-income households, particularly those families with chronic illnesses requiring ongoing and long-term medical care. This financial strain amplified the family's economic vulnerability and psychological stress.

Relying on Private Health Services

During the discussions, some women stated that they rely on private health facilities, due to various service limitations in public health facilities. While all the public health services were reconstructed after the earthquake, the service's fragility still existed. There were issues such as the unavailability of specialised services and frequent service interruptions. One participant aged 39 shared her frustration about this situation:

> *Since all facilities are not available in the district hospital, we also have to go to private hospitals[5]. Like, sometime before, when I was unwell, I went to the hospital for my check-up. Listening to my complaints, the doctor said I had to do a video X-ray. When I went for a video X-ray, the doctor [radiologist] was not available there, and they asked me to come tomorrow. I went the day after and again; the doctor was not available; this happened continuously for five days. I had to yell at them that they had to arrange another doctor if the usual doctor was unavailable... Just like me, other patients were also affected because of the unavailability of a doctor.* (FGD1, P5)

The data suggests the frustration and helplessness experienced by women due to repeated service disruptions and the prolonged absence of essential health personnel. Such experiences compelled women to seek care from private health providers, where services are more readily available. However, this shift often imposes a significant financial burden, as many women were forced to borrow money to afford treatment.

Moreover, some women preferred private hospitals and clinics for the specialized services:

> *Since all facilities are not available in our government hospital, we also have to go to private hospitals… My family and I go to the private hospitals in Batar Bazar[6] because in those clinics' specialist doctors from Kathmandu[7] regularly come as visiting doctors. So, most of the time, we prefer going to private hospitals. And if we are in much more complicated stages, we go to Kathmandu for better treatment, which is two hours by bus*. (FGD2, P3)

Despite having government hospital nearby, with repeated experiences of services and service providers being unavailable, the women come to "prefer" the private facilities, despite the ill-afforded costs and the travel distances. Another woman aged 50 also

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[5] Private hospitals- These are the hospitals run by the private sectors and the services available are more costly than the government hospital. Despite being expensive, the services are quicker and easily available.

[6] Batar Bazar- main city in Nuwakot, Bidur municipality, where all government and private health services are located.

[7] Kathmandu- capital city of Nepal, which is 2-3 hours by car/bus. People with chronic and complicated diseases prefer to go to the Kathmandu because of the availability of specialised health services.

reasoned her need to access private healthcare, although that was costly, considering her emergency health concerns:

> *I had to go to 3-4 government and private hospitals here and in Kathmandu. After my initial screening here in the district hospital, since there was bleeding from my lower part (vaginal bleeding), I was referred to a government hospital, specialised for cancer treatment and the necessary test was done. Luckily, it was not cancer, but the symptoms continued. Later, a brother suggested I go to the hospital in Kathmandu, it was a private hospital… the female doctor there assured me that the tumor and the uterus had to be removed… At that time, I did not have the money for admission and the operation. Therefore, I went home to arrange the money… my husband was in India; I borrowed money from two of my neighbours and collected the money for admission and performed my operation, uterus was taken out. The medications and all other procedures cost me a lot. However, now my health is fine.* (FGD3, P5)

This finding reflects a painful journey of a woman in seeking the appropriate medical treatment that was not available in a local government hospital. There was a compelling need to rely on private services to resolve her reproductive health problem. Despite the economic burden, the woman prioritised her health, ultimately expressing relief that timely medical intervention had improved her condition. Putting physical wellbeing needs over the cost underscores the critical gaps in practical accessibility and affordability of public healthcare infrastructure and its disproportionate economic and social influences on women.

Understanding Health Insurance

During the focus group discussions, almost all women commented on the affordability of health services in promoting their health and wellbeing. While discussing the health insurance scheme provided by the Ministry of Health in Nepal which was initiated after the earthquake, women had a mixed understanding of the importance and service availability of this scheme. One participant found the scheme effective for her and family:

> *Regarding health insurance, sister, we have health insurance, and I always find this very effective. We always go and use the health service there. My husband has a heart problem, high uric acid, sugar, and pressure. Also, due to a heart problem, he has to take regular medicine. That is why we go to the hospital every month. Since I also have many problems when I go with him, and I keep checking myself too. This service has helped us a lot. After going there, they always ask us*

> *about our insurance card, and they explain which place to go for further processing. With insurance of Rs. 25,00 per year (approximately US $225), treatment up to 1 lakh (approximately US $850 per year) is available. If the cost exceeds that, we need to pay extra.* (FGD3, P1)

The woman was satisfied that the scheme has enabled her and her family members to effectively utilise those health services they require. However, not everyone can afford the insurance with its every year instalments. A young woman who mentioned getting a new job after the earthquake as a health insurance agent revealed that people with financial constraints did not actually use the insurance scheme:

> *This is the thinking of most of the people in rural areas, as they earn on a daily basis; they do not want to invest yearly instalment for the insurance. So, even if insurance is targeted to poor people, they are not getting good health services and treatment at the time of need.* (FGD1, P2)

Even though the Nepalese government has targeted health insurance schemes to people with low socioeconomic status, the people who are already poor do not have enough money to pay for the yearly minimum instalment for health insurance. The people who work on daily wages to earn their daily living do not think about saving their earnings. Therefore, they are not motivated to get health insurance and are unable to use free health services at the time of need.

Expecting Better Health Services

While the previous findings suggested persistent systemic fragility even after the earthquake, resource constraints, and geographical barriers in accessing public health services, women expected healthcare access and quality of services. One woman suggested the need for 24-hour service availability in the health post:

> *The first thing we expect here in the health post is the 24-hour availability of the doctor. If possible, rather than other services, at least the delivery service for a normal pregnant woman should be available for 24 hours. You can see, sister, only a huge building has been built [she points towards the health post building]. It would be better if health services were available according to the capacity of the building, and one doctor along with 1-2 experienced nurses were available.* (FGD1, P2)

The women expected the health post to offer round the clock health services. The health post built following the earthquake was larger than before; however, available services

do not align with the building's capacity. Therefore, women stressed upon the need for better resource allocation and planning with round the clock availability of doctors and experienced staff.

For all participants and their families, emergency service availability was critical:

> *When we come to get health services from our local health center, they must provide us with services in the evenings and at night. But it is not available here…. In case of emergency, there may not be an ambulance available to take us to the hospital. Sometimes we may not have enough money, and we might be weak due to illness. At that time, this health post should also provide emergency services. They should have a 24-hour health service facility and deliver the baby here.* (FGD1, P4)

Women and their families suffered during emergencies with because of service fragility in nearby public health facilities, which then required them to travel long-distance. When there is an emergency, they need to book an ambulance or private taxis. At times, this has caused life-threatening delays. All these factors necessitate the need for health services beyond the regular hours, including evenings and nights. Women perceive that, as new buildings were built after earthquake, these improvements are crucial, to ensure timely and effective healthcare delivery and utilisation especially during medical emergencies and childbirth.

Women also expected comprehensive care from their designated tertiary hospital:

> *We expect to get all the services here at the hospital. We feel like it would be good if specialist doctors of all diseases were available here so that we would not have to go to private hospitals or to Kathmandu for better treatment.*
>
> *(FGD2, P5)*

Currently, only one tertiary-level hospital serves the entire district. Despite reconstruction efforts following the earthquake, completed after seven years, these facilities still lack comprehensive services and specialist doctors. Moreover, the absence of local specialist care forces many to seek treatment in private medical centers or travel to the capital, Kathmandu, both of which impose significant financial burdens and time consuming and problematic during emergencies. Therefore, women emphasised that access to such services within their designated service centre is essential to support their wellbeing.

Overall, practical accessibility to health services was a key factor in supporting women's health and wellbeing after the earthquake. Women faced delays in healthcare utiliasation because of long distances to hospitals, inadequate public transport facilities, limited-service hours, and inadequate staffing or equipment. Therefore, women expressed a strong need for 24-hour services, especially for maternal and child health as well as other health emergencies, at nearby health centers. Women also shared expectations for specialised service facilities and adequate and trained healthcare staffs available in local public hospitals.

Fear and Uncertainty on How to Act in a Future Earthquake

During the focus group discussions, women demonstrated limited awareness of safe earthquake response practices. Participants doubted their knowledge and the accuracy of previously taught safety precautions. They were concerned about immediate response needs for future catastrophes and expected safety training and support services based on the needs of vulnerable people.

Earthquake Awareness and Safety Precaution Needs

Throughout the discussions, when asked about their concerns, every participant stated that they were not aware of what their safety precaution needs are during an earthquake. One participant commented:

> *Sister, that day was Saturday and I was cleaning the utensils outside after having our lunch. My little boy, three years old, was playing with a [toy] car, and then an earthquake hit suddenly. Everyone out there was running out of their house. There were an elderly mother [aama] and a father [buwa], [Elderly individuals are referred to respectfully as – 'aama' and 'buwa'], and they told me to run away, I didn't even know that I had to run away, and with them, I also ran away in an open place taking my son with me*. (FGD3, P5)

The data shows a significant lack of awareness about safety measures during earthquakes. Women were unaware on how to apply precautionary practices to minimize harm during the potential disasters. Concerns about safety precautions were raised across all focus group discussions, as shown in the following excerpt:

> *… Because of the earthquake, the walls of the new house under construction collapsed and came toward us. At that time, I remembered in my mind what was*

> *taught to us; when an earthquake occurs, I should sit under the door or the window. Therefore, I sat under the door, however, the door itself pressed against me and there was a cut on the right side) of my head, it was bleeding, and I was semi-conscious. On the other hand, the shopkeeper (respectfully calling him "uncle") was injured by falling off the zinc roof and there was a cut on his hand. When I think about it now, we were taught the opposite way; we were taught wrong about being safe during an earthquake*. (FGD4, P2)

As survivor shared her experience when injured by a collapsing building under construction, she questioned the effectiveness of safety precautions learned in school. The findings revealed confusion when perceived safety measures failed to provide expected protection. This is also reflected in the following description of a community incident:

> *Sister, here near our house, [pointing towards the area where the incident happened], there was a couple with two sons and a daughter; the daughter passed away in the earthquake. When the earthquake hit, everyone came out, but the daughter was hiding under the bed. Because she was taught in her school that when the earthquake hit, one should hide under the bed, she did not come out. Her brothers regularly convinced her to come out, but she did not, the house collapsed, and she died. It was a very bad incident in their family*. (FGD3, P2)

The data highlights critical gap in understanding of safety precautions among women and their families. The uncertainty of an effective safety approach during the earthquake caused a tragic incident in a family. In Nepal, these measures are less effective because the houses are made up of heavy stones and bricks; when the walls fall, people hiding under the furniture can be crushed.

Inequitable Relief Provisions

Immediately after the earthquake, the women and their families had lost their clothing, cooking items, and bedding. They could not get into their homes to retrieve what was needed. Not only did they have a loss of income for purchasing basic need items, but they also lacked resources to cook the food that was provided. They could not change or wash their clothes. They lacked bedding when needing to sleep outside or in shelters. Their most basic wellbeing needs were not met. While women got some relief packages from governmental and non-governmental organizations, one woman explained, the relief measures were inadequate and unequally distributed:

> *The things we got immediately after the earthquake were materials such as sacks of rice, beaten rice, sugar, oil, salt, and lentils. We heard relief packages such as clothes and utensils were available, but we did not get them. People in urban areas were lucky to get all those packages; we could not get anything in our rural area…. It is the same everywhere, the packages are mostly targeted at poor people, however, the rich get it, and the poor do not.* (FGD1, P5)

The women perceived disparity in provision of relief packages. They felt that people in urban areas and those who were better off received more material than those in rural areas. This finding displayed the demand versus supply issues faced by the rural women and their families.

The earthquake destruction was extensive, with significant increases in people needing assistance, but the basic relief measures could not fulfill all the affected communities' needs. One woman shared her expectation of fair distribution of relief supplies in future disaster contexts:

> *Such an earthquake may come again, we believe that if such an earthquake occurs again, people will find out with priority who needs first management. And even in relief measures, we expect that food items, gender-specific clothes and materials, tents, and blankets, will be provided to all the disaster-affected communities equally*. (FGD4, P2)

The experiences following the earthquake made the women aware that a devastating earthquake can occur again, and they need to prepare for future events. While women expected supplies which could meet their immediate wellbeing needs such as food, clothes, and shelter, they also expected priority and equality in future disaster events. Participants expressed expectations of fairness and equality in relief aid distribution by the government and other organisations.

Collectively, the findings implied that women are worried and confused about how to respond during future earthquakes to minimize harm to themselves and their families. Women also expressed concerns about the inadequacy and unequal distribution of relief materials after the earthquake. Since the basic wellbeing needs of women were not met during the earthquake, they expect the fair and equal relief supplies if this type of disaster happens again.

Chapter Summary

Overall, the findings from focus group discussion highlighted that women's wellbeing eight years post-earthquake was shaped by complex interplay between ongoing traumatic fears and anxiety and their ongoing adaptive strategies with strong family and community support and continued religious faith. While women suffered burden because of the challenges during housing reconstruction and ongoing business and employment loss, over the time, some women developed some financial independency in supporting their financial wellbeing and developing individual perseverance by accepting "problems are part of life." However, women's long-term wellbeing was challenged by persistent health service fragilities despite the reconstruction efforts after the earthquake. The fear was consistent with uncertainty about how to effectively act during future earthquakes and fear of unmet cultural needs during adversities. These findings contribute to understanding how gender shapes the disaster experiences and recovery efforts in rural Nepalese context that informs need for more effective, culturally appropriate disaster risk reduction and recovery policies in Nepalese context. The next chapter will explore how women's wellbeing is shaped by health service accessibility and utilization from the perspectives of health services providers.

Chapter Seven Case Study Findings

Individual Interviews with Health Service Providers

This chapter presents the findings from in-depth interviews conducted with health service providers. Various health service providers are employed in different levels of the health service in the Nepal's government sector. Their role is to promote the health and wellbeing of the community through equitable health services (MoHP, 2024). The purpose of the interviews was to gain an understanding of the health services available to women and the utilisation of those services by the women to promote their wellbeing over the long-term. In addition, the interviews aimed to understand the perspectives of health service providers about their experiences and challenges while delivering these services to women. Table 4 presents a summary of the four health service providers who took part in the study, including their role and their years of experience in providing health services.

Table 4

Participant Health Service Provider's Information

Health Service Providers	Gender/age	Level of Health Service & Role	Years of Experience	Years of Experience (Nuwakot)
HSP1	Male/31	Province Level (Medical Doctor)	5 years	3 years
HSP2	Male/45	Local Level (Public Health Inspector)	10 years	3 years
FCHV1	Female/55	Local level (Community Volunteer)	25 years	25 years
FCHV2	Female /38	Local level (Community Volunteer)	10 years	10 years

The following themes and subthemes were constructed from the analysis of interviews with the health service providers.

Persistent Service Fragility

- Inconsistent round-the-clock service availability
- Mixed perspectives on service affordability
- Scarce human resources and training

- Shortfalls of infrastructure, equipment, and supplies
- Inactive rapid response team for future earthquake response

Obstacles to Women Travelling to Services

- Transportation difficulties
- Challenging geographical location, weather issues, and road conditions

Women as the Hub of Family Life

Delays in Health Seeking Caused by Women's Fears and Hesitancy

- Women fearing to open up reproductive and communicable health issues
- Women's Hesitancy to discuss female health issues with male health service providers

Initiatives for Strengthening Health Services

- Vital role of Female community health volunteers
- Innovative health services

Persistent Service Fragility

As discussed in Chapter One, in Nepal, the government health service system is dedicated to providing equitable health services to the people living in urban and rural communities through various levels of health facilities (MoHP, 2024). Despite this government health service commitment, following the earthquake, Nepalese women faced challenges accessing health services. Within this theme, this issue is explored from the perspectives of healthcare workers who shared their experiences of trying to provide essential healthcare to women over the longer term after the earthquake. They discussed the issue of persistent service fragility, which resulted in tenuous processes for people with few financial resources who needed to access health services. Concerns included the need for round-the-clock services in health posts, scarce human resources, shortages of health care services and supplies, and the inactivity of the rapid response team for future earthquake preparedness.

Inconsistent Round-the-Clock Service Availability

One of the main issues addressed in the interviews with health service provides was that of women not having access to round the clock healthcare. As previously discussed in Chapter Six, this issue was also raised by focus group participants. This meant that women were typically uncertain as to whether their health needs could be met. One of

the FCHVs, provided the following description of the challenges faced by women in labour:

> *Even for the women in labour, when it is daytime, delivery service is provided here by sisters, but during evening or night-time, no service is available, and that is a great problem...If any emergency happens at night, we have to call an ambulance and take them to the hospital. Therefore, in our place, it is difficult to manage emergencies that happen in the evening and nighttime.* (In2, FCHV1)

This data illustrates the serious gaps in emergency care availability, including those affecting women's reproductive health needs. The need to arrange transportation services for nighttime emergencies created additional delays and risks for women during critical health situations.

When asked about this issue, a public health professional agreed with the concerns of FCHVs about the emergency service needs and suggested the possibility for 24-hour service availability within the current government system:

> *Yes, sister, I agree, there are issues with providing healthcare access around the clock. What I believe is, after our government system has become a three-level government, the local government has some rights in its hands and [now] has a budget allocated to health. They can invest the budget in some health works by making their own rules, and regulations…. Hence, the demand of the community to get 24-hour service can be fulfilled… It is said that, wherever there is a problem, along with the problem comes a solution, it should be recognised and implemented.* (In1, HSP1)

This quote shows that the solutions existed within the current federal governance framework, where authority is now provided to local governments to deal with the matter of upgrading the facilities, but that timely implementation had challenges. The local government had not yet worked effectively to meet its objectives towards improving the health needs of their community with regards to round–the- clock services.

Mixed Perspectives on Service Affordability

The health professional participants did not have the same concerns about healthcare affordability as the focus group participants. In the following quote, the practitioner argued that, overall, services were financially accessible. This discrepancy in perceptions is significant:

> *I feel that the services available here are affordable; the OPD (outpatient department) ticket charge here is low so everyone can afford it. Our OPD charge plus investigations are mostly free for people above 60 years of age. Another thing is that for those who cannot afford it, we have a social service unit. The authority in the unit checks the necessary documents of patients who need the free service, and if they are genuine, they can utilise the health care services for free.* (In2, HSP2)

This practitioner's perception that the services are "affordable" may mean that he would not actively press for change to eliminate barriers. Hence, this barrier is not addressed. The need to provide documentation adds another hurdle to accessing free services. The requirement to prove "genuine" evidence of financial struggles may create persistent barriers and potential stigma for the most vulnerable families, especially those who are in emergency need of services. As discussed in the earlier chapter, this finding correlates with women's perspectives that, although hospital tickets are reasonable, services are expensive for families experiencing material poverty.

Scarce Human Resources

The shortage of qualified healthcare workers was a major factor that affected the quality-of-care women received. All the health service providers highlighted the significant issues related to recurrent understaffing in the health posts. This view was echoed by the public health professional when he mentioned that the consumers were not satisfied with the service because of the understaffing and frequent employee turnover:

> *We have been allocated six staff here [at the health post], but currently, we have only three staff. In our local government, when there is a need, someone is transferred temporarily to work somewhere [kaaj] and sometimes someone is on long leave. If the employee is not available according to the allocation, there is frequent turnover. While going to work in other places temporarily, the staff do not feel it is their organisation, so they carry less responsibility, and the outcome is not so good. Therefore, if the staff could work in their place permanently, they could work accordingly, and they would also work with a sense of responsibility. This way, the results can be good.* (In1, HSP1)

The above quote highlights the persistent healthcare fragility, with issues of understaffing and staffing "churn," meaning that there was and is rapid turnover and low commitment to the service. These situations are likely to have reduced satisfaction of services received by women as the staffs are unlikely to have formed relationships

with the women. These staffing practices undermine service quality for promoting community wellbeing particularly women.

Shortfalls of Infrastructure, Equipment, and Supplies

Despite the large physical structure of the health post, the availability of equipment and facilities within it were still limited to basic primary care, lacking more comprehensive services. A Female Community Health Volunteer (FCHV) highlighted that due to resource constraints, the health post was unable to manage complicated cases:

> *… In our health post, there are no facilities for complicated problems. Pregnancy test is done but to get video x-ray done, women should have to go to Trishuli Hospital. The resources are also few, so people are deprived of the facilities. That is why only primary level care is provided in this health post. In case of emergency, patients need to go to the hospital…. There is a big building of this health post, which is big only in physical structure but does not have many health service facilities.* (In3, FCHV1)

The above quote indicates that although there were superficial signs of post-earthquake progress, such as a substantial building, the reality is that these changes were insubstantial. Due to the lack of resources, the health post could not provide adequate services. Therefore, resource constraints compelled women to travel a significant distance to the district hospital, which focus participants described as inconvenient and time-consuming in emergencies, especially at night. This finding was echoed by women in the focus group discussions.

Many women were motivated to utilise the services from health posts due to proximity, and free medicines. However, a public health professional working in a health post identified that the availability of medicines was inconsistent, adding to an insufficient, fragile service for women:

> *What I believe is, sister, the service we provide at health post is accessible to everyone, and there are some medicines available free by the government. Many women seek service from health post because they are nearby to them and because they distribute free medicine[8]… but the medicine that we receive, is not*

[8] Government of Nepal provides 57 free medicines from a health post, earlier it was 37.

> *delivered on time. Therefore, despite providing regular service to our clients, they express their little dissatisfaction with the service providers.* (In1, HSP1)

In addition, there were some concerns regarding the shortage of medicines. The impact of this issue is illustrated in the following quote, shared by one of the FCHV, about how she found herself in the difficult positions:

> *Firstly, talking about health post, there is a continuous shortage of free medicine funded by the government. Women when they go to health posts for any problems, usually get advice and suggestions about the symptoms, but if they need medicine, health service providers say that the medicine is not adequately supplied from the central government level, therefore the medicine is not available. Even though we FCHVs have been given the responsibility to distribute cetamol [Paracetamol] and Oral Rehydration Solutions to needy people while doing the home visits, we are given only a limited amount which is not sufficient according to the needs of the community.* (In4, FCHV2)

This quote reflects the challenges faced by the local health service providers in comprehensively meeting the community's health needs. Although FCHVs are “grass root” level health care providers for local women who provide the basic health services specially targeted to women and the children (Khatri et al., 2017), they can provide only a partial service due to shortfalls. This situation puts FCHVs in a difficult position as they are unable to fulfil their responsibilities.

Inactive Rapid Response Team for Future Earthquake Response

The fragility of the health system became more apparent with the inactivity of the Rapid Response Team which was formed to respond effectively for disaster preparedness and mitigation at local level, raising concerns about future disaster preparedness. Service providers reported that the team, formed by the local government, was not adequately equipped or ready to respond to future earthquakes. A public health professional noted:

> *Exactly in this question, sister, when the disaster occurs, we have not gone directly to the field yet, but we have formed a disaster evacuation committee. If any disaster happens in the coming days, we will hold a meeting and find a way to solve it. It is through the same committee that discussions are held on how to solve immediate problems. Even during COVID, our RRT team (rapid response team) is formed and being on that committee, we start to manage the problems that arise from disasters.* (In1, HSP1)

This quote shows that disaster response remains reactive rather than proactive, with committees meeting only after disasters occur rather than preparing in advance. This revealed concerns about the local health care teams' effectiveness in future disaster preparedness. The public health professional, who was also a member of the Rapid Response Team, made the following comment:

> *As I said before, Rapid Response Teams have been formed in every ward, we should have met regularly, and simulation for earthquake response should have been organized in every community of every ward. What I believe is community members especially school children and women should be aware of how to act effectively during a future earthquake and other disaster conditions. If we can teach them practically, this will play a good role in disaster management that may happen tomorrow. However, currently, the committee has not been working actively. But if this awareness programme can be carried out in every area, then there can be some help in disaster risk reduction.* (In1, HSP1)

The quote highlights the need for simulation and training for disaster preparedness, especially for the school children and women. However, the team had not yet communicated the necessary actions to perform during future earthquake events. The lack of support for their immediate preparedness indicates the immaturity of the response team. This issue was also discussed in the focus groups as the women asked for updated information about how to act during the future earthquakes.

Obstacles Travelling to Services

In Nuwakot, although there was a pressing need for women to travel to hospitals for comprehensive care, they often faced significant physical barriers such as poor transportation, adverse weather, and difficult road conditions, particularly during the rainy season.

Transportation Difficulties

When discussing accessibility in terms of distance, all service providers highlighted the challenges women faced in reaching the tertiary level district hospital. A FCHV described how transportation barriers often delayed women from seeking timely medical care when they might be unwell:

> *It takes about 45 minutes to one hour to reach the hospital from this locality. While going on the local bus, we also need to walk for a while to reach the*

> *hospital. So, overall, it will take one hour. Going in the ambulance or private vehicle only can get you directly to the hospital, women have extremely tough times when they are pregnant or in labour.* (In4, FCHV2)

The data suggests that even if the distance to the hospital seems short, the journey takes considerably longer, which disproportionately affects women, and particularly those who are unwell. Women cannot access hospital services promptly due to alternative routes taken by public buses, requiring them to walk to reach the hospital. Therefore, in emergencies, such as pregnancy or labour difficulties, the only options are ambulance or private transportation. However, ambulance or car transport are not always available, accessible, or affordable for most of the public in Nuwakot, where many women necessarily travel from remote areas.

Geographical Location, Weather Issues, and Road Conditions

As described in the physical context section in Chapter Five, Nepalese people have always had to manage geographic challenges to access health services, and this situation has not improved since the earthquake. There were persistent issues related to remoteness, access, and weather that meant that even though there is new health infrastructure, with a rebuilt hospital, it was still not readily accessible for rural-living women:

> *As it is a hospital for the entire Nuwakot district, it is where public transportation facilities are available from all its catchment areas. Therefore, the hospital is in an easily accessible place, and the roads are in good condition where the hospital is situated. However, it is still a bit difficult for the people living in remote areas, especially for those living in hilly regions.... Therefore, the first challenge in the context of Nepal is the geographical location of Nepal. Many patients cannot come for treatment and follow-up on time because of road problems, especially during the rainy season.* (In2, HSP2)

This quote demonstrates that disparities between urban and rural accessibility persist. While the hospital location had good transportation links, patients from remote hilly areas face significant difficulties, particularly during adverse weather conditions.

One of the participants even identified road damage following bad weather to be the main cause for women not attending follow up appointments:

> *The main reason for delayed follow-up among the women is that the road gets damaged during the rainy season. When we ask them, "Why didn't you come for a follow-up?" Many patients say that the road was closed because of rain and that is why they could not come for 2-3 months.* (In2, HSP2)

Despite some infrastructure improvements since the earthquake, major accessibility issues persist, particularly for remote-living women. These issues compromise women's health.

Women at the Hub of Family Life

Women play specific care roles within family structures in every Nepalese community. These roles fundamentally shape their healthcare access and utilisation patterns. The analysis of health service provider interview findings revealed how women's responsibilities as primary caregivers and household managers created significant barriers to seeking timely healthcare, resulting in delayed treatment and compromised health outcomes. A hospital-based medical doctor articulated the challenge of gender roles and issues involved in travelling to the hospital:

> *We are providing service to patients who come to the hospital and seek service with us. But it may be because of their household-related problems, they need to take care of their home affairs, and they live far away from the hospital; many women do not come for follow-up on time, and they have not been able to get to the treatment facilities on time. In this regard, even though the facility is available, there is a problem with accessing it. This is the major challenge…. also, the male members of the family go outside to work [out of the locality] and earn, and the women are left to take care of the housework, and many women tell us that they cannot come for treatment and follow-up on time because they have to do houseworks.* (In2, HSP2)

Women's healthcare access was not merely an individual choice but was constrained by gender roles and expectations that shaped their healthcare experiences. In the above quote the health professional used the word "housework." It is important to note that, for these Nepalese women, "routine household work" is a term that covers a broad range of commitments, from milking of cows twice a day, looking after the needs of children and elders, cooking, and working in the fields. These responsibilities were compounded by the absence of the male partner. Therefore, most women do not pursue follow-up treatment at hospitals, stating that it is too far away and they must prioritise household responsibilities.

A male medical doctor 's view was that rural Nepalese women were still oppressed by their male counterparts, and where women's health needs were deprioritised in comparison to their household responsibilities:

> *Yes, madam[9], as I said earlier, there are gender challenges in accessing health services. There are many remote places in Nepal where women are still oppressed by men. For example, many women have come here to get their treatment, and some patients need to be admitted in the facility to get better treatment, but they say that they need to return because their husbands say that there is no one to do household chores at home. …. For example, one woman who needed hospital admission shared with me "Doctor sir, I have my family at home, and I must look after them, there will not be anyone to look after our farm animals, so I cannot be admitted here. You write down medicine for me."* (In2, HSP2)

In most rural Nepalese communities, the socio-economic context, which has worsened since the earthquake, with husbands working away from home, means that families still adhere to patriarchal practices that compromised their health. Therefore, women came with serious complications due to delays in seeking timely medical help. The doctor mentioned the importance of regular health awareness among women to minimise the gender-based challenge in meeting health needs among women:

> *For this, the clients should know from a basic level. Especially in rural areas. They must be knowledgeable about different diseases and the extent to which these can affect them. They must also be informed about treatment facilities and regular check-ups on time. By this, they will be aware of the complications of the disease and come for the treatment of the disease on time.* (In2, HSP2)

However, despite this belief that education will make a difference, the social position of women, patriarchal attitudes amongst male family members to avoid the household works and considering themselves as sole bread earners are the major obstacles to their timely utilisation of health services.

Women's Fear and Hesitancy Delay Health Seeking

The interview findings implied that fear, shame, and stigma create additional barriers to women's healthcare access, particularly for reproductive health and communicable

[9] Madam: is the common word used by people in Nepal to respectfully address a female teacher.

diseases. Analysis suggested how women's personal beliefs together with social and cultural factors create multiple layers of constraints that prevent women from seeking timely care.

Women Fearing to Open Up Reproductive and Communicable Health Issues

Stigma surrounding certain health conditions, especially reproductive health problems and communicable diseases, prevented women from seeking timely care. Women's fear of social judgment regarding their health problems led to their concealment of symptoms and delayed treatment, creating a cycle of suffering and compromised wellbeing. A public health professional described the burden of stigma for women that added to women's reticence to use services, leading to late disease presentation:

> *…like I said before, for the problem of uterine prolapse, tuberculosis, and other similar problems, they hide their problems. Women do not reveal their symptoms at the local level as they fear their issue will be known to their other family members or society and be stigmatised. They seek treatment only after the condition is severe. That is why there is a need for public awareness that we should talk openly about our health problems, not to be ashamed, disgusted, afraid, and this message can be provided through health education.* (In1, HSP1)

Within their close-knit local community, the women did not trust that their health concerns would be treated confidentially and feared social exclusion due to their health issues. Health providers emphasised the need for more education about health conditions as a means of normalising them, but this tactic seems at odds with the women's fears.

Hesitant to Discuss Female Health Issues with Male Health Service Providers

A longstanding issue that persisted both before and since the earthquake was that a gender difference between patients and providers created additional barriers to open communication about health concerns. Both male health service provider participants- a medical doctor and a public health professional- mentioned women's reluctance to discuss reproductive health issues with male health service providers. Both emphasised that this hesitancy led to incomplete assessments and potentially inadequate care, as captured in the following quote from the interview with a hospital based medical doctor:

> *.... They come up and explain only their general problems. Specially, if there is a problem related to women and their private parts, they find it difficult to open up. To be specific, if it is a male doctor, it is more difficult for females to tell their problems. Therefore, this hesitancy is also a special challenge for women's health care.* (In2, HSP2)

The findings suggested that women's reluctance to discuss reproductive health issues with male providers is not simply a matter of personal discomfort but is rooted in deeper cultural norms surrounding gender and communication. This hesitancy presented a significant barrier to proper diagnosis and treatment, ultimately impacting women's overall wellbeing. This problem was not readily resolved due to the very limited number of women doctors for women to consult with.

There were some suggestions by the other health service providers that FCHVs play a vital role in convincing women to seek early medical help. In the following quote, the medical doctor explains how FCHVs can contribute to timely service utilization among women:

> *In this case, the female community health volunteers can convince them. They can explain that they need to get treatment for their symptoms; no one knows about this disease, everything is kept secret, and privacy will be maintained. If this much confidence can be given at that time, many women can disclose about their problem and will come to get their treatment.* (In2, HSP2)

By assuring women that their health information will be kept confidential and that treatment is important, FCHVs can help build trust and encourage them to openly discuss sensitive reproductive health issues, particularly when male providers are involved. This support can lead to earlier interventions and improved health outcomes for women.

Initiatives for Strengthening Health Services

Following the earthquake, several important initiatives were introduced to address the health needs of women. Health service providers suggested that the establishment of OCMCs appeared as a key strategy to support women affected by gender-based violence. Document review findings also showed that incidents of gender-based violence increased following the earthquake, and many affected women accessed services through OCMCs (Rana, 2016). In addition, FCHV'S who had been contributing

to community health for many years, their role became even more prominent after the 2015 earthquake and the introduction of Nepal's new constitution and federal system. Since that time, FCHVs played a crucial role in promoting the health and wellbeing of women across Nepal.

Innovative Health Services

Findings from health service providers emphasized that the introduction of OCMC was one of the key initiatives in strengthening the health system which took momentum after the earthquake. This initiative was dedicated to preventing gender-based violence and promoting women's wellbeing. According to Rana (2016), after the earthquake, a high percentage of women were the victims of intimate partner violence in the form of physical, mental, and sexual abuse. In 2015, after the earthquake, to address the needs of gender-based violence victims in disaster-affected districts, successive OCMCs were established in 77 hospitals in 74 districts, including Nuwakot. The hospital-based health service providers emphasised that they had such a service targeted to women suffering from violence:

> *… in our district-level hospital, the service for women who are experiencing diverse types of family violence is also being provided which is called OCMC (One stop Crisis Management Centre). Under this service, various services to mitigate impacts of violence among women are organised. These include health assessments, treatment, and counselling. All these procedures are free for any woman who comes to us due to any form of violence and information are kept private and confidential.* (In2, HSP2)

The participant further highlighted the effectiveness of the service in promoting the wellbeing of women experiencing gender-based violence,

> *As mentioned earlier, there have been cases of violence against women, and the women are seeking and utilising services from our program. When one person knows about it, they tell their friends and neighbours who are also facing similar problems with this service, and they also come here. Many women now come here to be rescued from the violence, to examine their health condition, and to get treatment. They also come here for the sake of their security from those who hurt them. We have done the assessment and examination of the victims who survived violence followed by their treatment, and medications. These services are free of cost and while providing them, their privacy is maintained.* (In2, HSP2)

Even after suffering from the violence, women do not want to disclose the issue, thinking that they will be abandoned by their family and left alone. Therefore, they are convinced to utilise the service because they are assured their information will be kept confidential. So, the peer networking has been important in encouraging women to access this service. Sometimes, when the victims are brought to the hospital after a severe assault, free examination, consultation, and medications have helped women by allowing them to recover.

The medical doctor further stressed that women seek this service for all types of family violence:

> *Most of the women come due to physical assault from their family members. Some women are subjected to gender-based violence and sexual violence. Most of the time, women are victimised by their husbands.* (In2, HSP2)

This data highlights how the overall wellbeing of women is affected because of some form of violence. This issue has become more alarming since the earthquake. The OCMC initiative has become effective in helping women overcome their concerns by addressing their safety needs.

Vital Role of Female Community Health Volunteers

Interview findings also highlighted the vital roles of FCHVs in promoting the long-term wellbeing of women in Nuwakot. While FCHVs have long contributed to community health promotion in Nepal, specially focusing on maternal and child health, their work became notably vital and initiative-led after the earthquake and during the shift to federal governance. The public health professional mentioned the effectiveness of FCHVs in enhancing the health literacy and health care utilisation among women:

> *The strategy of employing FCHVs has been very effective in our health sector. FCHVs working at grass root level are our easiest medium of access to provide information to our community level. FCHVs hold their mother group meetings every month. If any of those women or their family member have any health problems, they discuss about their problems at that time. Again, FCHVs have meetings with us every month. They inform us about women's health problems. After that, those health problems which can be managed at our health post are managed here. Otherwise, the complicated cases are referred to district hospital after health counseling.* (In1, HSP1)

Findings suggested vital role of FCHVs in promoting healthcare knowledge and utilisation by women in the Nuwakot district. They take lead and initiative by holding the meetings with women and identifying their health concerns. As FCHVs have a direct connection between the healthcare system and the community, their ability to communicate and share important health information with the communities helps increase women's health literacy. They liaise between the women and the healthcare system by communicating women's health needs.

The medical doctor also mentioned that the fact that community volunteers are female fosters trust with the women in their community:

> *The role of female community health volunteers has been remarkably effective. They belong to the same society, and the important thing is that they are also women. That is why, women of a specific community listen more clearly to what they say about the health services. The Female Community Health Volunteers can go among the women and inform them that if they have any disease, they can come to our hospital and utilise the treatment facilities available here.* (In2, HSP2)

FCHVs have a deep understanding of women's needs and challenges because they are also female. Women feel more comfortable seeking help and advice from them. Therefore, FCHVs have been found to effectively address the health issues specific to women and children, either through group counselling or individual home visits.

FCHVs also highlighted that their uniform was the symbol of trust among women:

> *... Instead of us, if someone other goes to their place and tells them about any health services, they do not believe it, but when we tell them about it, they believe and trust us a lot. When they see our dress, they believe what we say. They have seen us doing regular work for their health benefits. That is why they think that what we FCHVs say is true, thus they agree to go to the facility and get the available service. When it comes to health, we also take our work seriously; we instruct the general people of our village to learn what we have learnt from the training.* (In3, FCHV1)

When visiting households in their catchment areas, the unique uniforms establish credibility, enabling women to believe and trust the information offered by FCHVs. Community women show respect for their work and pride in providing a service to community members, especially women.

Despite lacking formal health education, FCHVs serve as trusted frontline workers who are taking initiative to bridge the gap between communities and the health system. They are instrumental in raising awareness, promoting maternal and child health, supporting immunisation campaigns, distributing essential medicines, and encouraging healthy behaviours among women and families. However, as the following quote illustrates, FCHV shared their dissatisfaction with not receiving regular training:

> *First, we are provided with basic training (18 days), and later, if a new programme is launched, then we are provided with information about that. These days, there is not as much training as before. All of us health volunteer workers feel that the training is not adequate as per our needs because many FCHVs are now aged. If they are not trained regularly, they will forget whatever is taught before. For this, regular training would be better.* (In3, FCHV1)

The above data suggests that there was a need for ongoing, structured training for FCHVs to ensure sustained capacity building in delivering community health services. Although the volunteers are aging, their services are ongoing. Given their deep community engagement and influence, continuous refresher courses to ensure accuracy of information were seen as important. This is required not only to enhance their effectiveness but also to significantly contribute to improving the health and wellbeing of women and children in Nepal, especially in remote areas where professional health services are limited.

Converging Data from Different Data Sources

The data analysis and interpretation of this case study is guided by the constructivist perspectives of Lincoln and Guba (2013) and Stake (1995). Consistent with the principle of relativism, findings and themes were initially presented separately to preserve the differing perspectives of the participant groups and document review. According to Stake (1995), "the importance of triangulation is to bring understanding about the case and on the degree to which this statement clarifies the story or differentiate between conflicting meaning" (p. 113). Although various approaches to data triangulation exist, this study employed methodological triangulation. While the perspectives derived from different data sources are presented separately, this section synthesises themes across the data sources- focus group discussions with women, individual interviews with health service providers, document review and description of physical context to provide a more comprehensive understanding of the case.

Bringing together the document review, focus group discussions, individual interviews, and descriptions of the physical context of Nuwakot based on personal observation, the data collectively provides an understanding of the case under investigation- survivor women's long-term wellbeing and the factors that influenced their wellbeing over time through inductive analysis. Through the common ground of different data sources, it was interpreted that for the survivor women, earthquake was not a one-time event but the start of a long journey of loss, coping and adaptation.

In answering the first research question, how did survivor women experience their long-term wellbeing following the earthquake, findings across all four data sources revealed that women experienced impacts on multiple dimensions of their wellbeing. The findings from the document review showed high rates of injury among women, disrupted livelihood and increased male labour migration to withstand the financial impact. Focus group discussions provided personal accounts of ongoing pain from injuries, persistent fear of future earthquakes, and the continued burden of domestic and caregiving responsibilities while husbands worked abroad. Interview findings further indicated that women often missed important medical follow-up appointments being the hub of family life, that compromised their health. This agreement between

data sources shows that post-earthquake hardship continued for long- term and women's wellbeing was heavily influenced.

In response to the second research question, how has women's wellbeing been influenced over the long-term following the earthquake, a consistent finding across all four data sources was the persistent fragility of health services in rural Nepal, particularly in Nuwakot, which continued to compromise women's wellbeing despite post-earthquake reconstruction efforts. Focus group discussion, interviews with health workers and the document review all agreed that- basic health care was usually available, but specialised care was expensive, far away, and hard to get specially for women who are financially disadvantaged. Furthermore, personal observation of the physical setting also showed barriers such as transportation, affordability and unavailability of 24-hour service confirmed these findings. Therefore, these systemic fragilities point to a long-standing weakness in Nepalese rural health care system.

Across the findings of all data sources, women were not confident that the health services were easily accessible and dependable. Male health service providers reported that women were often reluctant to discuss reproductive health concerns with male practitioners. Women frequently relied on volunteer community health workers and felt more comfortable sharing their concerns because of their similar gender. The document review similarly identified stigma and reluctance to discuss health concerns with male providers as significant barriers to health service utilisation. These findings suggested that the provision of gender responsive professional health services in promoting long-term wellbeing of women has not been prioritised despite the completion of post-earthquake reconstruction efforts.

Multiple data sources collectively revealed that, women's wellbeing was also shaped by the reconstruction of the houses and the strength, perseverance and ingenuity of women in response to the challenges they encountered post- disaster. While the document review described the government's "build back better and safer" approach in constructing the newer homes to the affected communities, women in the focus groups reported feeling secure again once they had solid, earthquake-resistant homes. This finding was supported by researchers' direct observation of newly built houses with

proper toilets, kitchen garden and clean surrounding environment. Therefore, new home supported women's sense of safety and coping over time. Additionally, data across the focus group discussions and document review indicated that factors including self-earning and saving opportunities for women, mutual community support, individual perseverance and religious faith and practice facilitated women to cope with the ongoing challenges resulting from the earthquake.

Finally, there was consistency across the focus group discussion and interview findings on the gap between disaster preparedness policy and its implementation. Health workers reported that Rapid Response Team (RRT) exist, however, they are not sufficiently active in providing safety training within communities. This finding was consistent with the women's accounts, which indicated that they were not adequately prepared to respond appropriately or take necessary precautions in future disaster contexts. Although national and local disaster response and management policies emphasise the importance of regular community-based safety exercises to enhance preparedness, these interventions were not evident in practice and appeared to be inadequately implemented at the local level.

The data convergence matrix below summarises how findings from the different data sources converged and complemented one another, contributing to a comprehensive understanding of the case.

Table 5

Data Convergence Matrix

Theme	Document Review	Focus Group Discussion	Individual Interviews	Physical Observation	Converging relation
1. Long- term influences on women's wellbeing	High injury rates, disrupted livelihoods, and increased male labour migration noted.	Women shared ongoing physical pain, fear of future disaster and impact to families, burden of family caregiving	Health service providers shared women skipping medical follow up due to prioritisation of housework	Male family members were absent in most of the houses	Agreement across the data sources
2. Persistent Systemic Fragility in Rural Healthcare	Documents show accessibility, affordability and geographical barriers for women to access health services.	Women noted basic care is available, but specialized treatment is too expensive and far away.	Health workers also pointed that primary health care services are affordable, specialized care is financially and geographically out of reach for disadvantaged women.	Personal observation revealed persistent structural barriers following post-earthquake reconstruction	Complete agreement across all four data streams
3. Gender Barriers & Trust in Health Services	Records show stigma and hesitancy to consult male providers act as major barriers to utilization	Women trusted FCHVs in sharing their health information rather than consulting with male doctors.	Interviews with health workers revealed a lack of trust in general services, and a preference for same-gender community volunteers to discuss reproductive health issues.	N/A	Complementary data findings to deepen the social context of the barrier in health service utilisation
4. Housing Reconstruction & Coping Strategies	Document reviews shed light on government's introduced "build back better and safer" policy,	Women felt secure in new homes. Being financially independent, living in their own community	N/A	The newly built homes were equipped with proper toilets, kitchen gardens and cleanliness	Data findings are complimentary to each other.

Theme	Document Review	Focus Group Discussion	Individual Interviews	Physical Observation	Converging relation
	to support post-earthquake reconstruction	and their individual perseverance, and religious faith helped adaptation and recovery		was maintained.	
5. Policy-Intervention Gap in Disaster Preparedness and Response	National and local Disaster Response and Management policies mandate regular community safety exercises and active disaster response.	Women confirmed they remain entirely unaware about the effective measures to follow if another earthquake hits.	Health workers revealed that Rapid Response Teams exist but are completely inactive with no safety training provided.	N/A	Data findings suggested gaps in written policy and practical implement ation

Chapter Summary

Overall, the findings with health service providers suggested that women's wellbeing post-earthquake is affected by persistent service fragility in health systems in terms of accessibility, affordability, and utilization of health services in Nuwakot. Even following the reconstruction and recovery efforts, persistent gaps remained in service delivery and utilization. Women faced barriers in timely seeking the services because of significant transportation and geographical barriers, being focused on 'housework' as they acted as a hub of family life missing the follow ups for health problems. This constrained women's wellbeing over the long term. Initiatives such as OCMC and strengthened role of FCHVs are helping in women's health promotion and wellbeing. Therefore, addressing women's health care needs requires the comprehensive strategies to tackle the gender inequalities, ensuring adequate resources, improvement of transportation infrastructures and creating culturally supportive healthcare environments to encourage timely health care utilization for sustained positive wellbeing among women. The chapter concluded with convergence of data findings from four different sources which provided a comprehensive understanding of the case.

Chapter Eight Assertions

Introduction

This chapter presents the assertions drawn from my overall case study report. According to Stake (2010), assertions can be a mix of personal experiences during fieldwork and scholarship pertinent to the research questions and are drawn from our deep understanding of the case. Therefore, the assertions drawn from my study findings convey key conclusions that relate to the research questions: How do Nepalese women experience their long-term wellbeing following the 2015 Nepalese earthquake and how has Nepalese women's wellbeing been influenced over the long-term following the earthquake? I have constructed these assertions from the interpretations of the data collected from the document review, focus group discussions with women in Nuwakot, Nepal, who survived the earthquake in 2015, and individual interviews with the health service providers working in Nuwakot.

The Assertions

The assertions are presented in order of the issues presented in the conceptual structure (see Table 1 above), which was developed to seek answers to the research questions and guided by the case study. Firstly, assertions are presented about the survivor women's initial experiences of the earthquake, followed by how they perceived their wellbeing over the long-term following earthquake. I then present assertions on women's health and safety concerns in the short- and long-term post-earthquake and elaborate on what factors contributed to maintaining long-term wellbeing among the women while identifying the constraints they faced in accessing and utilising health services (dos Santos Silva et al., 2024). The final assertion is focused on initiatives that address women's long-term wellbeing after the earthquake. A total of eleven assertions were developed from the overall findings. The assertions are presented below:

Assertion 1: The 2015 earthquake profoundly impacted multiple aspects of wellbeing of women and their families in Nuwakot, including the physical, mental, and socio-economic wellbeing of them and their families across both the immediate and longer term (Document review, FGD).

Women in Nuwakot reported sustaining physical injuries immediately after the earthquake and described how the emotional impacts of the event continued over time. One woman stated, *"it took time to heal, the scar is still here, my body was hurting even later… at that time, I was really stressed*" (FGD4, P2). The physical consequences of the earthquake in women's family were also still evident, as one woman stated that her husband's fractured hand was still misaligned, and such consequences contributed to women's concerns.

The impact on psychological wellbeing was noticeable as women feared that the earthquake would occur again and harm their near and dear ones. *"Even now, when there is shaking of a small earthquake, I feel like it will cause harm"* (FGD4, P2). Additionally, their desire to protect their family from adversity was evident throughout the findings, as shown by one woman's comment that*, "it is not only a matter of myself, but I am also more worried that my family will suffer more if these things happen again"* (FGD3, P3).

Moreover, there was a significant effect on women's socio-economic wellbeing during the mid- and long-term period following the earthquake as families suffered loss of employment or family business and experienced financial constraints related to housing reconstruction. Women were frustrated at having lost their home businesses after the earthquake, which meant that their husbands had to go to abroad to work. This was the situation for one woman, who stated, *"… but the hotel did not run well after the earthquake, …so, he went abroad again, and he is still in a foreign country*" (FGD4, P1). The document review also identified an increase in labour migration after the earthquake, predominantly among male family members, to address financial hardship (Central Department of Population Studies, 2015). The instalment-based housing grants placed an additional burden on women, as they were required to lay the foundation of their homes independently, despite lacking the financial resources to initiate construction. As one participant noted, "*…it was difficult for those who did not have any saving to start building their house"* (FGD4, P4). The Asia Foundation (2024) report concluded that the grant distribution process was lengthy and inefficient, particularly for women who were uneducated and unfamiliar with formal banking procedures, making it difficult for them to access the necessary support.

Assertion 2: Women had health and safety concerns in the immediate and long-term post-earthquake that were not sufficiently met by the temporary accommodation and facilities provided (FGD, document review).

Women faced multiple challenges and ongoing fear and stress while they were living in the temporary shelters immediately after the earthquake. *"We had to live in cowsheds, under tents as well as open yards. There was fear of tigers and thieves."* (FGD1, P1). Another major stressor was continuing the cultural rituals during menstruation in temporary shelters. "*The biggest problem was during menstruation. There was always the fear of being touched here or there in the house…*" (FGD3, P4). They lacked separate bedding when needing privacy and had to sleep outside, meaning that their basic wellbeing needs were not met. These issues were also noted by the document review findings that approximately 62% of female respondents in Nuwakot reported feeling insecure while sleeping in temporary shelters or damaged homes, with 32% experiencing difficulties during menstruation and while changing clothes (CDPS, 2015).

Women, being the hub of their family life, shouldered added responsibilities while managing food and shelters and taking care of their family members, many of whom were also injured. The water sources were disrupted, and women had to travel far to fetch water, which was time consuming and physically demanding. Lack of private space and unsuitable toilet and bathroom facilities meant that the gender-specific needs of women were not addressed. Important supplies such as sanitary pads or clothes for women were not available in the relief aids (FGD, Document review).

Assertion 3: The completion of post-earthquake reconstruction significantly contributed to women's long-term perception of safety and wellbeing (FGD, document review, description of physical context).

Women's wellbeing was supported by the completion of housing reconstruction as women reported their fear and worries, in part, was alleviated by being able to live in new, earthquake-resistant houses. *"The main thing we considered was to make a concrete house, …it has toilets, and the houses are better than before"* (FGD1, P5). The document review finding revealed that the reconstruction in Nuwakot was completed using the "build back better and safer" approach. This government-led effort focused on

empowering homeowners to rebuild safer, more resilient homes (The Asia Foundation, 2024). Following the completion of the housing reconstruction, the women could maintain wellbeing as they had access to a clean physical environment with newly built latrines and were able to grow vegetables in their new kitchen gardens. While observing the surroundings during the data collection, all the houses were newly built, and seasonal vegetables were grown in kitchen gardens (Personal Observation).

Assertion 4: Community solidarity and a strong social support system from friends, relatives, and neighbors were one of the protective factors for women to cope with the earthquake's immediate and long-term impacts, fostering their social and emotional wellbeing (FGD).

Even while living in temporary tarpaulin tents, women found strength to face the challenges in aftermath of earthquake, being able to remain within the community. "*At that time, our entire village was living like we were living in the same house as our own family*" (FGD3, P4). Women were able to manage their food and accommodation with the help and support from each other. During the hardships, they lived as a single family with a "sharing and caring" attitude. Rural Nepalese communities pride themselves on their community solidarity, mutual help, and cooperation in navigating any life challenges, *"not only during the earthquake, every time, we have very good cooperation and support with each other in our society" (*FGD2, P2).

Assertion 5: Women's wellbeing was also supported by their internal capacity to accept recurrent adversities, contributing to individual perseverance and emotional resilience. This adaptive acceptance was evident in participants' reflections that "problems are part of life" (FGD).

Women's accounts highlighted that they believe problems to frequently arise in life, and they felt ready to face and navigate the challenges. This was evident in focus group discussions as one woman said, "*I have problems in my life…but if I do not lose courage and work with encouragement, the solution to any problem can be sought"* (FGD2, P3). They accepted the ongoing adverse events in life and moved forward by focusing on self-strength, having quality family time, and sorting out best possible solutions to overcome the recurrent challenges. "*Problems come and go in our life… we should be able to enjoy*

ourselves and be satisfied with what we have, stay calm, and do our work in such a way that our health and wellness do not suffer (FGD3, P3). This positive mind-set and individual perseverance helped women positively shape their subjective wellbeing over the long-term.

Assertion 6: The women's long-term peace of mind was supported through faith and regular practice of religious rituals (FGD).

Women described how their faith, continuous devotion and engagement in religious activities have given them a sense of peace following the earthquake. Their spiritual practice provided emotional stability throughout the immediate and long-term recovery periods. Across all focus group discussions, women consistently expressed that faith had been crucial for their survival and emotional resilience. *"We constantly remembered and prayed to God during the time of the earthquake. It is because of God's grace we are alive"* (FGD1, P1). Their strong belief in God provided a sustained sense of peace of mind and helped them navigate recurrent problems and challenges over time.

Assertion 7: Women's involvement in financial self-empowerment through small scale farming businesses, participation in mother's group saving schemes, and deposits in cooperative banks, supported their long-term financial independence after the earthquake (FGD).

In the years following the earthquake, women became increasingly proactive in strengthening their financial security. In the focus group discussions, women reported contributing regular monthly levies to their mothers' groups and participating in savings practices, which provided them with accessible funds during times of need. In addition, several women engaged in small-scale farming enterprises, such as raising and selling goats and chickens, and developed the habit of saving a portion of their earnings. As one participant explained, *"…whatever money comes in, I make some savings in the cooperative bank"* (FGD4, P5). This cultivation of financial management practices and economic independence through self-employment functioned as a protective mechanism that positively supported women's socioeconomic wellbeing, particularly during times when families faced loss of livelihood, or when male household members had to work abroad.

Assertion 8: Women regularly endeavoured to access health services after the earthquake. However, while primary health care services were generally available, there was inequitable access to secondary and tertiary diagnostic and treatment services for women living rurally and who were experiencing socio-economic difficulties (FGD, interviews, document review, description of physical context).

The women in rural Nuwakot communities described persistent challenges related to accessibility and comprehensiveness of health services. Using the expression "it hurts" *[pida huncha]* one participant (FGD1, P2) articulated the emotional and practical distress associated with being unable to meet their health needs due to expensive health care costs and a lack of comprehensive and accessible services. Women requiring specialist care often had to travel far to private facilities, "*…since all facilities are not available in the district hospital, we also have to go to private hospitals"* (FGD1, P5). In these contexts, the costs of diagnostics, treatment, and temporary accommodation imposed additional socio-economic burdens—particularly for those managing chronic conditions or having limited income. As one woman reported, "*I borrowed money from two of my neighbours and collected the money for my admission and surgery"* (FGD3, P5). These insights align with the document review findings showing that shortages of trained staffs, inadequate infrastructure, and limited specialist services were major barriers in getting comprehensive health services (MoHP, 2018). Importantly, these are barriers that existed even before the earthquake and continued after the reconstruction of health service sectors, suggesting the need for sustainable, systemic reforms of the health sector.

Assertion 9: Initiatives that address women's long-term wellbeing after the earthquake are effective when they are locally based, led by women, sufficiently resourced, and provide a one-stop solution (Interviews, FGD).

One of the most effective initiatives after the earthquake and Nepal's shift to federal governance (see Figure 1) was strengthening the role of FCHVs in a disaster context and the promotion of women's health and wellbeing. FCHVs are well positioned to communicate health information and encourage women to attend service regularly. Their effectiveness stems, in part, from being available within the communities. Unlike

most health professionals in Nepal, FCHVs are also women, which facilitated interpersonal relationships and trust among community women. Thisin turn made women more receptive to the health advise the FCHVs had to share. Meanwhile, the establishment of OCMCs at the government hospital was another important initiative that provided integrated, confidential support for women experiencing violence after the earthquake. As one health provider noted, "…*there have been cases of violence against women, and the women are seeking and utilising services from our program*" (In2, HSP2).

Despite these promising initiatives, there continued to be persistent resource gaps at nearby health facilities. While geographic proximity and the availability of 24 hours service at local health centres would greatly enhance women's ability to access timely and consistent care, long travel distances, road and transportation constraints and fragmented and unreliable services in the tertiary hospital created substantial barriers that were difficult to overcome even when supportive initiatives existed.

Assertion 10: Women lack trust that health services are safe and dependable (FGD, interviews).

Focus group findings and interviews with service providers implied that women had concerns around a lack of confidentiality, potential stigma, cultural concerns about engaging with male practitioners, and worries over things such as medicines running out or unavailability of emergency and comprehensive services at certain times, suggesting service fragility. As one of the participants noted, "*when we come to get health services from our local health center, they must provide us with services in the evenings and at night. But it is not available here…"* (FGD1, P4). FCHV voiced similar concerns in their interviews, with one of them stating, *"in our place, it is difficult to manage emergencies that happen in the evening and nighttime, and hospital is far away"* (In2, FCHV1*).*

Male health service practitioners suggested that women felt unsure that their health problems would be kept private within their tightly connected community (In1, HSP1). The shortage of female healthcare providers further limited women's ability to openly discuss sensitive health issues, reinforcing systemic fragility and reducing their ability to access timely and appropriate care. Collectively, these factors illustrate a broader

pattern of mistrust that undermines women's confidence in the healthcare system, and which affects their post-disaster wellbeing.

Assertion 11: There is a policy-intervention gap in supporting women's preparedness for future earthquakes (Interviews, document review).

Women's uncertainty about the safety precautions they should take during an earthquake was evident in focus group findings, leaving them vulnerable in the event of future seismic events. Women described confusion about appropriate actions, noting that prior information they had received was unclear or had not been reinforced over time. As mentioned by one woman "…*I didn't even know that I had to run away*" (FGD3, P5), illustrated the extent of this uncertainty. Findings demonstrated outdated or poorly contextualised preparedness knowledge that placed women at particular risk, given their roles within the home. As one participant shared, *"I was taught in school, when an earthquake occurs, I should sit under the door or the window, I did so, however, the door itself pressed against me and there was a big cut on my head*" (FGD4, P2).

Health service providers similarly reported that although local Rapid Response Teams had been established with defined roles and plans, these mechanisms remained reactive rather than proactive. As one provider explained, "*Rapid Response Teams have been formed in our every ward … However, currently, the committee has not been working actively"* (In1, HSP1). The absence of active community engagement-particularly through regular drills, simulations, and public education-meant that women and other community members were not benefiting from existing policy frameworks for updated earthquake safety precaution education. Document review findings further confirmed this gap. Nepal's Disaster Risk Reduction and Management Act clearly outline the responsibilities of local authorities to conduct preparedness activities, including public awareness campaigns, safety training, and earthquake simulation drills (MoHA, 2019). However, women's and health service providers noted that these policy commitments have not consistently translated into practice.

Chapter Summary

The chapter presented assertions derived from the key linkages across data sources. These assertions illustrated that following the earthquake, women had negative wellbeing experiences across multiple dimensions over the long-term. There were ongoing physical concerns, long-term stress, and socio-economic challenges women and their families had to face, even eight years after the disaster. However, the assertions also highlighted continued religious faith, community support, individual perseverance, and financial independence as key adaptive strategies women drew on that supported their wellbeing in the face of recurrent challenges over the years following the earthquake. Despite such strategies, persistent barriers to wellbeing existed in the form of both comprehensive, reliable healthcare accessibility and women's attendance of regular healthcare appointments. Furthermore, the chapter underscored the significant role of initiatives such as counselling services and FCHVs in supporting women's health promotion post-earthquake. The next chapter discusses how these findings compare with existing literature and relevance of these findings for policy and practice, particularly in the context of Nepalese community, are analysed.

Chapter Nine Discussion

Introduction

This case study aimed to understand the long- term wellbeing of women in a Nepalese community following the 2015 Nepal earthquake. The current chapter collates the findings and assertions identified in previous chapters, highlighting the women's experiences, influences on their long-term wellbeing, and the key strategies they used to overcome challenges after the earthquake. The chapter then provides a summary of the findings in light of the research questions and positions the findings in relation to the existing literature. The key implications of the study findings are presented, and the study's strengths and limitations are discussed. Finally, the chapter offers recommendations for health policy and identifies the avenues for future research.

Summary of Findings: Focus Group Discussions with Women

The focus group discussions with women survivors of the 2015 Nepal earthquake identified enduring concerns for, and influences on, multiple dimensions of their wellbeing. Many women continued to experience emotional distress, recalling traumatic events such as near-death experiences, loss of homes, and their difficult life in temporary shelters. These memories remained vivid, showing that the psychological impact of the disaster persisted long after the event.

Findings highlighted that women's caregiving roles intensified in the short term after the earthquake, as they had to manage their household duties and care for injured family members. The burden increased as women dealt with menstruation and pregnancy-related challenges in unsafe and unsanitary conditions. Despite improvements in housing and sanitation, eight years past the earthquake, many women still suffered from health problems and had an enduring fear of experiencing another earthquake, suggesting some post-traumatic stress symptoms. The main cause of their fear of living through another earthquake was worrying about the safety of their families.

In the longer term, women's lives have become more complex since the earthquake as many now are in sole charge of their household while partners are away earning. This

responsibility has increased the burden placed on women. To navigate the challenges faced, women relied on mutual support and faith-based religious practices. This helped them manage stress and enhance their inner self-strength and confidence to rebuild their lives. Women also pursued financial independence through small-scale farming and livestock rearing, which helped improve their confidence and resilience.

Since the earthquake, access to healthcare remained a persistent concern for women in Nuwakot. Despite the reconstruction of healthcare infrastructures, women suffered healthcare accessibility issues due to transportation problems, geographical constraints, limited-service hours, and high service costs. Some relied on private healthcare despite the financial burden, while others struggled to even afford less costly government health insurance. Participants expressed a strong need for 24-hour services, emergency care, and specialist availability in rural health facilities. Even with the passing of time after the disaster, women had concerns regarding their awareness of safety procedures should another earthquake of similar magnitude occur. Concerns about unequal relief distribution further highlighted the need for fair and inclusive disaster response planning. Overall, these findings show that women's wellbeing is shaped not only by the initial disaster but by their continued efforts to cope with stress, rebuild their lives, lead their households, and navigate systemic challenges.

Summary of Findings: Individual Interviews with Health Service Providers

The interviews findings with health service providers in Nuwakot demonstrated persistent fragility in the healthcare system in both the immediate and long-term aftermath of the 2015 Nepal earthquake. These findings align with the focus group findings. While the health facilities were reconstructed after the earthquake, the newly built health posts were still not equipped to provide 24-hour service. This posed risks for women during emergencies, especially at night when they had to had to figure out how to travel to the nearest hospital, which was either impossible or costly. Staffing shortages and frequent turnover further undermined service quality in both tertiary and local primary healthcare facilities. Additionally, limitations in infrastructure and medical supplies restricted health posts to providing basic care only. As a result of these structural issues, women often had to travel long distances to access specialised

services, which was especially challenging given the poor road conditions, the lack of transport, and seasonal weather disruptions.

Many women were unable to prioritise their own health due to their family and household responsibilities but also due to their gendered roles. Fear, stigma, and hesitancy to share their health problems further limited women's willingness to seek care, especially in relation to reproductive and communicable diseases. Women were often reluctant to disclose symptoms or consult male health service providers, which led to delayed diagnoses and treatment. Where women were more reluctant to open up about their problems with male service providers as they could not effectively address personal and cultural preferences of women; the provision of FCHVs partially helped women overcome this barrier. FCHVs have emerged as vital mediators who fostered trust and encouraged service utilisation through community engagement and health education. However, their effectiveness was limited because of a lack of regular training.

Despite these challenges, some innovative services gained momentum following the earthquake and the promulgation of Nepal's new federal constitution in 2015. The establishment of OCMCs provided crucial support for women experiencing gender-based violence, offering free and confidential services in a safe environment. However, in line with the findings from the focus group discussions, disaster preparedness efforts were found to be reactive rather than proactive, with the Rapid Response Team failing to conduct regular training or disaster preparedness simulation exercises.

As a whole, the current study findings suggest that women experienced tough times immediately after the earthquake; and this traumatic experience had long-term influences on their wellbeing in the context of this rural Nepali village. The constructivist case study methodology used in this study provided a contextualised, holistic view of women and their experiences, capturing short-term and long-term influences after the disaster. Additionally, knowledge was constructed on how women had adopted strategies that helped them navigate those challenges linked to their disaster recovery. The following sections discuss the meaningful constructs that were derived from the document analysis documents, focus group discussions with women survivors, and

individual interviews with health service providers, and findings are compared and contrasted with existing literature.

Women's Life Experiences Immediately after the Earthquake

The women's early experiences following the earthquake were marked by vivid and overwhelming trauma. Some women sustained personal injury, and some had witnessed near-death and struggles of their family members with long-term injuries. The loss and fear remained intense eight years later amongst the women. This suggests that the experience of the earthquake had enduring emotional wellbeing impacts and aligns with findings of post-disaster studies that have shown that exposure to death, bereavement, injury, or illness can significantly affects survivors' mental health (Fernando & Hebert, 2011; Paudel et al., 2025).

In this case study, trauma was compounded by women's caregiving responsibilities, including care for children and injured family members. Women prioritised the safety of children over their own, reinforcing findings by Dema Moreno et al. (2022) on gendered roles in disaster response. The gender-based division of labour caused an additional burden within the home. Similar to the earlier findings by Rajbhandari (2016) and Singh (2021)., the current study findings also suggested that throughout the post-earthquake phase, the responsibility for caregiving, food management, and water collection, which was physically demanding, rested mostly upon women, an observation The migration of male family members for the purpose of earning for their family further intensified women's responsibilities.

Study findings also suggested unsafe practices posing health concerns when families were living in tents and temporary homes. For example, drinking water was used that was deemed unsafe due to the blockage of water sources, and the use of unhygienic, off-cast clothing for pads during menstruation which posed a risk of infection. Living in tents, cowsheds, and open fields exposed women to safety risks and extreme weather. This is consistent with the findings from the report by the United Nations (2019) and a qualitative study by Rajbhandari (2016) on gendered health vulnerabilities post-disaster. In contrast to other study findings, this case study generated a deeper understanding of how women prioritised survival over hygiene, which was barely explored in previous

studies. This finding highlights the need for gender specific relief supplies in the immediate post disaster phase to ensure women's wellbeing needs are met.

Assertion 2 implied, beyond hygiene concerns, women's post-earthquake menstruation experiences were marked by having to constantly negotiate social expectations within the confines of their temporary shelters. Many Nepalese women adhere to the practice of *chuna-nuhune*-a ritual rooted in rural and ethnic communities that designates women as impure while they are menstruating (Mukherjee et al., 2020). Mensurating women perform common rituals Click or tap here to enter text.such as not touching male family members or shared water sources, eating alone, avoiding kitchens or worship places, and not attending social gatherings (Crawford et al., 2014). Though widely regarded as gender-based discrimination, women in my study viewed this primarily as a cultural obligation. Living in temporary shelters created heightened stress as maintaining untouchable status in small spaces was difficult. This aligns with findings by Budhathoki et al. (2018) and Baumann et al. (2022), who found that disaster contexts intensify the burden of maintaining purity rituals. The findings from the current study capture the contextual reality of a rural Nepalese community that amplified psychological pressure on women through not being able to meet cultural expectations. These strongly suggest the need to recognise women's cultural perspectives for effective, post- disaster rehabilitation.

The post-disaster experiences of pregnant women in this study revealed increased psychological vulnerability, shaped by cultural beliefs and disrupted healthcare access after the earthquake. Pregnant women experienced sustained emotional stress throughout pregnancy and the post-natal phase. They shared a deep fear of miscarriage and were anxious about the wellbeing of their fetus due to the earthquake's shaking and ongoing aftershocks. This is similar to the findings of Brunson (2017) ethnographic study that was also conducted in Nuwakot, who found that pregnant women were concerned about fetal health. K.C and Hilhorst (2022) likewise noted high levels of anxiety and sleep problems among pregnant Nepalese women post-earthquake and Adhikari et al. (2017a) found that pregnant women affected by the 2015 earthquake had increased mental health issues, especially when access to health services was limited. Drawing on my positionality as a female researcher who has directly experienced the earthquake, my

study findings have provided an in-depth understanding of local cultural perspectives from an empathetic lens and underscore the critical need to integrate culturally sensitive approaches into maternal health interventions in post-disaster settings.

Delays in post-earthquake reconstruction represented an extra burden and source of stress for the women. As Assertion 1 implied, since all the houses needed reconstruction, women faced delays due to labour and financial shortages, especially for those whose daily living depended on their daily wages. This finding is congruent with the study by Sharma et al. (2018), which revealed that poverty, inequality, and unemployment are existing social problems that increase people's vulnerability and hinder their ability to accelerate the post-earthquake reconstruction. Additionally, this study finding also found that the instalment-based government aid system created barriers for those without initial savings, a finding echoed by Nepal et al. (2021), suggesting that poorer and more isolated families in particular faced hurdles in securing loans, which further slowed reconstruction. Evidence suggests that flexible housing assistance, where those whose houses were destroyed had access to a lump sum to help them start reconstruction, was associated with better psychological outcomes as well as higher housing completion rates (Laurito et al., 2022). In the current study, participants shared the struggles they faced initiating reconstruction by taking loans, which was arduous. The findings of this study thus indicate a lack of effective government strategies for providing flexible financial support after disasters, which contributed to delays in housing reconstruction and hindered timely recovery in initial post-disaster phase.

Influences on Women's Long-Term Wellbeing

The findings from the current study highlight the complex influences on women's long-term wellbeing. Research has shown that over the long-term, witnessing and experiencing a natural disaster places survivors at risk for emotional, behavioural, and psychological difficulties, with victims varying considerably on the survivor's ability to cope (Malik & Khalid, 2015; Norris et al., 2008). Women are also more likely to be affected by additional socio-cultural factors that can impact their wellbeing over the long-term, such as relocation, changes in family circumstances, and negative economic

effects. The combination of these factors is likely to negatively impact various wellbeing dimensions determinants that of the most vulnerable women and their families (Gunaratne & Kremer, 2021; Harville et al., 2021). In the current study, based on the overall findings from different data sources, Assertions 1 and 2 reported compounded influences of the earthquake on women's wellbeing in a rural community of Nepal.

Influences on Physical Wellbeing

Firstly, the long-term influence on physical wellbeing, was evident in the accounts shared by the women. Women talked about their scars and mis-aligned fractured limbs among their family members during the focus group discussions. These physical markers were constant reminders of the earthquake. Additionally, women attributed their current physical ailments, such as joint pain, headaches, and fatigue, to post-disaster stress and poor hygiene conditions. This finding correlates with findings from post-tsunami Indonesia, where women reported chronic fatigue and reproductive health issues linked to prolonged stress and poor sanitation (Oxfam, 2005). There is also evidence that links chronic stress to long-term health issues (Adam, 2023; Livingston et al., 2025), suggesting that there were lower levels of cortisol among the women survivors of the 2004 Tsunami. Importantly, low cortisol was associated with lower self-reported health outcomes among the women. Thus, the present study findings add to the body of evidence that suggests that post-traumatic stress symptoms can lead to long-term somatic symptoms among women survivors of disaster.

Influences on Psychological Wellbeing

Most participants exhibited long-term emotional effects, describing persistent fear of earthquake recurrence triggered by environmental reminders like rainy dark days or minor earthquake tremors. Such trauma echoes findings by Acharya Pandey et al. (2023), who reported long-term PTSD symptoms among survivors three years after the 2015 Nepal earthquake. Similarly, after the 2004 Indian Ocean tsunami, women in Sri Lanka and Indonesia were also found to suffer from long-term psychological distress due to loss, displacement, and fear of recurrence (Trieb, 2015). Collectively, these findings point to the enduring nature of psychological trauma, often sustained through environmental triggers and event-related flashbacks long after the initial disaster.

From the focus group discussions, it was noted that women had recurring symptoms involving features of hyperarousal and reactive symptoms of post-traumatic stress. For instance, mothers with young children described hypervigilant behaviours, such as instinctively running outside with their babies during aftershocks. This corresponds with findings by Panday et al. (2021), who noted that women in Nepal after the earthquake in Nepal prioritised their children during the rescue phase and continuously worried about the safety of their loved ones. Such persistent fears reflect what Norris et al. (2002) described as chronic disaster-related stress, particularly among women who were primary caregivers. Similarly, Silove (2013) emphasised that trauma from natural disasters can lead to enduring mental health challenges among women, especially when compounded by displacement and additional care responsibilities. While prior studies employed quantitative methods to assess long-term PTSD impacts, this case study uniquely contributes a qualitative perspective, capturing the nuanced experiences of women's fear and anxiety about earthquake recurrence and potential harm to loved ones. The current study adds to the existing knowledge on gendered roles in Nepal by demonstrating how women are family bound and primed to risk their lives for their children's and family's safety and wellbeing.

Influences on Socio-Economic Wellbeing

The profound influence of the earthquake experience on the long-term economic and social wellbeing among the women and their families was evident throughout the findings. The most notable influence, as captured in Assertion 1, was loss of occupation resulting in chronic depression and substance abuse amongst women's husbands. Additionally, some women discussed how the loss of livelihood compelled men to move either out of the village or abroad for work caused impaired family functioning and increased burden for women as they were left to manage households, care for children, support other family members, and look after their farm and livestock. This finding is consistent with research on the aftermath of Typhoon Haiyan in the Philippines and floods in Bangladesh, where women were bound to take on additional labour and caregiving roles while coping with reduced income and increased emotional stress (Alam & Rahman, 2014; Plan International, 2021). Similar findings were reported in a study on New Zealand's 2010 Canterbury earthquake. Briggs et al. (2023) found that secondary

stressors, such as repeated aftershocks after the major earthquake, loss of employment for extended period, financial difficulties, making decisions about damage, repairs, and relocation, and delays in insurance claims, were important indicators of psychosocial wellbeing issues among the survivors. While Briggs' (2023) study identified these predictors using a quantitative approach with the general adult population, the current study adds a qualitative perspective on women's experiences of long- term influences on physical, mental and socio-economic wellbeing through constructive inquiry supported with healthcare providers' perspectives and document review.

Considering both initial experiences and current perception of wellbeing, the findings from the present study suggest that women's wellbeing is influenced over the long-term following disasters. The current study findings postulate that the ongoing fear of disaster recurrence, the migration of male family members, increased household responsibilities, financial stress, and tensions caused by substance abuse were not short-term issues but enduring consequences of the disaster. These insights emphasise how wellbeing is deeply interwoven with the contextual influences, including social, economic, and familial dynamics.

Mediating Factors for Long-Term Wellbeing of Women

The findings from various data sources indicate that over the long-term, women's wellbeing is influenced by multiple impacts on their physical, psychological, and socioeconomic dimensions. Additionally, as proposed by Assertion 8, the influences are compounded through the inequitable access to comprehensive health services. The major barriers included resource constraints, systemic fragility in providing health care services within reach of the communities, geographical complexities, and shortages in human resources. However, as suggested by Assertions 4, 5 and 6, women's wellbeing is shaped not only by the initial disaster but also through continued efforts to cope with stress, rebuild their lives, and navigate systemic challenges. Despite having systemic fragility of the health services and persistent barriers in service utilisation, women's long-term wellbeing was partly supported by adopting strategies such as community support, engaging in religious practices, and developing individual perseverance to overcome the recurrent stressors. This is consistent with Makwana's (2019) literature

review findings that natural disasters cause socio-structural disruption, physical damages, and hinder normal social functioning, all of which contribute to long-term effects of both physical and psychosocial dimensions. Moreover, Makwana's (2019) also emphasised on the role of adaptive coping mechanisms in fostering wellbeing among disaster affected populations. Therefore, a conceptual model is developed based on the key findings on mediating factors for long-term wellbeing among the women.

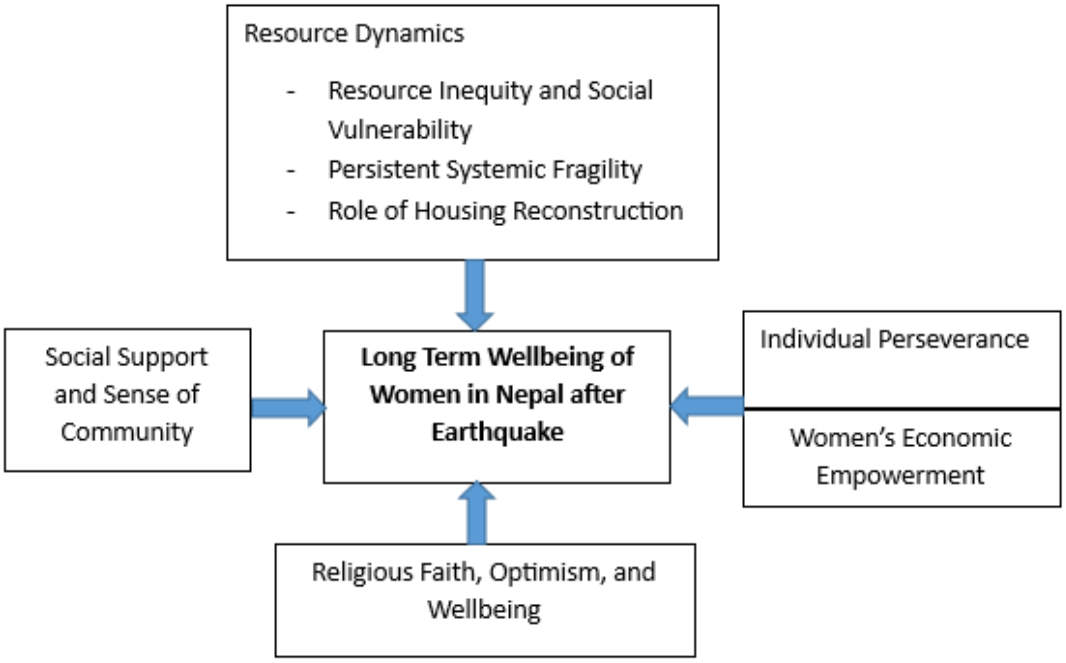
In a constructivist study, constructs are co-created between the inquirer and the participants to generate new knowledge or add depth to existing knowledge (Lincoln & Guba, 2013). The current study used the key constructs identified from the thematic analysis of different data collected from various sources to develop a conceptual model. Figure 4 illustrates the interaction between the individual, psychosocial, and structural dimensions that were found to influence women's wellbeing over the long-term following the earthquake. This model represents the relationship between the key constructs- the stressors women faced following the earthquake and the adaptive strategies they adopted over the long-term. It shows that the resource inequity and persistent systemic fragility acted as stressors for these survivor women. However, the women tried to counterbalance these stressors through drawing on social support, gaining financial independence, and through their individual perseverance in facing the recurrent disasters. Additionally, religious faith, optimism, and the empowerment that comes with gaining some degree of financial self-sufficiency are depicted as internal coping mechanisms that reinforce women's sense of wellbeing.

Evidence supports these dimensions as mediators to influence long-term wellbeing after natural disasters. According to the theory of resilience by Norris et al. (2008), successful adaptation and positive wellbeing over the long-term after a natural disaster depends on the availability of resources such as relief supplies, healthcare support, financial resources, and resources of daily living. Concurrently, social support is equally important immediately and in the long-term following a disaster. Similarly, the post-disaster wheel of psychological wellbeing proposed by Prayag et al. (2021) after the Canterbury earthquake emphasised the importance of social resources and social support to assist psychological wellbeing. According to a systematic review of qualitative research conducted after the earthquakes in different countries by Jung and Han (2022),

survivors' individual perseverance and religious faith play key roles in facilitating post-traumatic growth. However, these models were not developed specifically for the context of developing countries; neither did they focus on women's wellbeing after an earthquake in rural settings. Therefore, the current model, developed from a constructivist case study inquiry, provides insights into the cultural and gender-specific context of rural-living Nepalese women following the 2015 earthquake. It shows how these interwoven factors modulate women's long-term wellbeing after the earthquake within a Nepalese community setting.

Figure 4

Mediating Factors for Long-term Wellbeing of Women



Resource Dynamics

Resource dynamics in disasters refers to the changing flow and management of essential resources such as supplies, information, and personnel across different phases of natural disaster-preparedness, response, and recovery (Norris et al., 2008). The current case study findings noted significant fluctuations in resource availability over the eight years post-earthquake under conditions of scarcity and uncertainty, which played a critical role in influencing women's long-term wellbeing. The following section examines the immediate impacts on women's wellbeing that resulted from the unequal

distribution of relief measures. However, there is evidence that communities try to adapt to disasters by mobilising available resources and mitigating resource loss (Bakic & Ajdukovic, 2021; Nomura et al., 2016; Panday et al., 2021). Therefore, this section also explores how the reconstruction of housing and health service sectors over the mid-term recovery period contributed to mitigating the long-term challenges faced by the survivor women.

Immediate Post-Earthquake Phase: Resource Inequity and Social Vulnerability

Assertion 2 postulated an imbalance in terms of the fair distribution of relief resources in rural and urban Nuwakot in the immediate post-earthquake phase. Gendered vulnerability was also noted in receiving adequate relief aid. While communities in urban areas received support services from government and private social service organisations, those residing in rural areas experienced delayed, inadequate, and unequally distributed relief measures immediately after the earthquake. Consequently, access to essential services significantly influenced rural women's wellbeing in the aftermath of a disaster.

Women's vulnerability increased in immediate aftermath as they lacked the access to basic resources such as housing, clothes, food, and water. Meanwhile, women adhered to traditional gender roles such as arranging food, cooking, and caring for families. In another term, women faced the 'double disaster' where the main event impact was compounded with the additional responsibilities. This correlates with research findings from the 2015 Nepal earthquake immediately after the disaster. Bengts (2016) and Shakya (2016) found that rural women could not access timely relief measures, which contributed to their hardships. The findings are also supported by other studies conducted in low resource countries, like India, Sri Lanka, Pakistan, and Bangladesh, after the Indian Ocean Tsunami, the Kasmir earthquake, and the floods, respectively, that also noted that women faced challenges in accessing gender-friendly and timely post-disaster relief (Ahmed, 2018; Alam & Rahman, 2014; Gunaratne & Kremer, 2021).

The study findings suggested that many women expressed ongoing fear about future disasters and emphasised the importance of fairness in relief distribution should such an event occur again. These immediate resource constraints were not confined to the

short-term; instead, they are one of the early stressors that shaped women's wellbeing trajectories over the long-term. The initial deprivation and neglect weakened women's trust and confidence in equitable recovery support, affecting the emotional and social dimensions that are central to long-term wellbeing.

Persistent Systemic Fragility and Influence on Women's Wellbeing

As Assertion 3 suggested, in part, the fragility of the health service system after the earthquake created delays and barriers in health service utilisation among women. The document review found that tertiary hospital rebuilding took seven years, with primary healthcare centres only reconstructed five years after the earthquake (MoHP, 2020). Although the reconstruction was completed at the time of data collection for the current study, participants still reported delays in service access due to long travel times, limited public transport options, the unavailability of 24-hour local health post services, and unreliable availability of medicines supply. The findings resonate with the broader literature that identifies transportation barriers, limited-service hours, and financial constraints as critical obstacles to healthcare access post disaster (Ali et al., 2023; Cao et al., 2021).

The findings from this study noted that the rural women often experienced delays in accessing emergency obstetric care due to poor road infrastructure and limited ambulance service availability. Because of the hilly landscape, poor road conditions, and the absence of a developed public transport system in rural areas, distance remains the main obstacle to visiting a health facility. This is in line with Ali et al. (2023) Nepal-based research, which indicated that rural populations often face longer travel times and limited transportation options, with women disproportionately affected, resulting in women struggling to attend healthcare appointments. The holistic wellbeing model by dos Santos Silva et al. (2024) noted that being updated with health information and regularly utilising with healthcare services are important for health promotion which in turn maintains individual's wellbeing. However, women's efforts to sustain their wellbeing after the earthquake through regular healthcare utilisation were hindered by these persistent fragilities which could not be improved, even after the post-disaster reconstruction efforts.

Women's accounts asserted that, because of the systemic barriers in healthcare services, they were compelled to use expensive healthcare services from private medical facilities, which offered better resource availability, prompt service, specialty care, and better communication regarding health problems and management options associated with such facilities. This echoes Sah et al.'s (2020) research, who compared public and private healthcare systems in Nepal. Sah et al.'s (2020) findings revealed that private hospitals offer higher patient satisfaction and service quality, although public hospitals are more accessible. Unlike findings from previous quantitative studies, the current study captured the emotional perspectives of women in being compelled to use such services. For instance, women shared the distress caused by being denied services during emergencies and the financial strain of needing to seek private care. As interpreted from Assertion 8, women had to weigh their healthcare needs against the associated costs and often could only seek care after borrowing money.

Interview findings with health service providers indicated that women, being the hub of family life, often prioritised family, and household responsibilities over their own health, leading to missed follow-up visits and seeking hospital care only after complications had arisen. This finding is also reflected in the outcomes of the document review, which identified that women's housework constrained regular health service utilisation among women (MoHP, 2018). Thus, from these findings, it is important to understand how deeply ingrained gendered responsibilities can pose serious health risks for women, especially when women prioritise collective family wellbeing and needs.

The findings from the interviews with health service providers proposed that women's satisfaction and service uptake could be enhanced by effective budget allocation by the local government. This approach would help in hiring experienced health service providers, allowing them to start offering 24-hour healthcare at health posts and ensuring appropriate and ongoing training. Uprety and Lamichhane (2016) also noted the role of local and national linkages in health planning and budgeting processes in reducing existing structural inequalities from national and local perspectives.

The Role of Housing Reconstruction in Supporting Women's Wellbeing

Women's wellbeing during the mid-term recovery phase in Nuwakot was closely tied to housing reconstruction. Although it took 2-3 years, almost all households transitioned from temporary shelters to permanent, earthquake-resistant homes. In Nuwakot, more than 90% of households used government grants to rebuild their homes (The Asia Foundation, 2024). Assertion 3 suggested that the newly built earthquake-resistant homes helped mitigate women's fear of future disaster consequences.

Women expressed satisfaction with remaining in their own communities during and after the reconstruction. This underscores the importance of social ties and women's attachment to their place of residence in fostering recovery. Research in post-disaster contexts has shown that people being able to stay in their own place, despite the chaos of reconstruction, enhances better adaptation to stressful events leading to post-traumatic growth and resilience (Jung & Han, 2022). In contrast, relocation often exacerbates stress and delays psychological healing (Prayag et al., 2021; Tanaka et al., 2019). Adding to previous knowledge, this current study showed that women's wellbeing improved through resolution of fear after the housing reconstruction. Likewise, in a study conducted in Indonesia by Laurito et al. (2022) after the Indian Ocean Tsunami, it was observed that the most substantial improvements in psychological wellbeing among disaster survivors often emerged two or more years after receiving housing assistance and completing reconstruction. In the present study in Nuwakot, after reconstruction completion, women named their community as *Sampada* in references to their maroon-roofed houses, the act of which symbolises community unity and pride highlighting the benefits of housing reconstruction for collective, community wellbeing.

Social Support and Sense of Community

From the document review it was understood that many women in Nuwakot were living with limited material resources and that they lacked political empowerment, remaining constrained by gendered roles and responsibilities (NSO, 2017). Assertion 8 derived from focus group discussion proposed that, despite minimal systemic improvements and persistent geographic vulnerabilities in the face of the earthquake, women

displayed key adaptive strategies, drawing on and building social support systems and a sense of community. Living communally, sharing resources, and emotionally supporting one another helped the women cope with trauma and uncertainty. According to Norris et al. (2008), post-disaster social support refers to a web of social relationships, primarily involving family, friends, and closely tied relatives, which involve the provision of help, love and care at the time of need. Thus, social support is regarded as a protective factor for individuals against any major stressors, as way to cope with various life problems (Saegert & Carpiano, 2017).

In Nuwakot, women adopted a "sharing is caring" attitude and informally helped each other with available resources during times of adversity. The least affected communities offered help to the most severely affected people, which resulted in strong communication and taking care of each other during the adverse time. These findings correlate with studies specifically conducted after the 2015 earthquake which showed how the social support from relatives, family, friends, and neighbours fosters resilience and enhances survivors' wellbeing (K.C et al., 2019; K.C & Hilhorst, 2022). Thus, the collective findings imply that community-based support systems cultivated a sense of unity and purpose among the women of Nuwakot, which helped them to partly navigate stress and promote wellbeing.

Women continued to rely on community networks for emotional and practical support long after the earthquake. K.C et al. (2019) also found that two years after the 2015 Nepal earthquake, affected communities demonstrated coping from the stress through sharing their available resources and providing help and support to one another. This continuity suggests that social support in Nuwakot is not merely a coping mechanism but a way of life, which resonates with Malik and Khalid (2015) findings from the research following the 2005 Pakistan earthquake. Findings indicated that extensive and supportive social networks helped women and girls to adjust to the stressful life event. In the Nepalese context where social ties are deeply embedded in cultural and communal life, such bonding networks seem to foster social wellbeing and serve as a vital mechanism for recovery and resilience among women survivors. This is supported by the Norris' (2005) theory of community resilience and to the concept of the holistic model of wellbeing by dos Santos Silva et al. (2024), which emphasises that

interconnected social relationships play a crucial role in sustaining individual wellbeing during times of hardship.

Religious Faith, Optimism, and Wellbeing

In the context of natural disasters, many people interpret such events as the "will of God" or "acts of God." In this study, as Assertion 6 highlighted, the women demonstrated strong faith and belief in God. Women perceived that they survived the earthquake because of the God's divine help. They viewed the earthquake not only as a traumatic experience but also as part of a spiritual journey that brought them closer to God. Local deities such as *Bhanger Than* were seen as one of the protectors who kept them and their families safe. Women described faith-based rituals, such as visiting the temples, daily prayers, and worship, as practices that supported their adaptation and coping with the stresses related to adverse event. According to the holistic wellbeing model as described in Chapter One, spiritual wellbeing is one of the key dimensions supporting a person's wellbeing (dos Santos Silva et al., 2024). Therefore, in the present study, having peace of mind through faith in God and continuity of religious practice underscores the role of faith in fostering subjective wellbeing among women following traumatic events (Makwana, 2019; Maurya, 2018). These rituals women engaged in immediately after the earthquake were continued afterward, suggesting that religiosity provided both immediate relief and long-term emotional support.

These findings are consistent with the broader literature on religious coping in disaster contexts. Adhikari Baral and K.C (2019) found that survivors, particularly women, used religious practices as a coping mechanism after the earthquake. Similarly, Paudel et al. (2025) highlighted that spirituality, when integrated with psychosocial support, can help mitigate psychological distress and promote recovery. Aten et al. (2019) suggested that positive religious coping characterised by trust in a higher power and engagement in spiritual practices was associated with lower levels of depression and PTSD. A study conducted involving survivors of Hurricane Katrina in New Orleans, United States, revealed that, for women in a low resource setting, religious involvement provided survivors with a sense of hope and meaning as well as access to social support networks (Chan et al., 2012). However, these studies were primarily quantitative and focused

broadly on the role of religiosity in disaster recovery. Adding to existing knowledge, the findings from the current study offers qualitative insights into how religious prayers and faith-based practices supported women's emotional healing and strengthened their sense of safety. Nepal provides a unique context for the understanding of religious coping contributions to understanding religious coping. The women's belief in deity-specific protection, continued integration of spirituality into daily life, and engaging together in religious rituals within their communities point to a culturally embedded form of resilience. These practices did not only help individuals cope well after the earthquake but also reinforced social cohesion and collective healing.

Individual Perseverance in Navigating Life Challenges

One of the key themes from the focus group discussion was "Problems are Part of Life." This theme captures participants' reflections on the idea that, despite systemic fragility marked by recurrent disasters, resource loss, disrupted health services, and loss of livelihoods, women have demonstrated a dynamic capacity for adaptation and coping. Their responses underscore a belief that problems are inevitable in life; thus, cultivating inner self-strength is key for survival. In the focus groups, participants shared that being with family and enabling themselves to face the recurrent challenges played a key role in maintaining wellbeing after the disaster. These findings from rural living women in Nepal align with findings by Jung and Han (2022), who conducted a systematic review to identify post-traumatic growth of earthquake survivors, and with the study by Bourke et al. (2022), who explored the long-term psychological wellbeing of survivors seven years after the Canterbury earthquake, both of which emphasised the importance of individual perseverance among earthquake survivors. Positive emotions, emotional regulation, and a renewed focus on meaningful aspects of life were found to significantly contribute to long-term wellbeing (Jung & Han, 2022; Prayag et al., 2021). The women in Nuwakot no longer worried excessively about money or material things, realising that disasters can take everything away. Instead, positive family bonding, maintaining self-health, being socially connected, and engaging in their regular activities seemed to be more important for the survivors. This finding aligns with Prayag et al. (2021) observation that five years after the Canterbury earthquake, survivors reported a shift in priorities, placing greater value on being safe and maintaining harmonious family

relationships. The current study extends this understanding by emphasising the role of individual perseverance and women's strength to navigate the ongoing challenges in fostering women's wellbeing after the earthquake in the Nepalese context.

The Role of Women's Economic Empowerment in Promoting Wellbeing

Women's economic empowerment is key to financial wellbeing, and there are several key dimensions about the role of women that need to be considered in livelihood and economic recovery planning in disaster contexts (Global Facility for Disaster Reduction and Recovery [GFDRR], n.d.). As interpreted in Assertion 7, financial independence through self-employment and saving strategies contributed to women's positive wellbeing after the earthquake. Single women, women with husbands who were unemployed post-earthquake, and those whose husbands worked abroad or outside Nuwakot described journeys from financial vulnerability to economic self-reliance through diversified income sources such as livestock farming, daily wage labour, and savings in cooperatives.

Women's reflections on gaining strength and solidarity following socio-economic hardships, post-quake, emerged vividly during the focus group discussions. Coping with unemployment and, for some, their husband's substance abuse after the disaster, as well as taking on the responsibility of supporting the family through savings from poultry farming and wages from daily labour, supported the women's subjective sense of pride, reduced stress, and enhanced life satisfaction. Such ideas resonate with a study from Bangladesh, which emphasised that women's participation in microfinance and community savings groups through their self-employed earnings enhanced resilience and autonomy in disaster-prone regions (Alam & Rahman, 2014). Similarly, Malik and Khalid (2015) found that two years after the Kashmir earthquake, women had become more conscious of their rights, gained independence, and recognised the value of education and income-generating activities such as preparing and selling food and handicrafts. In Nepal, some recent studies have documented income generation as a key driver of women's empowerment, enabling them to support their families and improve their socio-economic status (Acharya, 2020; Aryal, 2024). However, those studies have primarily examined women's economic involvement outside the post-disaster context.

The present study uniquely emphasises the importance of economic independence in strengthening post-disaster socio-economic wellbeing in the long-term context of the disaster.

The findings of this study implied that financial independence does not necessarily require complete economic autonomy. Rather, it is shaped by women's ability to manage resources, make decisions regarding spending and savings, and maintain social cohesion. These insights underscore the need for policy frameworks that support women's financial agencies beyond mere income generation. While some women in the study reported being financially independent and actively managing household finances, this is not universally the case in Nepal (Dulal, 2020). Traditional norms that position men as primary income earners often limit women's access to paid work and income-generating opportunities (Acharya, 2020; World Health Organization, n.d.). Recognising women's roles in the economic management of households and community resilience is therefore essential for developing inclusive and effective recovery strategies. To better support women's self-recovery, it is crucial that equal access to economic opportunities are provided for both women and men in post-disaster recovery and reconstruction efforts (GFDRR, n.d.).

In conclusion, the conceptual model illustrates that, eight years after the earthquake, women continued to face systemic fragilities in sustaining their long-term wellbeing because of their gendered responsibilities, geographical complexities, and resource constraints in accessing and utilising health resources. Despite these structural barriers, women have drawn strength from ongoing community support, deeply rooted spiritual beliefs, and their own perseverance—factors that have collectively contributed to strengthening their perception of subjective wellbeing. These adaptive strategies have enabled them to navigate recurring adversities and maintain a sense of stability in their lives.

However, it is important to acknowledge that such strategies primarily helped rural women adapt to recurrent challenges; they did not fundamentally alter the underlying conditions that shape their wellbeing. Women's long-term wellbeing therefore remains heavily influenced by entrenched structural inequalities, unmet expectations regarding

healthcare services, and a persistent fear of future disasters. Given Nepal's vulnerability to recurrent natural disasters, including earthquakes, the study highlights the urgent need for the government of Nepal to implement strategic measures to enhance disaster preparedness, and to mitigate both the immediate and long-term impacts on affected communities.

Women's Earthquake Preparedness and Readiness Needs

In addition to the conceptual model, significant findings were noted regarding women's disaster readiness needs. Assertion 11, the interpretation of the focus group discussions, interviews, and document review, drew attention to the policy-intervention gap in supporting women's preparedness for future earthquakes. While women seemed to feel less fearful and worried once they could move into the newly built, concrete, houses, fear was not completely gone. Some women expressed concern that a high-magnitude earthquake could result in similar adverse circumstances. This fear was further reinforced by women's uncertainty about how to respond during future earthquakes.

Women's questions during the focus group discussions implied extensive deficiency in practical earthquake preparedness of knowledge among participants. Women and their families relied on school safety instructions such as standing in doorways- which proved ineffective, and, in some cases, harmful due to the structural properties of traditional Nepali homes. When the earthquake hit, rural households were typically '*kachha*' houses (mud houses) constructed from mud, bricks, and stones. These houses proved highly susceptible to collapse in earthquakes and posed severe risks to individuals sheltering inside. The findings demonstrate that generalised safety protocols during the earthquake did not apply to the specific structural realities of Nepalese homes. Parajuli (2020) similarly noted that widely promoted measures such as "Drop, Cover, and Hold on" may be effective in many modern contexts, particularly in houses constructed under seismic standards. However, these recommendations may not translate effectively to contexts like Nepal, where even homes considered "earthquake resistant" often do not meet rigorous seismic design criteria and may fail under the shaking caused by high magnitude earthquake. Such measures may offer limited protection and, in some cases, even exacerbate risk.

Document review findings noted that Nepal's Disaster Risk Reduction and Management Act 2017 established district and local disaster management committees to strengthen long-term disaster preparedness across administrative levels in federal Nepal (MoHA, 2018). Their key responsibilities include providing regular disaster response and management training to local officials and community members. At the community level, committees are meant to raise awareness in defined wards, conducting routine disaster response drills, and developing local information systems for disaster management and early warning to ensure operational readiness (MoHA, 2019). However, women's accounts of uncertainty and confusion regarding disaster preparedness suggests a significant gap in the implementation of these policies.

The need for community- based simulation exercises to enhance women's understanding of safety precautions was a key point raised repeatedly throughout the interviews with health service providers. Evidence suggests a critical role for education in improving disaster knowledge and preparedness. For example, an educational programme on seismology conducted across 22 Nepali schools by Subedi et al. (2020) demonstrated that targeted interventions significantly increased students' awareness of earthquake preparedness. Collectively, these findings underscore the need for pre-disaster initiatives including education and context-specific simulation drill exercise. Such measures could reduce women's fear of future earthquake's impacts and support their psychological wellbeing. This aligns with UNESCO's (2024) emphasis on empowering local communities with knowledge tailored to their specific vulnerabilities to achieve effective disaster risk reduction.

Role of Female Community Health Volunteers in Promoting Women's Wellbeing

Trained FCHVs, despite no formal medical education, have consistently played a pivotal role in safeguarding women's health in Nepal since 1988. Their importance in disaster response and management became particularly evident during the 2015 earthquakes, when they served as first-line responders by conducting home visits, providing health education, and mobilising mothers' groups to sustain service uptake under crisis conditions (Bhattarai et al., 2022). In the federal context (see Figure 1), after the

earthquake, FCHVs' responsibilities have expanded at local levels, as municipalities and rural municipalities have taken greater ownership of providing primary healthcare services (Adhikari et al., 2021).

The current study findings showed that role of FCHVs was crucial in raising awareness and providing reassurance to women during the crisis. Furthermore, over the longer term, they supported the women with their health needs. In this capacity, they have bridged the gap between women and the formal health system, offering advice, and practical support such as safe delivery assistance and referrals to hospitals. These strategies helped many women seek and utilise seek health measures in a timely manner, which supported their wellbeing. This finding is consistent with existing research on FCHVs, suggesting their critical role in extending access to essential health services in resource-constrained and crisis contexts (Bhattarai et al., 2022; Khatri et al., 2017). Adding to existing knowledge, this case study uniquely underlined the symbolic and motivational role of FCHVs' uniforms in the Nepalese context (see figure U 16 in Appendix U), described as a marker of credibility and trust within their communities as evident in focus group findings. Women were more likely to accept health messages from FCHVs, perceiving them as trustworthy and reliable sources of information. This is supported by broader evidence that the legitimacy of FCHVs often stems from their embeddedness in local communities as well as from visible markers of their role, such as uniforms, which reinforce recognition and respect (Panday et al., 2024).

The findings of the current study also emphasised that, since FCHVs are female, women feel more comfortable disclosing their health problems to them. This is particularly important in Nepal, where the availability of professional female doctors remains limited. Currently, women represent only 25% of Nepal's generalist medical practitioners' workforce (International Labour Organization, 2017). A scoping review to identify key barriers in reproductive service utilisation in low- and middle-income countries, including Nepal, has highlighted that the low numbers of female health providers is a significant barrier to women's health service utilisation, especially for reproductive and maternal health, as women often prefer female healthcare workers for these types of consultations (Sarikhani et al., 2024). In this context, FCHVs play a crucial role by acting as trusted and approachable people who not only listen to

women's concerns but also guide them toward appropriate healthcare services. This role is practically important for the long-term post-earthquake context in rural Nepalese villages as women were reluctant to visit doctor because of the stigma in discussing their reproductive health concerns with male service providers.

As discussed in the overview of Nepal's healthcare delivery system in Chapter One, Nepal comprises 753 local governments and 6,743 wards (Ministry of Health and Population, 2024). In 2022, the Government of Nepal announced a policy commitment to deploy community nursing services in every ward to improve access to healthcare, particularly maternal, neonatal, and geriatric services, through a trained female health professional (The Himalayan Times, 2022). However, four years later, this commitment has yet to be implemented. Therefore, as Assertion 9 proposed, although FCHVs lack formal training, they remain the key frontline health workers at the community level, where they are responsible for assessing and addressing women's healthcare needs and making a significant contribution to supporting women's wellbeing in Nepal.

However, as implied by the findings from interviews with FCHVs, there are challenges faced by FCHVs. FCHVs reported obstacles to the effectiveness of their service delivery because of irregular refresher training, limited supervision, and insufficient logistic support. This finding is also supported with wider evidence that although FCHV'S work is considered voluntary, they are required to invest significant time and effort in traveling long distances, facilitating group meetings, and carrying out household visits. This growing workload has raised concerns around retention and motivation, as many commitments go uncompensated (Bhattarai et al., 2022; Khatri et al., 2017). At the same time, researchers have argued that besides financial incentives, non-financial support such as community recognition and structured training are equally critical to sustaining FCHVs' performance (Ghimire, 2025; Khatri et al., 2017). Taken together, these findings indicate a pressing need for regular capacity-building opportunities and increased allowances while strengthening non-financial support forms to ensure FCHVs remain motivated and effective in providing an essential health service to Nepalese women.

To sum up, the findings presented by this study underscore the need for systemic reforms that support the long-term wellbeing of the women in Nuwakot, especially in

the face of the current, post-earthquake context. Although women continue to adapt to recurrent disaster challenges through various coping strategies, these efforts alone are insufficient to enhance their wellbeing as long as the underlying structural issues remain unaddressed.This is supported by a Dumka et al. (2024) report on understanding key factors for strengthening Nepal's health care needs. Both studies' findings jointly emphasise the need for an integrated strategy to overcome the challenges of systemic barriers to healthcare among women, including locally tailored interventions in service delivery such as regular training and strengthening the role of FCHVs, quality enhancement of services by increasing the availability of healthcare supplies in primary healthcare centres, and human workforce planning and training that supports the context-specific healthcare provision and increases accessibility utilisation for rural dwelling women. This approach would acknowledge the diverse healthcare landscape within Nepal as it would align well with the unique needs of different communities and regions.

Implications of the Study

Long-term Wellbeing Assessment and Intervention Planning

This study explored the long-term wellbeing of women in a rural community of Nepal after the 2015 earthquake. Assertion 1 implied the enduring impact of the disaster on multiple dimensions of wellbeing. One significant and often under-addressed issue in Nepal's disaster management policies is the lack of regular wellbeing assessment and psychosocial support for survivors in their long-term recovery (MoHP, 2020). Platt et al. (2020) also found that over the long-term, Nepal's disaster response efforts were insufficient in terms of wellbeing assessment, and provision of counselling, mental healthcare, or psychosocial support services. Therefore, the findings from this study, showing that women continued to experience psychosomatic and psychological and socio-economic influences even eight years post-quake, underscore the need for ongoing and systematic wellbeing assessments, need identification and interventions planning in immediate and long-term post-disaster contexts. In particular, the women's concerns for the wellbeing of their families highlight that individual and family wellbeing cannot be separated in this context. Understanding that women's wellbeing is relational

and interconnected with that of their family members has important implications for designing appropriate psycho-social support services; specifically, service models that address the collective wellbeing needs of women and their families.

Prioritising Women's Wellbeing with Cultural and Contextual Sensitivity

Assertion 2 suggested that women had health and safety concerns over the immediate post-earthquake phase, as the disaster response did not address the cultural and contextual sensitivities that shaped women's experiences during the crisis. Women's accounts revealed that their wellbeing was significantly affected while living in makeshift shelters, where they faced continuous stress in trying to maintain untouchable status during menstruation. Adhering to this custom was mandatory for the participant women. Moreover, the lack of gender-responsive relief measures heightened their distress, as women struggled to manage menstrual hygiene materials, privacy for changing clothes, and other basic needs in poorly designed temporary living spaces.

Therefore, these findings underscore the need to design culturally and contextually sensitive relief support for women in future disaster contexts. Incorporating gender-responsive approaches by the local disaster response team and social support organisations in providing adequate privacy for women, menstrual hygiene supplies, and culturally informed psychosocial support has the potential to significantly enhance women's wellbeing and dignity during post-disaster recovery.

Creating Local based Self-Employment Opportunities for Women

As Assertion 7 proposed, this case study uniquely emphasises the role of self-employment and saving habits among women in shaping their positive wellbeing and family functioning. The findings demonstrate that women's earnings from small scale poultry businesses or working as daily wage labourers on farms, as well as their participation in monthly savings within mothers' groups and cooperative banks, not only enabled them to sustain their livelihoods in the post-earthquake context but also enhanced their ability to access vital financial support during emergencies.

These insights hold practical value for local government in Nepal, especially in planning and implementing women-focused, small-scale entrepreneurship and financial

management initiatives. Appropriate skill-development training to promote self-employment opportunities might help reduce the pressures associated with male migration, alleviate financial burdens, and mitigate the risks of gender-based violence.

The Role of Local Government in Health System Strengthening

Assertion 8 highlighted persistent fragility in health systems, which require systemic reforms with regard to the national and local context. The 2015 earthquake severely damaged healthcare facilities across Nepal, particularly in rural and remote areas. While the reconstruction of health infrastructure has been completed, many communities still lack access to adequate healthcare services, and even basic health facilities remain underequipped (Platt et al., 2020). Moreover, women faced difficulties in accessing health services as there are limited community-based health units to address the emergency care and specialised health care needs of those in hard to-reach rural areas (MoHP, 2020).

Following the promulgation of a new constitution after the earthquake, the local government now has the power to reform depending upon the needs of the community. The study findings from interviews with health service providers and the document review identified a critical role of local governments in human resource planning and the provision of continuous healthcare services. As participants emphasised, there is a need for 24-hour service availability at health posts, trained health care personnel, and speciality services; these findings from the case study can guide local government bodies in designing and implementing needs-based public healthcare systems. This approach can enhance women's trust and satisfaction towards health care utilisation in shaping their wellbeing.

Strengthening Women's Earthquake Preparedness and Readiness

Assertion 11 demonstrated that participants had persistent fear related to future earthquakes and a strong desire to practice appropriate response actions. According to the document review, Nepal's Disaster Risk Reduction and Regulation Act of 2017 has formed district and local disaster management committees to implement an effective long-term disaster response at various administrative levels of federal Nepal (MoHA,

2018). The key responsibilities of the committees include regular training on disaster response and management to local level officials and the communities.

The members of local government have a greater understanding of the local context, knowledge regarding the needs of the vulnerable population, and better knowledge of indigenous perspectives (GON, 2019). Therefore, local governments must be prepared to mitigate and respond to even large-scale disasters such as earthquakes, landslides, and floods. Such initiatives could include community-based training, drills, and awareness campaigns to enhance readiness and reduce vulnerability in future disaster with particular focus on women. The reason for this is that the mortality data following the 2015 earthquake in Nuwakot follow the same pattern as the national data, with higher numbers of female deaths in comparison to males (OSOCC, 2015). Gendered roles assign more indoor chores to women, making them more vulnerable when houses collapsed during the day (NPC, 2015a). Strategic preparedness initiatives of this kind would better equip women to respond safely and effectively during future seismic events.

Strengths of the Study

To the best of my knowledge, this is the first study to examine the long-term wellbeing of women in the aftermath of the 2015 Nepal earthquake. In contrast to previous research, which has largely concentrated on the psychological consequences of the disaster, this study employs a broader conceptualisation of wellbeing- encompassing physical, psychological, and socio-economic dimensions- to provide a more holistic understanding of women's post-earthquake experiences. In addition, it has explored the strategies adopted by women to maintain their wellbeing in the years following the earthquake. Methodologically, the study is grounded in a constructivist paradigm, employing Stake's (1995) case study approach to deeply understand women's experiences and perceptions of wellbeing post-earthquake in the long-term. The paradigm and methodological approach recognized the value of my own perspective as a Nepalese woman who lived through the earthquake in interpreting the women's data. The qualitative design allowed participants to articulate their experiences, concerns, and adaptive strategies in their own words, which enriches the depth and credibility of the

findings. Furthermore, findings have been triangulated through the analysis of three data sources.

My preexisting links to the study setting, which were established during my master's thesis research in the area facilitated familiarity with the community, enhancing interpersonal relationships, and enabling effective data collection through focus group discussions and interviews. The community's active participation and willingness to engage further strengthened the study. The selected setting, Nuwakot District, was one of the most severely affected communities, which enhanced the relevance and potential transferability of the findings to similar rural contexts in Nepal. My cultural and linguistic similarity with the participants also facilitated the data collection and analysis procedure. Being a woman researcher and having experienced the earthquake myself further helped with my interpretation of the data and the construction of knowledge through a contextual and empathetic lens.

Limitations of the Study

The study, which aimed to explore the long-term wellbeing of women following the 2015 earthquake, found that participants have experienced multiple stressors since the disaster. These ongoing challenges may have shaped their current perceptions of wellbeing, making it difficult to isolate discrete influences from the earthquake. Furthermore, the study was conducted in two wards of a single municipality in Nuwakot district. Whilst the findings can be transferred to similar rural contexts in Nepal, the location limits the application of the findings to all Nepalese women affected by the 2015 earthquake. Although the study sought to include the perspectives of health service providers regarding their roles in promoting women's wellbeing, two of the four providers interviewed were not present in the study area at the time of the earthquake. As a result, their insights were limited to current service provision rather than firsthand experiences of disaster responses.

Moreover, studies have documented particular psychosocial impacts of earthquakes on Dalit communities such as those in this study in Nuwakot, who are considered among the most marginalized caste groups in Nepal, as outlined in Chapter One (Arora, 2022; Bengts, 2016). Existing evidence suggests that Dalit populations often experience

heightened vulnerability due to entrenched social exclusion, limited access to resources, and structural inequalities that shape their exposure to risk and capacity to recover (Bradley et al., 2023; Tan et al., 2024). However, this study did not explicitly examine whether women from different caste backgrounds experienced distinct effects on their wellbeing after the earthquake.

Recommendations

This case study identified specific areas for improvement in promoting the wellbeing of the women long- term after a disaster. The findings indicate that policy implementation gaps exist in the government's disaster response along with gaps in their planning for identification of long-term impacts of disasters. Therefore, the findings suggest the need to improve existing disaster response procedures, including those at the individual and community level, the health sector and service level, and at the policy level.

Recommendations for Policy and Practice

Equitable Relief Supply Distribution

The findings reveal significant power imbalances in accessing relief aid following disasters; a challenge that is likely to persist given Nepal's vulnerability to recurrent hazards. To address this, disaster response frameworks should prioritise the gender-sensitive distribution of essential supplies, including women's clothing and sanitary kits. Aid allocation should be needs-based and non-discriminatory, ensuring timely assistance for those in urgent need while guaranteeing adequate support for all affected groups. Disaster relief supplies need to recognise and address the complexities associated with delivering relief to rural communities associated with transportation so that rural-living women are not disadvantaged.

Improving the Quality and Facilities of Public Health Care Systems

Based on the study findings, the government of Nepal should prioritise strengthening public healthcare infrastructure to ensure accessible, affordable, and high-quality services, all of which are the key determinants of health and wellbeing. This includes upgrading facilities, enhancing resource capacity in primary healthcare centres, and

improving service availability. Increased investment in public transportation is essential to facilitate access to healthcare for rural living and disaster-affected populations. Additionally, as women tend to miss their healthcare follow up needs and neglect their own health concerns, community outreach and education programmes should be implemented to raise awareness about the importance of timely healthcare.

Study findings also specifically showed the need to employ more female medical professionals in community health care centres because the women were unlikely to seek out and disclose significant issues to male practitioners. While the government of Nepal proposed deploying a nurse in each Ward for regular health assessment and monitoring of wellbeing in the communities, particularly focusing on women and geriatric healthcare needs, this study highlights the urgency of this plan to be implemented in practice.

Role of Local Government in Disaster Readiness and Response

One of the most significant findings from the case study was the fear among women regarding what to do during earthquakes and other disasters to prevent loss of life and resources. This lack of knowledge is further compounded by the rapid response team formed to act on disaster management, being reactive rather than proactive in its approach. To address this, local governments should implement regular disaster drills and simulation exercises to educate individuals on appropriate response actions during earthquakes and similar hazards. Such initiatives are essential for reducing initial fatalities and alleviating resource loss. Furthermore, such preparedness measures can help women feel more confident and better equipped for potential disasters, which reduces long-term psychological impacts.

Sustainability of the Community Support System

It was evident from the study findings that being in their own community throughout the reconstruction process strengthened the recovery among the women. Therefore, in the context of Nepal, where natural disasters are recurrent, along with the financial aid, reconstruction should consider not only structural safety but also cultural relevance and emotional connection to place. The women of the Nuwakot community demonstrated how strong community cohesion can significantly facilitate recovery in the aftermath of

disasters such as the 2015 earthquake. Based on these findings, this study recommends that the government of Nepal, in collaboration with local governments and genuine partnership with community members, can initiate the establishment of multi-purpose women's centres, which could serve as hubs for trauma counselling, safe spaces, and social support. These centres could play a vital role in fostering psychological recovery and strengthening social networks in times of crisis. This would provide a sustainable support system from community members over the long term.

Culturally Responsive Disaster Preparedness and Response Framework

From the findings, it was noted that culturally rooted beliefs and practices during pregnancy and need to maintain purity during menstruation increased stress among the women. Additionally, the relief measures and aids were not gender sensitive. Therefore, government-led disaster preparedness and response framework and strategies should incorporate culturally responsive action plans in disaster context. Specifically, programmes should address culturally rooted fears, such as beliefs linking earthquake-related behaviours to miscarriage risk, through targeted health education and psychosocial support. By integrating these approaches into emergency protocols, policymakers and healthcare providers can reduce anxiety among pregnant women and enhance overall maternal wellbeing during and after disasters.

Additionally, the makeshift houses could be built to address cultural beliefs including menstrual rituals and need to provide adequate privacy for the women. This can minimise the risk of sexual and domestic violence in aftermath of disaster.

Empowering Women Through Financial Literacy and Saving Initiatives

Based on the findings, it was noted that women are bound by socially constructed gendered responsibilities, which are often compounded by additional burdens. Despite these challenges, women who initiated self-earning activities and adopted saving practices were found to have fostered more stable and resilient lives in the post-earthquake context. Therefore, the government of Nepal, in collaboration with local governments and community-based organisations, could promote financial literacy and saving initiatives among women to enhance economic independence, reduce vulnerability during and after disasters, and build capacity for informed financial

decision-making. The government could support the formation of women-led savings groups and cooperatives, which then serve as platforms for mutual aid and resource mobilisation. Such initiatives should be culturally sensitive, locally grounded, and co-designed with women to ensure relevance, ownership, and long-term sustainability.

Strengthening the Role of Female Community Health Volunteers

The case study findings emphasised the pivotal role of FCHVs in bridging gender-related gaps in healthcare access and promoting service utilisation at a local level among women in Nepal. To ensure FCHVs remain motivated and effective in delivering essential health services to Nepalese women, the government of Nepal should provide regular capacity-building opportunities, including emergency response and post-disaster assessment training. Enhancing financial support through travel allowances and stipends, alongside strengthening non-financial incentives such as community recognition and structured supervision, could address challenges related to workload and FCHV retention. Integrating FCHVs into local disaster management frameworks and establishing feedback mechanisms would further reinforce their role in promoting women's wellbeing, especially during crises.

Recommendations for Future Research

Considering that this study is situated within a constructivist case study approach, based on the findings, it would seem worthwhile to explore this issue from different methodological perspectives. For example, since the findings have demonstrated influences on wellbeing over the long-term following the earthquake, longitudinal research would be instrumental to conceptualise the impact on women's wellbeing throughout the recovery process following a disaster. This approach would track changes over time and help in uncovering the critical phases where interventions are most needed, identifying persistent stressors, and highlighting protective factors that contribute at particular points to long-term resilience and recovery among women.

Study finding highlighted that the women were largely uncertain of how they should react during an earthquake. Therefore, participatory action research is recommended which can actively involve community women and other members for preparedness strategies such as simulation drills along with evaluation of the effectiveness of

simulation interventions. This would necessitate a collaboration with local disaster preparedness teams, so that interventions are context specific.

Additionally, ethnographic research could be used to understand the long-term influences of deeply ingrained cultural norms surrounding menstruation and pregnancy in post-disaster settings. Based on the case study findings, these norms appear to act as hidden stressors that shape women's experiences and adaptive strategies during and after disasters. By exploring how such beliefs and practices affect women's access to resources, community engagement, and psychosocial wellbeing, such a research study could contribute to more culturally responsive disaster response frameworks that promote gender equity and long-term resilience.

This study has developed a conceptual model outlining the key factors that contributed to long-term wellbeing in the Nepalese context. Comparative research across different countries is recommended to assess the model's applicability and effectiveness in identifying stressors and protective factors influencing the long-term wellbeing of women survivors worldwide.

Researcher's Intentions to Disseminate Findings to Communities

Nuwakot was among the districts most severely affected by the 2015 earthquake, and it remains vulnerable to future hazards, including earthquakes, floods, and landslides. I therefore intend to share the findings with the women and health service providers who contributed to the research. Because in-person sharing is the most appropriate way to disseminate findings in rural communities, I intend to return to the community and organise meetings with the participants. As I already have connections with the FCHVs and women in Nuwakot, I intend to hold the meeting in the Mothers' Group Hall. This meeting will facilitate open dialogue on how the findings can support women in recognising their wellbeing needs and identifying practical approaches they can employ to support their wellbeing over the long-term following the disaster. Moreover, it will serve as the meaningful way of acknowledging the trust participants held in me and honouring their ownership of the knowledge they helped to co-create.

Building on the findings of this research, I also aim to develop a Participatory Action Research project in which women, community representatives, FCHVs, and health service providers can work together to set priorities and design collaborative actions plans. Through this process, the study's findings can be translated into practical initiatives that support women's long-term wellbeing and strengthen community preparedness and resilience in disaster-affected and disaster-prone settings.

Conclusion

My PhD research journey started from my strong interest that evolved from my master's research, which identified high post-traumatic stress symptoms among adult survivors 10 months after the 2015 earthquake. When I conceptualised the PhD title, five years had already passed since the disaster. I chose to focus specifically on women-both because of my own lived experience as a woman and earthquake survivor, and because my field work had shown that women experienced additional burden and responsibilities in the post-earthquake context. I observed that many male family members were working out of town or abroad, and women were left at home to manage households while caring for their children, elderly family members, agricultural fields, and livestock by themselves.

The literature review suggests that there is limited research that has explored the long-term impacts women face following the earthquake or factors contributing to the maintenance of their wellbeing over the long-term.

To address this gap, I adopted a constructivist case study methodology, which enabled me to explore women's experiences and co-construct meaningful knowledge about how women's wellbeing was influenced and sustained over the long-term following the earthquake. Drawing on multiple data sources-the focus group discussion with women, the individual interviews with the health service providers and the document reviews-I systematically constructed and interpreted the case and identified the mediating factors for long -term wellbeing among women.

The research revealed that over the long-term, women experienced enduring influences on their physical, psychological, and socio-economic wellbeing. While women's

wellbeing was partially supported by strong community support, the development of personal resilience, religious faith, and post-earthquake housing reconstruction, critical challenges and systemic barriers persisted. The findings highlighted that regular wellbeing assessments and accessibility, and utilisation of health services are crucial factors for maintaining health among women. Structural, functional, and geographical reforms are needed to ensure the delivery of comprehensive and round-the-clock services in the affected community.

In Nepal's federal context, alongside national policy reforms, empowering local governments with delegated authority to plan and design appropriate disaster recovery interventions would facilitate targeted strategies that better serve women's health and wellbeing over the long-term following natural disasters. Furthermore, addressing underlying cultural, religious, and gendered norms that constrain women's healthcare autonomy, increasing the representation of female health care providers and strengthening primary healthcare infrastructure are essential to promoting positive wellbeing among women in post disaster context.

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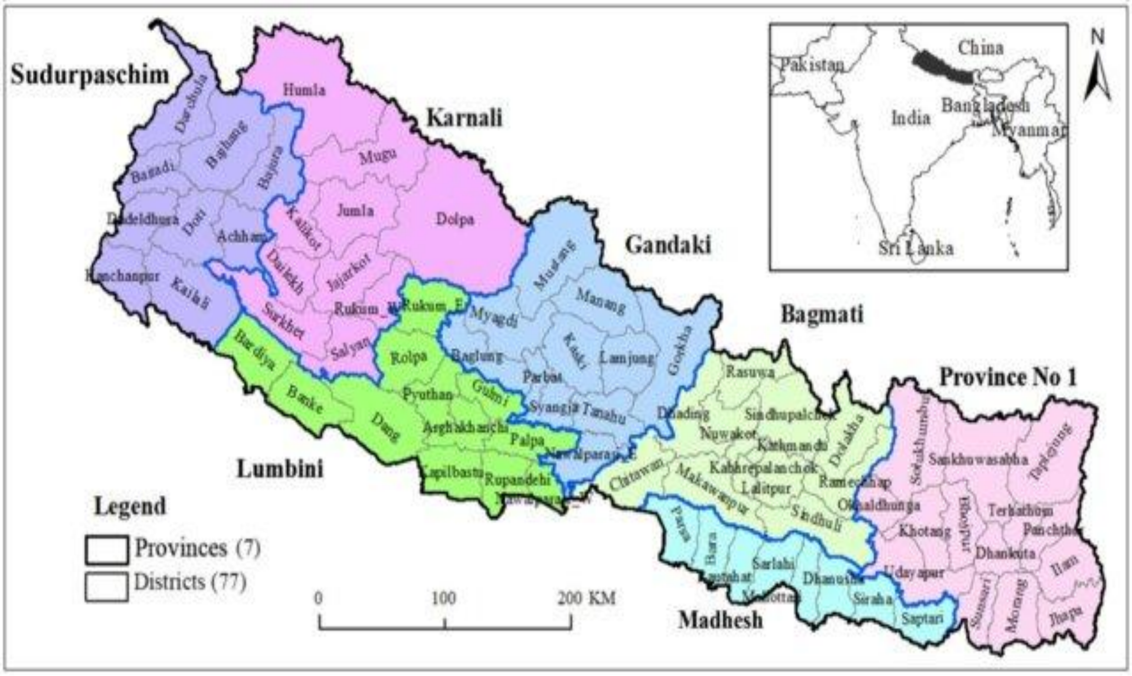
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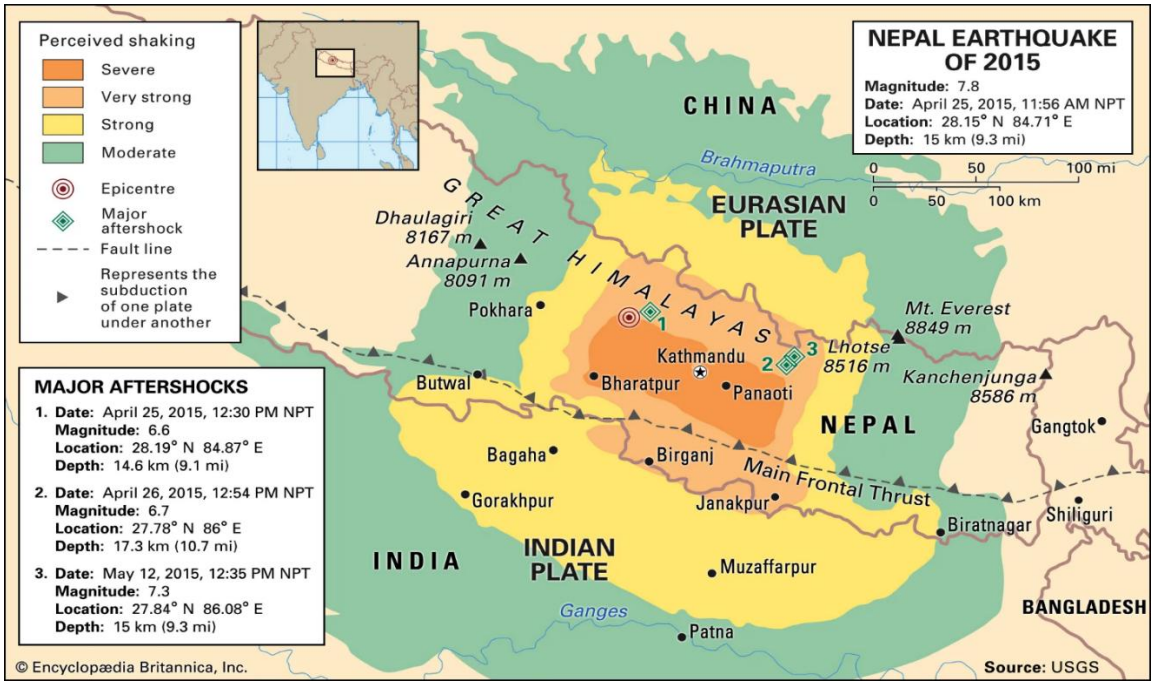
Appendices

Appendix A: Location Map of Nepal

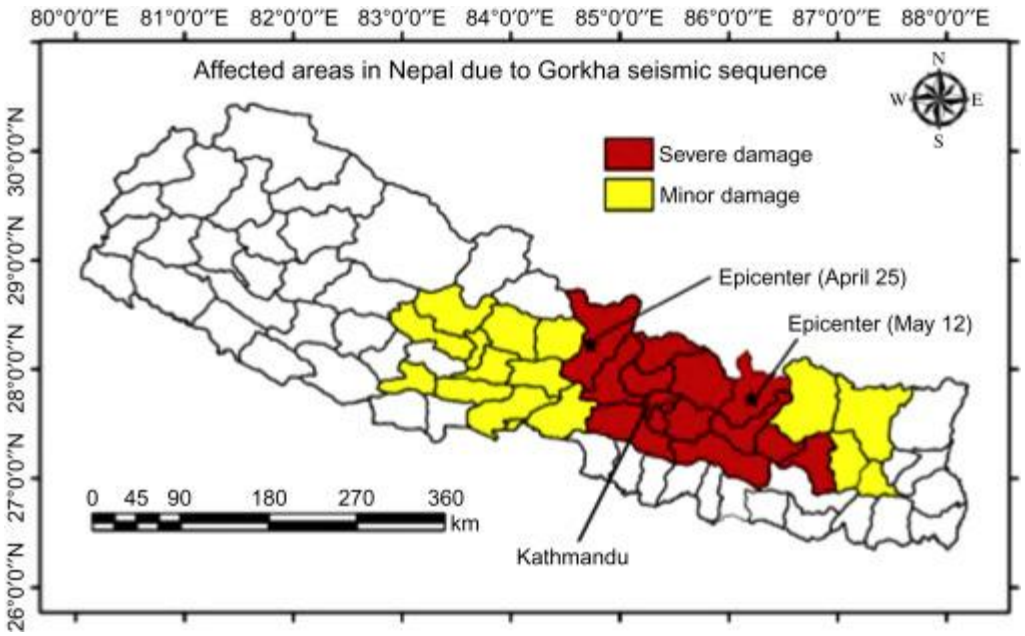


Source: Available via license: CC BY-SA 4.0

Appendix B: Map of Nepal with Epicentre of Nepal Earthquake 2015

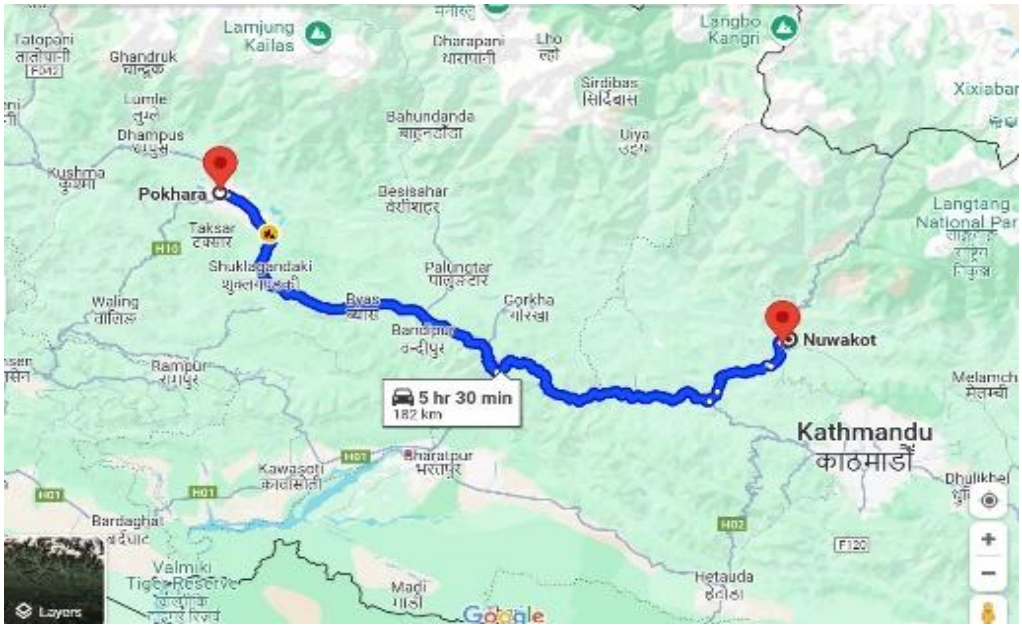


Source : *Encyclopædia Britannica, Inc./Kenny Chmielewski* (https://www.britannica.com/topic/Nepal-earthquake-of-2015)

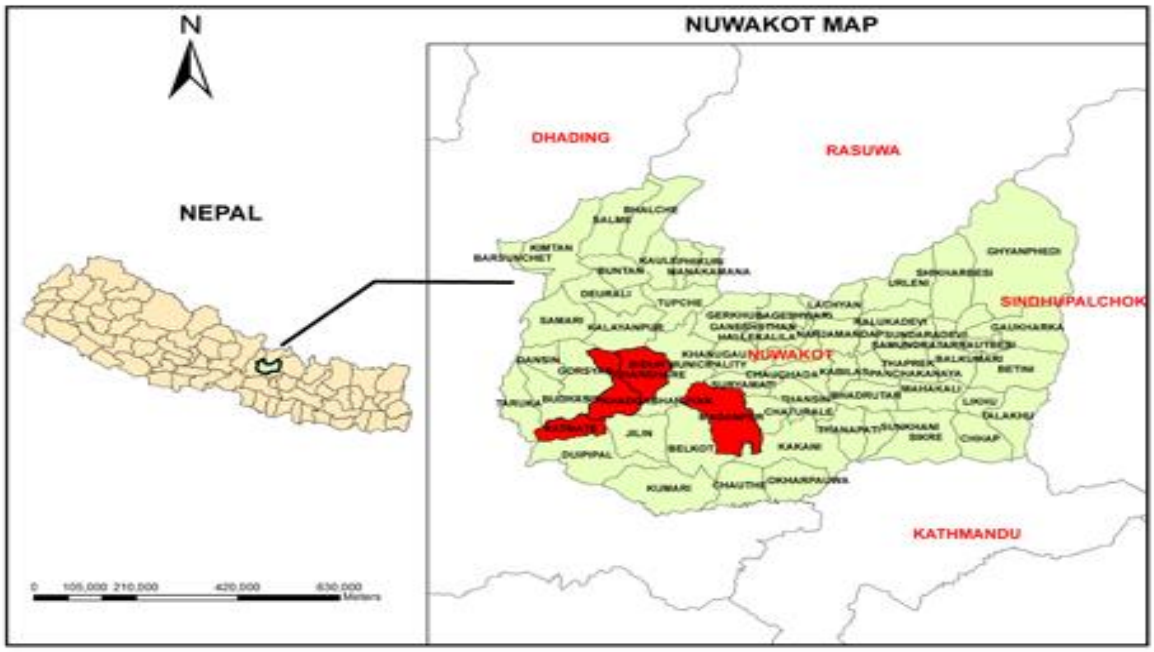


Appendix C: Map of Nuwakot [Data Collection Setting]

Distance of data collection setting (Nuwakot) from researcher's locality (Pokhara)



Location Map of Nuwakot District in Map of Nepal



Appendix D: Detailed Losses from 2015 Nepal Earthquake

Particulars	**Number**
Total number of Deaths	8896
Missing	198
Injured	22,302
Affected families	8,86,456
Houses Fully damaged	6,04, 930
Houses Partially damaged	2,88,856
Total Material loss	NPR 706 billion=$7billion

Source: Post Disaster Needs Assessment (National Planning Commission, 2015a)

Appendix E: Literature Review Studies Table

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
Studies from Nepal after 2015 Earthquake						
1.	Adhikari et al. (2017a)	Earthquakes, fuel crises and power outages Nepal	N/A	Report and Recommendations	Review the effects of mega earthquakes, fuel crises, and power outages on health services in Nepal and to formulate recommendations for the future.	Review of studies
2.	Adhikari et al. (2020)	Nepal Earthquake, 2015	Data by Nepal police 1 month after disaster	Retrospective Analysis: review of data published by Nepal Police on death from Nepal earthquake	Analysis of Mortality: Evidence and future recommendations	N/A
3.	Adhikari Baral and K.C. (2019)	Nepal Earthquake, 2015	10 months	Descriptive Cross-sectional Study	Identify PTSD and coping strategies among adult survivors of Earthquake Nepal	Male and Female adults, PTSD was higher among Women (Conducted in Nuwakot)
4.	Adhikari et al. (2017b)	Nepal Earthquake, 2015	3 months after earthquake	Qualitative (Thematic analysis)	Identify community perceptions on psychosocial and mental health problems of older people	Health care workers, older adults including women, social workers, School teachers

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
5.	Basnet et al. (2022)	Nepal Earthquake, 2015	6 months to one year	Qualitative case study (Thematic analysis)	Assess violence against women and girls after Nepal Earthquake 2015	Women, key informants from NGOs, INGOs
6.	Bengts (2016)	Nepal Earthquake, 2015	One Year	Qualitative Case Study (Thematic Analysis) (Master's Thesis)	Identify post-earthquake consequences for women within marginalized groups in Nepal.	Interviews and Participant observation
7.	Bhattarai et al. (2018)	Nepal Earthquake, 2015	8-12 months	Descriptive Cross-sectional study	To identify factors affecting resilience of people who sustained Spinal Cord injury from 2015 Earthquake	Adult Individuals who sustained Spinal cord injury (Includes Nuwakot as well)
8.	Brunson (2017)	Nepal Earthquake, 2015	6 Months	Ethnographic Field research	To investigate the impacts of the 2015 Nepal earthquakes on mothers and children under five	Women having under five children (Includes Nuwakot as well)

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
9.	Budhathoki et al. (2018)	Nepal Earthquake, 2015	4 months	Mixed Method study Semi-structured questionnaires for perception of menstrual hygiene and in-depth interview for personal experiences	To identify Menstrual hygiene management among women and adolescent girls after the earthquake	117 Women and adolescent girls
10.	Dahal et al. (2018)	Nepal Earthquake, 2015	9 months	Cross Sectional Study	To identify prevalence and risk factors of PTSD	Adult survivors of Dhading District PTSD higher among females
11.	Fothergill and Squier (2018)	Nepal Earthquake, 2015	1 Year	Qualitative case study (thematic analysis)	Experiences of women and children in Nepal after the earthquake	Women and Children
12.	Grooves et al. (2017)	Nepal Earthquake, 2015	1-3 months after earthquake	Descriptive study (Medical Records)	To identify earthquake related spinal cord injury in Nepal	Adult survivors (Higher SCI among women)
13.	Jang et al. (2018)	Nepal Earthquake, 2015	1-2 months	Cross-sectional study	To identify religion, and mental health after earthquake	Adolescents of Kathmandu, Nepal
14.	K.C et al. (2019)	Nepal Earthquake, 2015		Qualitative Case study (Interviews with Key informants) and thematic analysis	To explore measures needed to develop community mental resilience for disaster preparedness in Nepal	Members of Organizations working in area of mental health during post-earthquake phase

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
15..	K.C and Hilrost (2022)	Nepal Earthquake, 2015	2-5 months after earthquake	Ethnographic study	To identify women's experiences of evacuation, relief and recovery in socio-economic context	Women of Lalitpur district, Nepal
16.	Khatri et al. (2018)	Nepal Earthquake, 2015	6-7 months after earthquake	Population based cohort study	To identify mental health impact of earthquake on Pregnant women	Pregnant women of Bhaktapur, Nepal
17.	Khatri et al. (2023)	Nepal Earthquake, 2015	6 years after earthquake	Qualitative case study including thematic analysis	To evaluate role of self-help women's groups in resilience and disaster risk reduction	Grassroots women leaders (women's/mother's group representatives)
18.	Kvestad et al. (2019)	Nepal Earthquake, 2015	20 months	Cross sectional survey with likert scale	Postraumatic stress symptoms among Nepalese Mothers	Women of Bhaktapur having under 5 children

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
19.	Luce et al., (2021)	Nepal Earthquake, 2015	15 months	A part of longitudinal study	To examine association between symptoms of mental health disorders with active coping and social support	Earthquake survivors of six earthquake affected areas (72% were females)
20.	Mackintosh (2022)	Nepal Earthquake, 2015	4 years	Mixed method- Participant observation, interviews, focus groups and document analysis	To identify role of gender in post-disaster recovery and disaster risk governance	Women and Men in Bhaktapur NGO/INGO facilitators who run community programs Municipal and federal employees working in disaster risk reduction.
21.	Mawby and Applebaun (2018)	Nepal Earthquake, 2015	N/A	Narrative Review Report	Based on prior research examining the role of gender in humanitarian relief and long-term recovery efforts	Studies on Women: Obstacles to Women's participation, women's role in political transition and disaster recovery
22.	National Planning Commission (2015)	Nepal Earthquake, 2015	3 months	Review Report	Post disaster needs assessment by Nepal Government	Pre and post data of earthquake affected communities

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
23.	Pandey et al. (2021)	Nepal Earthquake, 2015	3 years	Qualitative research-participants video, focus group discussions and key informant interviews	To identify role of social capital in disaster resilience	Adults of Remote Nepal communities-Sindhupalchowk and Gorkha districts
24.	Paudel et al. (2025)	Nepal Earthquake, 2015	9 Years	Systematic Review and Metanalysis	PTSD and associated factors in aftermath of 2015 earthquake in Nepal	25 studies after 2015 Nepal Earthquake (April 2015- August 2024)
25.	Rajbhandari (2016)	Nepal Earthquake, 2015	1 months	Qualitative case study and thematic analysis-Telephone interviews	Impact of the 2015 Earthquake on Women in Nepal	Women survivors of earthquake,18 years and above
26.	Sapkota (2018)	Nepal Earthquake, 2015	10 months	Quantitative survey-399 households (Nepal Living Standard Survey Questionnaire0	To identify human well-being after 2015 Nepal Earthquake	Adults of Sindhupalchok district
27.	Singh (2021)	Nepal Earthquake, 2015		Qualitative case study	Women's experiences during Natural Disaster	

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
28.	Suvedi et al. (2021)	Nepal Earthquake, 2015	Not mentioned	Mixed method- Structured household questionnaires, focus group discussion and key informant interviews	Impact of earthquake and coping mechanisms	Adult population of Kispang Rural Municipality, Nuwakot
29.	Tearne et al. (2021)	Nepal Earthquake, 2015	9-10 months	Qualitative study- Interviews and Focus group discussion	Health and security of women and girls following disaster	57 Women and girls from Kathmandu, Bhaktapur and Lalitpur Nepal
30.	Thapa and Acharya (2019)	Nepal Earthquake, 2015	N/A	Review Article	Identify the women's health vulnerability in disaster zones	N/A
31.	Thapa and Pathranarakul (2019)	Nepal Earthquake, 2015	8 months-16 months	Mixed Method Quantitative- household survey Qualitative- Interviews with adult survivors, Key informant interviews	To identify gender inclusiveness in disaster risk governance for recovery after 2015 earthquake	Adult survivors (male and female) of Kathmandu
32.	Women Rehabilitation Centre Nepal (2024)	Nepal Earthquake, 2015		Evidence based Policy brief	To identify need for Feminist Disaster Response	N/A

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
International Studies (Natural Disasters from 2004- 2025)						
1.	Afzal et al. (2024)	Major disasters of middle and low middle income countries	Conducted on 2022: Articles published in the last 5 years were given preference.	Systematic Overview PRISMA-ScR method	Drawing the Linkage Between Women's Reproductive Health, Climate Change, Natural Disaster, and Climate-driven Migration: Focusing on Low- and Middle-income Countries	Women affected by Natural disasters and climate change
2.	Ahmed, (2018)	2005 Pakistan earthquake	5 years of earthquake	Mixed Method approach -semistructured interviews, narrative interviews, field notes, researcher's journal, participant observations and timeline drawing	To identify Psychosocial wellbeing of adolescent girls and young women	Adolescent girls and young women
3.	Ali et al. (2012)	2005 Pakistan earthquake	2.5 Years	Cross-sectional Survey	To identify prevalence and determinants of posttraumatic stress disorder in adult survivors	All adults (Female had higher PTSD)

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
4.	Ardalan et al., (2010)	Bam Earthquake 2003	5 Years	Cross-sectional survey design	To identify post-disaster quality of life among older survivors five years after the Bam earthquake: implications for recovery policy	Older Adults
5.	Bourke et al. (2022)	Canterbury Earthquake 2010-11	September 2012 to June 2017- (binually) And annually upto 2020	Repeated Cross sectional study- Survey Method	To analyse the pattern of disabled and non-disabled responses over time across four variables: wellbeing, sense of community, and stress.	Disabled and non-disabled adults of Christchurch region
6.	Cavallo and Noy (2009)	Major natural disasters before September 2009	N/A	Literature Review from Emergency events Data base (EM-DAT)	To examine short and long-run effects of natural disasters on Economics	N/A
7.	Cofini et al. (2015)	Italy Earthquake, 2009	15-18 months	Cross-sectional Prevalence Study	To identify PTSD and coping	Adult survivors
8.	Cook et al., (2008)	Natural disasters before 2008	N/A	Literature Review	To identify long-term impacts of natural disasters on health of communities	N/A

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
9.	Fatema et al., (2021)	Natural disasters of South Asia and Southeast Asia occuring before 2020 (Includes Nepal Earthquake, 2015)	N/A	Systematic Review	To identify health impacts and risk factors affecting women of South Asia and Southeast Asia after Natural disasters	Women affected by Natural disasters
10.	Global Facility for Disaster Reduction and Recovery. (n.d.)	Major natural disasters globally	N/A	Report (Guidance Note) Literature Review	To provide action-oriented guidance for incorporating gender-responsive recovery and reconstruction	Studies focusing on impact of disasters on women and their vulnerabilities
11.	Goodman (2016)	Global Natural disasters before 2016	N/A	Narrative literature Review	To identify health impacts on women after the disasters	Women after the various disasters
12.	Islam et al. (2016)	Recurrent Floods in Sirajgang, Bangladesh 2012	Within one year	Qualitative case studies (In-depth interview and thematic analysis)	Women's changing role in resilience, recovery and economic development	Women of Sirajgang Bangladesh (19-29 years old)

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
13.	Jung and Han (2023)	Eight Qualitative studies (Earthquake occuring Globally)	Studies published from 2012 to 2021	Systematic literature review of Qualitative research	To identify post traumatic growth of people who have experienced earthquake	People who experienced earthquakes
14.	Kar et al. (2014)	2004 Asian Tsunami (India)	4.5 years	Cross-sectional epidemiological study (Comparative)	To identify mental health problems 4.5 years after the Tsunami	Asian Tsunami victims from South India
15.	Ladd and Macintosh (2008)	N/A	N/A	Review Paper	To evaluate meaning, God and prayer as Physical and Metaphysical aspects of Social support	N/A
16.	Makwana (2019)	N/A	Studies related to natural disasters and coping strategies after disasters	Narrative Review		Qualitative studies related to Mental Health
17.	Naeem et al. (2011)	Kashmir Earthquake in Pakistan, 2005	18 Months	Descriptive cross-sectional study	To identify prevalence and psychosocial risk factors of PTSD	Women and Man earthquake survivors (PTSD higher among women- 55.2%)

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
18.	Nagaratnam (2018)	Countries that have one or more incidences of natural disaster, earthquake, flood and landslide	1980-2014	Examination of Panel data from 1980-2014 in 165 countries	To examine impact of natural disasters on fertility rates of women	N/A
19.	Nahar (2025)	Bangladesh Flood,	N/A	Qualitative study: Thematic analysis	Experiences and coping strategies of women after recurrent Floods	Women – in-depth interview (age 15-50) FGD- Women and men
20.	Nair (2018)	Natural disasters in Southeast Asia	N/A	Policy Report by Association of Southeast Asian Nation (ASEAN)	Key conceptual tool for community resilience, sustainable rehabilitation and recovery strategies for ASEAN	Studies involving women's participation in decision making and planning strategies
21.	Nakasu and Amrapala (2023)	Regional and national level data of South-east Asian countries	N/A	Quantitative analysis using Emergency Events Database (EM-DAT)	Evidence based disaster risk assessment in Southeast Asian Countries	N/A
22.	Naz et al. (2018)	Bangladesh Flood Active flood plain of Padma River, Bangladesh	NA	Mixed method – household survey and qualitative- focus group discussion and in-depth interviews	Gender based adaptive strategies for disaster readiness	Male and female farmers

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
23.	Norris et al. (2008)	Multiple natural disasters	N/A	Literature review (i.e., PsychINFO, PubMed, ERIC, PILOTS, Academic Search Premier)	To identify community resilience as a Metaphor, Theory, Set of Capacities and Strategy for disaster readiness	Multiple disaster related studies
24.	Notling et al. (2025)	Multiple natural disasters	Short-term- 1-12 months post hazard Long-term- 13 months and above	Random-effects Metaanalysis following PRISMA guideline (95 reports for Meta-analysis)	To identify gender differences in prevalence of mental disorders following exposure to natural hazards	Mental Health Outcome on Women
25.	Noy and duPont IV (2016)	Multiple natural disasters	N/A	Narrative Literature Review	To evaluate long-term economic consequences of natural disasters	Multiple natural disaster related studies
26.	Oxfam (2005)	2004 Tsunami	3 months	Briefing Note	To identify Tsunami's impact on Women	Available data from 2004 Indian Ocean Tsunami affected Countries (Indonesia, India, Srilanka)
27.	Plan International (2021)	Multiple flood disasters in Bangladesh	N/A	Qualitative field research- document review, key informant interviews, in-depth interviews, focus group discussion, observation	To collect information on women and girl's participation on the community disaster management committees	Women and girls of 8 rural areas of Bangladesh Interviews with key government officials and local NGOs

Serial	Authors, Year of publication	Name of Disaster	Study Conducted after (Years)	Methodology	Objective	Participants
28.	Prayag et al. (2021)	Canterbury Earthquake, 2010	9 years	Qualitative Study developing POST-DISASTER WHEEL OF WELLBEING- In depth interviews with residents.	To evaluate the psychological wellbeing on long-term disaster recovery	Adult survivors of Canterbury earthquake (16 females and 9 males)
29.	Rathore et al. (2007)	Pakistan Earthquake, 2005	1 month 2.5 month	Quantitative study, Neurological status and functional outcome at 1 month and 10 weeks	To identify epidemiological features specific to spinal injuries as a result of earthquake	Spinal cord injured patients admitted in Spinal cord Centres of Pakistan (80 men and 107 women)
30.	Shiba et al. (2022)	Great East Japan Earthquake, 2011	9 years (Pre disaster survey- 2010) Post disaster follow-up surveys- 2013, 2016, 2020)	Longitudinal cohort study	Long-term association of home loss, health and wellbeing	Older survivors
31.	Sudaryo et al. (2012)	Indonesia Earthquake, 2009	3 and 6 months	Prospective Cohort study	Association between injury, disability and quality of life among adult survivors	Adult survivors of Padang, Indonesia (Physical injury was significantly associated with quality of life)
32.	Tanaka et al. (2019)	Great Hanshin-Awaji-Earthquake, Japan, 1995	20 years	Qualitative study: Constructivist Grounded theory approach	Long-term psychological recovery process and associated factors	20 affected survivors (55% females)

Appendix F: Indicative Questions Focus Group Discussion

Project Title: **Long-term Influences on Women's Wellbeing in a Nepalese Community following the 2015 Nepal Earthquake: A Constructivist Case Study Focus Group**

Focus Group Discussion with: Survivor women of Nepal Earthquake 2015

Venue:

Time:

Date:

Opening/ Greeting, introduction, overview of the research and FGD process

<u>Participants' Demographic Questions</u>

1. How old are you?.....
2. What is your marital status?
    a. Unmarried
    b. Married
    c. Divorced/Separated
    d. Widow
3. Do you have children/grandchildren?
    a. Yes
    b. No
    If yes, how many?.....
    How many are currently living with you?.....
4. Type of family
    a. Nuclear
    b. Joint
    c. Extended
5. How many family members are living in the same home as you?.....
6. What work or paid employment are you engaged in? .....
7. If married, what is your husband's Occupation? .....
8. What is your highest level of educational qualification?
    a. No qualification
    b. basic level (1-8 class)
    c. secondary level (9-12 class)
    d. University level education (bachelor and above)
9. What is your religion?
    a. Hindu
    b. Buddhist
    b. Muslim
    c. Christian
    d. None

Indicative questions

Statement Number	Topical Question
1 Wellbeing	1.1 What does 'being healthy' mean to you? 1.2 How have these things (above question) been since the earthquake? 1.3 What are your important concerns for keeping healthy and well? How have this been changed since the 2015 earthquake? please explain……
2 Influences on wellbeing	2.1 What health services are available at your locality? 2.2 What health services have you been accessing regularly? 2.3 What challenges do you face in assessing these services? (affordability, transport, wait times). 2.4 How have they affected your health and wellbeing? 2.5 What support services were available since earthquake- e.g. garments, money - Garments- were the garments gender friendly? - Did you get enough money to sustain your daily living immediately after the earthquake? 2.6 How is your current physical living environment? 2.7 What type of work have you been doing? Has it changed since the earthquake? 2.8 Are you are engaged in education or supporting any members of your family to engage in education? Did you experience some barriers to education since the earthquake?
3 Earthquake	3.1 What were you doing when the earthquake happened? 3.2 Did you or any of your family members get injured because of the earthquake? 3.3 What consequences did you have to face because of the earthquake? 3.4 What additional roles did you have to carry out since earthquake? (home, work, taking care of family members). 3.5 What are the social support networks that you have since the earthquake - Family, friends, women/mother's group 3.6 Have you been able to carry out spiritual/religious practices since earthquake? -How do you link these practices with your wellbeing and resilience since earthquake? Prompts: (For any of these questions, if required) - Can you give me example of?..... - Can you tell me how these has been for you?..... - How have these changed since the earthquake?.....

Ending Questions:

- Of all the issues that we discussed today, which one do you consider as the most important aspect in promoting your overall wellbeing?.....
- 2-3 minutes summary by moderator. Did I correctly describe what was said? Does this sound OK to you
- Final question- Is there anything which you would like to share about?.....

Thank you for your time and all the valuable information

Indicative Questions (Focus Group Discussion)- Nepali

सन् २०१५ को नेपाल भूकम्पपछि नेपाली समुदायमा महिलाको स्वास्थ्य र समग्र कल्याणमा दीर्घकालीन प्रभाव: एक रचनावादी केस अध्ययन

सामुहिक छलफल: नेपाल भूकम्प २०१५ का पीडित महिलाहरू
स्थान:
समय:
मिति:

<u>उद्घाटन / अभिवादन, परिचय</u>

सहभागीहरूको जनसांख्यिकीय प्रश्नहरू

1. तपाइँ कति वर्षको हुनुहुन्छ? .....

2. तपाईको वैवाहिक अवस्था कस्तो छ?

a. अविवाहित
b. विवाहित
c. सम्बन्धविच्छेद भएको/विछोडिएको
d. विधवा

3. के तपाईंका छोराछोरी/नातिनातिनीहरू छन्

b. छैनन्
यदि छन् भने, कति?
हाल कति जना तपाईँसँग बस्दै हुनुहुन्छ?.....

4. परिवारको प्रकार

a. एकल
b. संयुक्त
c. विस्तारित

5. तपाईँ जस्तै एउटै घरमा परिवारका कतिजना सदस्यहरू बस्छन्? .....
6. तपाईँ कुन काम वा सशुल्क रोजगारीमा संलग्न हुनुहुन्छ? .....
7. यदि विवाहित हुनुहुन्छ भने, तपाईँको श्रीमानको पेशा के हो? .....
8. तपाईँको शैक्षिक योग्यताको उच्चतम स्तर के हो?

a. योग्यता छैन
b. आधारभूत तह (१–८ कक्षा)
c. माध्यमिक तह (९–१२ कक्षा)
d. विश्वविद्यालय स्तरको शिक्षा (स्नातक र माथि)

9. तपाईँको धर्म के हो?

a. हिन्दू
b. बौद्ध
c. मुस्लिम
d. क्रिस्चियन
e. कुनै पनि छैन

संकेतात्मक प्रश्नहरू

Statement Number	Topical Question (समसामयिक प्रश्न)
१ Wellbeing **(कल्याण)**	१.१ तपाईंका लागि **'स्वास्थ्य र राम्रो जीवनयापन'** को अर्थ के हो? १.२ भूकम्पपछि यी कुराहरू (माथिको प्रश्न) कस्तो रह्यो ? १.३ स्वस्थ, सुखी र राम्रो रहनका लागि तपाईँले ध्यान दिने कुराहरू के–के हुन्? २०१५ को भूकम्पपछि यी कुराहरूमा कसरी परिवर्तन आयो? कृपया व्याख्या गर्नुहोस् .....
२ **स्वास्थ्यमा प्रभाव**	२.१ तपाईको इलाकामा कस्ता स्वास्थ्य सेवाहरू उपलब्ध छन्? २.२ तपाईंले नियमित रूपमा कुन स्वास्थ्य सेवाहरू पहुँच गरिरहनुभएको छ? २. ३ यी सेवाहरूको उपयोग गर्दा तपाईंले कस्ता चुनौतीहरूको सामना गरिरहनुभएको छ (सर्वसुलभ, यातायात, प्रतीक्षा समय)। २.४ तिनीहरूले तपाईँको स्वास्थ्य र कल्याणलाई कसरी असर गरेका छन्? २.५ भूकम्पपछि कस्ता सहयोग सेवाहरू उपलब्ध थिए? उदाहरणका लागि लुगा, पैसा - कपडाहरू: के कपडाहरू लैङ्गिक रूपमा उपयुक्त थिए? - के तपाईँले भूकम्पपछि तुरुन्तै आफ्नो दैनिक जीवन निर्वाह गर्न पर्याप्त पैसा पाउनुभयो? २.६ तपाईँको हालको भौतिक जीवनको वातावरण कस्तो छ? (घर अनि वरिपरिको वातावरण) २.७ तपाईँले कस्तो प्रकारको काम गरिरहनुभएको छ? भूकम्पपछि परिवर्तन भयो? २.८ के तपाईँ वा तपाईँको परिवारका सदस्यहरूलाई शिक्षामा संलग्न हुन सहयोग गर्दै हुनुहुन्छ? भूकम्पपछि शिक्षामा केही अवरोधहरू अनुभव गर्नुभयो?
३. **भूकम्प**	३.१ भूकम्प जाँदा के गर्दै हुनुहुन्थ्यो ? ३.२ भूकम्पका कारण तपाईं वा तपाईंको परिवारका कुनै सदस्य घाइते भए ? ३.३ भूकम्पका कारण तपाईंले के–के समस्या र परिणामहरू भोग्नुभयो? ३.२भूकम्पपछि तपाईंले के थप भूमिका निर्वाह गर्नुपऱ्यो? (घर, काम, परिवारका सदस्यहरूको हेरचाह)। ३.४ भूकम्पपछि तपाईँले के थप भूमिका निर्वाह गर्नुपऱ्यो? (घर, काम, परिवारका सदस्यहरूको हेरचाह)। ३.५ भूकम्पपछि समुदायबाट कस्ता सहयोग/समर्थन उपलब्ध थिए? - परिवार, साथीहरू, महिला/आमाको समूह ३.६ के तपाईँले भूकम्पपछि आध्यात्मिक/धार्मिक अभ्यासहरू गर्न सक्षम हुनुभयो? यी अभ्यासहरूसँग तपाईंको स्वास्थ्य, सुख-शान्ति र प्रतिरोध क्षमता कसरी जोडिएको छ?? **प्रम्प्टहरू: (यदि आवश्यक भएमा यी कुनै पनि प्रश्नहरूको लागि)** - के तपाईं मलाई उदाहरण दिन सक्नुहुन्छ? - के तपाई मलाई भन्न सक्नुहुन्छ यी तपाईको लागि कस्तो रह्यो? - भूकम्प पछि कसरी परिवर्तन भयो?

अन्त्यका प्रश्नहरू:

- आज हामीले छलफल गरेका सबै मुद्दाहरूमध्ये, भूकम्पपछि आफ्नो समग्र स्वास्थ्य र सुख-समृद्धि कायम राख्न वा सुधार गर्न तपाईंले कुनलाई सबैभन्दा महत्त्वपूर्ण मान्नुहुन्छ?
- २–३ मिनेटको सारांश...
- के मैले तपाईंका विचारहरू सही रूपमा प्रस्तुत/वर्णन गरेको छु? के यो तपाईंलाई ठीक लाग्छ?
- अन्तिम प्रश्न: के तपाईं अरू केही थप्न चाहनुहुन्छ? .....

तपाईंको समय र प्रदान गर्नुभएको सबै बहुमूल्य जानकारीका लागि हार्दिक धन्यवाद।

Appendix G: Indicative Questions- Individual Interviews

Project Title: **Long-term Influences on Women's Wellbeing in a Nepalese Community following the 2015 Nepal Earthquake: A Constructivist Case Study**

Interview with: Health Service Providers

Venue: **Date:**

Greeting, introduction, overview of the research and interview process

Participant's background information?

1. How old are you?.....
2. What is your gender –
    a. Male
    b. Female
3. What is your designation as a health service provider?
    a. Primary Health Care Officer (Medical Doctor)
    b. Public health supervisor
    c. FCHV (Female community Health Volunteer)
4. How long have you been working here? ……..

Statement Number	**Topical Question**
1.Health services	1.1 What have you noticed about women's health in general since the earthquake? 1.2 What support services are available to the survivor women since earthquake? 1.3 What primary health services targeted to women's health and wellbeing are available? 1.4 How do you assess and promote the health literacy of women? 1.5 How easy are the health services to access (affordability, transport, wait times) 1.6 What health services have been utilized by the survivor women? 1.7 How effective do you think primary health care services in this region have been meeting the health needs of earthquake survivor women? 1.8 What challenges do you perceive that women might have in accessing the health services? 1.9 Do you perceive any gender-based challenges in accessing and utilizing health services?

2-3 minutes summary

Final question- Were there any issues that you consider are important and not covered in our conversation today? ……

Thank you for your time and all the valuable information

Indicative Questions (Individual Interviews): Nepali

सन् २०१५ को नेपाल भूकम्पपछि नेपाली समुदायमा महिलाको स्वास्थ्य र समग्र कल्याणमा दीर्घकालीन प्रभाव: एक रचनावादी केस अध्ययन

अन्तर्वार्ता: स्वास्थ्य सेवा प्रदायकहरू

स्थान:

मिति:

अभिवादन, परिचय, अन्तर्वार्ता प्रक्रिया बारे अवलोकन

१. तपाईंको उमेर कति हो? .....

२. तपाईंको लिङ्ग –

क. पुरुष

ख. महिला

३. तपाईं स्वास्थ्य सेवा प्रदायकको रूपमा कुन पदमा हुनुहुन्छ?

क. प्रारम्भिक स्वास्थ्य सेवा अधिकृत (चिकित्सक)

ख. सार्वजनिक स्वास्थ्य पर्यवेक्षक

ग. महिला सामुदायिक स्वास्थ्य स्वयंसेवक (FCHV)

४. तपाईं यहाँ कति समयदेखि काम गर्दै आउनु भएको छ? .....)

Statement Number	Topical Question (**समसामयिक प्रश्न**)
१. स्वास्थ्य सेवा सम्बन्धी	१.१ भूकम्पपछि सामान्य रूपमा महिलाको समग्र स्वास्थ्य सुधार का लागि यस क्षेत्रमा के के कुरामा ध्यान दिनुभएको छ? १.२ यस क्षेत्रमा महिलालाई के कस्ता स्वास्थ्य सहयोग सेवाहरू उपलब्ध छन्? १. ३ महिला लक्षित प्राथमिक स्वास्थ्य सेवा र स्वास्थ्य कार्यक्रमहरू कुन-कुन सञ्चालनमा छन्? १.४ महिलाको स्वास्थ्य साक्षरताको मूल्याङ्कन र प्रवर्द्धन कसरी गर्नुहुन्छ? १.५ स्वास्थ्य सेवाहरू पहुँच गर्न कत्तिको सजिलो छ (सस्तो, यातायात, प्रतीक्षा समय) १.६ महिलाहरूले कस्ता स्वास्थ्य सेवाहरू प्रयोग गरेका छन्? १.७ भूकम्पपीडित महिलाको स्वास्थ्य आवश्यकता पूरा गर्न यस क्षेत्रमा प्राथमिक स्वास्थ्य सेवाले कत्तिको प्रभावकारी भएको छ जस्तो लाग्छ? १.८ स्वास्थ्य सेवामा महिलाको पहुँचमा कस्ता चुनौतीहरू हुनसक्ने देख्नुहुन्छ ? १.९ के तपाइँ स्वास्थ्य सेवाहरूको पहुँच र उपयोगमा लैङ्गिक चुनौतीहरू महसुस गर्नुहुन्छ? **प्रम्प्टहरू (आवश्यक परेमा):के तपाईं यसको कुनै उदाहरण दिन सक्नुहुन्छ?**

आजको हाम्रो वार्तालापमा तपाईंले महत्त्वपूर्ण ठान्नुभएका तर छलफलमा समेटिन नसकेका कुनै मुद्दाहरू छन्?
२–३ मिनेटको सारांश:
के मैले तपाईंका विचारहरू सही रूपमा प्रस्तुत गरेको छु?

तपाईंको समय र प्रदान गर्नुभएको सबै बहुमूल्य जानकारीका लागि हार्दिक धन्यवाद।

Appendix H: Indicative Questions: Participant's Recruitment Flyer



Namaste, I am Ishwari Adhikari Baral and I am a Nursing Lecturer who is passionate about women's health and wellbeing.

I am conducting research for my Doctor of Philosophy (PhD) at Auckland University of Technology, New Zealand and would be grateful to hear the experiences of women about my questions

How has your wellbeing been since the 2015 Nepal Earthquake?

What is your experience of women's health services in your community?

Are you a Nepalese Woman

- who have experienced Nepal Earthquake, 2015?
- is 25 years and above?
- can communicate in Nepali language?

If you would like to share your experiences and would like more information,

Please contact me:

Ishwari Adhikari Baral

Phone- 9846652411

Email: ishadh@iompnc.edu.np

AUTEC reference number: 23/16



नमस्ते, म **ईश्वरी अधिकारी बराल** हुँ र म एक **नर्सिङ लेक्चर** हुँ जो महिलाको स्वास्थ्य र कल्याणको बारेमा उत्सुक छु। म **अकल्यान्ड युनिभर्सिटी अफ टेक्नोलोजी**, न्यूजील्याण्डमा मेरो डाक्टर अफ फिलोसोफी (**पीएचडी**) को लागि अनुसन्धान गर्दैछु र मेरा प्रश्नहरूको बारेमा महिलाहरूको अनुभव सुनेर आभारी हुनेछु।

- २०१५ को भूकम्पपछि तपाईको '**स्वास्थ्य र जीवनयापन**' कस्तो छ?
- तपाईको समुदायमा महिला स्वास्थ्य सेवाको अनुभव कस्तो छ ?
-

- **के तपाईं नेपाली नारी हुनुहुन्छ, जसले २०१५ को नेपाल भूकम्प अनुभव गर्नुभएको छ?**
- **के तपाईं २४ वर्ष वा सोभन्दा माथिको उमेर समूहमा पर्नुहुन्छ?**
- **के तपाईं नेपाली भाषामा सहज रूपमा कुराकानी गर्न सक्नुहुन्छ?**

यदि तपाईं आफ्नो अनुभव साट्न वा साझा गर्न चाहनुहुन्छ र थप जानकारी चाहनुहुन्छ भने, कृपया मलाई सम्पर्क गर्नुहोस्:

ईश्वरी अधिकारी बराल

फोन- 9846652411

इमेल: ishadh@iompnc.edu.np

AUTEC अनुमोदन नम्बर: 23/16

Appendix I: Participant Information Sheet for Focus Group Discussion

Date Information Sheet Produced: 13 January 2023

Project Title: **Long-term Influences on Women's Wellbeing in a Nepalese Community following the 2015 Nepal Earthquake: A Constructivist Case Study**

An Invitation

Namaskar (Greetings)! I am Ishwari Adhikari Baral from Pokhara. I have been working as Nursing Lecturer in Nepal. Currently, I am doing my PhD in Nursing at a New Zealand University called Auckland University of Technology. For this, I am conducting a research study. I would like to cordially invite you to participate in this research where together we will explore about your long-term wellbeing following the Nepal earthquake, 2015. Please note that your participation in this study is entirely voluntary. If you agree to take part in this this research, I would like to assure you that you are free to withdraw from this research at any time you want and you do not need to give any reason for your withdrawal. This information sheet will further explore the research study. If you have any queries regarding this study, you can contact on:

Ishwari Adhikari Baral: +977-9846652411

Email: ishadh@iompnc.edu.np

What is the purpose of this research?

The main purpose of this study is to understand the long-term wellbeing of women residing in Nuwakot district following the Nepal earthquake, 2015.

The information obtained from this study will be used to write a thesis report of my PhD degree. The study findings will also be shared at various national and international conferences and will be published in relevant academic journals. The study findings will also be shared to National Commission on Disaster and Humanitarian Responses which provides needed evidence of the felt concerns of the disaster survivor women and their view on what is needed. The findings also contribute to local, provincial and national level disaster plan and policies development to promote overall wellbeing of disaster affected women.

How was I identified and why am I being invited to participate in the research?

You have been identified as the Nepalese woman who have experienced the Nepal earthquake and can share your experiences of your wellbeing after the earthquake. You have received information about the study from myself and one of the Female Community Health Volunteers in your community. You have been invited to participate in the study as you meet the criteria for this study- you are twenty-four years and above as you would be eighteen years and above during the time of earthquake and you can communicate in Nepali language.

How do I agree to participate in the research?

I would like to inform you that your participation in this study is voluntary and you have the full right to withdraw from the study at any time without fear and without giving reasons. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible. All the information given by you will be kept confidential and will be used only for study purpose. Your personal identity will not be disclosed to anyone.

If you agree to participate in this study, please let me know within the next two weeks. You can phone myself, Ishwari Adhikari Baral on the phone number given below. If you are not able to call the researcher, you can send this information to the FCHV about your willingness to participate. Your signed informed consent will also ensure your agreement to participation in this study. If you cannot sign, you can put your thumb print and bring it during the focus group discussion which I will collect before starting our discussion.

What will happen in this research?

For this study, data will be collected from focus group discussions with women who have experienced 2015 earthquake and individual interviews with health service providers about the services available. This invitation is to take part in a focus group discussion.

Focus group discussion

You are invited to take part in a focus group discussion. I will be conducting four focus group discussions with female participants who are 24 years and above at the time of data collection (because they would have been 18 years and above during the earthquake). Each focus group will have 4-5 participants. The discussion will explore women's experiences and perspectives about the issues pertinent to their wellbeing during and after the earthquake and utilization of primary health care activities contributing to their health and wellbeing. The discussion will be conducted in the hall

of the mother's group as it will be feasible, easily accessible and comfortable for the participants.

If you decide to take part in a group discussion

- You will be one of the participants of a group
- The discussion will be conducted in Nepali language
- It will take approximately one and half hour
- You will need to sign/thumbprint the consent form that was sent to you together with this information sheet. The consent form will be collected before the group discussion starts
- At the beginning of the group discussion, some of the general information about the group will be collected (e.g. people's ages, number of children).
- During the discussion, your perspectives about your wellbeing after the earthquake will be explored.
- Only the researcher as a facilitator and other group members will be present at the discussion.
- Participants will be reminded at the start of the discussion not to reveal details of other participants outside the focus group.
- With your permission, the group discussion will be audio-recorded and brief notes will be taken
- After the discussion, the audio taped discussions will be transcribed (written in Nepali) and then translated into English
- Also, when the study is completed, you will receive a summary of the outcomes and recommendations of the study.

What are the discomforts and risks?

As a participant of the study, you will be discussing about your personal feeling and experiences during and after the Nepal earthquake 2015. This may bring back memories of the hardships that you had to face in immediately and in the long-term after the earthquake. This may be upsetting and cause some grief. Furthermore, it might be of concern for you to discuss some important matters in a group. If any of these situations arise, please do not hesitate to inform me and I will organize support to you. You will not have to discuss any things during the group that you prefer not to share.

Since there will be 4-5 participants in a single Focus Group Discussion, your identity will be known by other focus group participants but confidentiality outside the group can be assured. Participants will all be reminded at the start of the group not to reveal information about other participants outside of the group. The risk of participants revealing details is unlikely, but because of this risk, privacy cannot be guaranteed.

How will these discomforts and risks be alleviated?

If you choose to participate in the group discussion and become emotionally upset and distressed while recalling the event of the earthquake and you feel that you cannot continue with the discussion, you may choose to leave the group at this time. Or, you may wish to take a break for some time and join the discussion later.

Moreover, free counselling service will be available for you on requirement. As a registered nurse, I have the skills to respond appropriately to your expression distress. If you feel you need counselling, you can attend mental health service available at nearest health office. The contact details are

Health Office
Bidur, Nuwakot, Nepal
Contact no. +977 010560231

What are the benefits?

As a participant you will find it helpful talking with others about your experiences. You will also make a significant contribution to this study by providing important information on women's health and wellbeing in long-term after the earthquake in your own words. The meaningful knowledge gained through this research can have important implications to promote better health of the survivor women of earthquake through health education and health promotion activities. The findings can be utilized by primary health care facilities to plan and implement regular health promotion activities and strengthening regular availability and accessibility of primary health care service. Findings may also benefit governmental and non-governmental organizations to develop appropriate policies and strategies to be carried out in long-term aftermath of natural disaster.

This project is part of my studies for a Doctor of Philosophy (PhD) degree at Auckland University of Technology (AUT) in New Zealand.

How will my privacy be protected?

In this study, the focus group will be conducted at a place accessible and comfortable to you. Your participation in this study will be kept confidential by the researcher. I want to assure you that your information will be used only for the study purpose. Your personal identity will not be disclosed to anyone. Furthermore, while preparing the transcripts I will use a pseudonym (false name) which you will be asked to choose during the discussion. In this way, the responses which you have provided to us will not be able to tracked back to you. The recorded information and transcripts of the discussion will be stored in a locked filing cabinet in the researcher's office and at AUT, and any information with your name or contact details will be kept in a locked filing cabinet separately to the transcripts, Only the members of research team will have access to the

contact details, recordings, and transcripts. After the research is completed, the recorded information and transcripts will be stored in a locked filing cabinet at AUT for six years and after this time they will be destroyed. However, if you withdraw from the study, your information will be destroyed immediately.

What are the costs of participating in this research?

There will not be any monetary cost in participating in this research. However, you will have to provide your valuable time (approximately 90 minutes) for the discussion.

What opportunity do I have to consider this invitation?

I hope you will consider this invitation carefully. If you agree to participate in this study, please let me know within the next two weeks. You can phone Ishwari Adhikari Baral on the phone number given below. If you are not able to call the researcher, you can send this information to the head of the mother's group about your willingness to participate. Your signed informed consent will also ensure your agreement to participation in this study. If you cannot sign, you can put your thumb print and bring it during the focus group discussion which I will collect before starting our discussion.

I would like to assure you once again that your participation is voluntary and you are free to withdraw during the study at any time. If you decide to withdraw from this study, all the relevant information including digital recordings and transcripts will be destroyed.

Will I receive feedback on the results of this research?

Processing and formulating the data from the information that you have provided will take time. After the analysis of the data, a summary of the findings will be sent to you through the Health Office of Bidur Municipality in your community.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this research should be notified in the first instance to the Project supervisors:

Dr. Catherine Cook

Phone: +649 921 9999 Ext 6651; email: catherine.cook@aut.ac.nz

Dr. Jagamaya Shrestha-Ranjit

Phone: +649 921 9999 Ext 7657; email: jagamaya.shrestha@aut.ac.nz

Dr. Margaret Jones

Phone: +649 921 9999 ext 7781; email margaret.jones@aut.ac.nz

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, *ethics@aut.ac.nz*, (+649) 921 9999 ext 6038.

Whom do I contact for the further information about this research

Please keep this information sheet and a copy of the consent form for your future reference. If you have any questions or concerns regarding the nature of this project, please feel free to contact one of the researchers.

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Approved by the Auckland University of Technology Ethics Committee on: 30 March 2023AUTEC Reference number: 23/16

सामुहिक छलफलको लागि लागि सहभागी सूचना पाना

जानकारी पाना उत्पादन मिति: १३ जनवरी २०२३

परियोजनाको शीर्षक: सन् २०१५ को नेपाल भूकम्पपछि नेपाली समुदायमा महिलाको स्वास्थ्य कल्याणमा दीर्घकालीन प्रभाव: एक रचनावादी केस स्टडी

निमन्त्रणा

नमस्कार (नमस्कार)! म ईश्वरी अधिकारी बराल, पोखराबाट । म पोखरामा एक नर्सिङ लेक्चररको रुपमा कार्यरत छु र हाल म न्यूजील्याण्डको अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी भनिने विश्वविद्यालयमा नर्सिङमा पीएचडी गर्दैछु। यसका लागि म एक अनुसन्धान गरिरहेकी छु । म तपाईंलाई यस अनुसन्धानमा सहभागी हुन हार्दिक निमन्त्रणा गर्न चाहन्छु जहाँ हामी सँगै मिलेर नेपालको २०१५ को भूकम्पपछि तपाईंको समग्र स्वास्थ्य तथा जीवनयापनमा परेको प्रभावको अन्वेषण गरिनेछ । कृपया ध्यान दिनुहोस् कि यस अध्ययनमा तपाईंको सहभागिता पूर्णतया स्वैच्छिक हो। यदि तपाइँ यस अनुसन्धानमा भाग लिन सहमत हुनुहुन्छ भने, म तपाइँलाई यो आश्वस्त गर्न चाहन्छु कि तपाइँ तपाइँले चाहेको समयमा यो अनुसन्धानबाट फिर्ता लिन स्वतन्त्र हुनुहुन्छ र तपाइँले यसको लागि कुनै कारण दिन आवश्यक छैन। यस जानकारी पानाले अनुसन्धान अध्ययनलाई थप अन्वेषण गर्नेछ। यदि तपाइँसँग यस अध्ययनको बारेमा कुनै प्रश्नहरू छन् भने, तपाइँ मलाई सम्पर्क गर्न सक्नुहुन्छ:

ईश्वरी अधिकारी बराल : ९७७-९८४६६५२४११

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यो अनुसन्धानको उद्देश्य के हो?

यस अध्ययनको मुख्य उद्देश्य २०१५ को भूकम्पपछि नेपालको नुवाकोट जिल्लामा महिलाहरूको समग्र स्वास्थ्य कल्याणमा (शारीरिक, मनोवैज्ञानिक, सामाजिक र आध्यात्मिक) परेको दीर्घकालीन प्रभावहरूको अन्वेषण गर्नु हो। यस अध्ययनबाट प्राप्त जानकारी मेरो पीएचडी डिग्रीको थीसिस रिपोर्ट लेख्न प्रयोग गरिनेछ। अध्ययनका नतिजाहरू विभिन्न राष्ट्रिय र अन्तर्राष्ट्रिय सम्मेलनहरूमा पनि साझा गरिनेछ र प्रासंगिक शैक्षिक जर्नलहरूमा प्रकाशित गरिनेछ। अध्ययनका नतिजाहरू नेपालको विपद् र मानवीय प्रतिक्रियासम्बन्धी राष्ट्रिय आयोगलाई पनि साझा गरिनेछ जसले विपद् पीडित महिलाहरूको महसुस गरेको चासो र दीर्घकालीन रुपमा के आवश्यक छ भन्ने बारे उनीहरूको दृष्टिकोणको आवश्यक प्रमाण प्रदान गर्दछ। खोजहरूले स्थानीय, प्रादेशिक र राष्ट्रिय स्तरको विपद् योजना र विपद् पीडित महिलाहरूको समग्र स्वास्थ्य कल्याणलाई प्रवर्द्धन गर्न नीति निर्माणमा पनि योगदान पुऱ्याउँछ।

मलाई कसरी पहिचान गरियो र मलाई किन अनुसन्धानमा भाग लिन आमन्त्रित गरिएको छ?

तपाई नेपालको भूकम्पको अनुभव गरेकी तथा भूकम्पपछिको आफ्नो अनुभव बाँड्न सक्ने नेपाली महिला हुनुहुन्छ । तपाईंले आफ्नो समुदायको महिला सामुदायिक स्वास्थ्य स्वयंसेविकाको र मेरो माध्यमबाट अध्ययनको बारेमा जानकारी प्राप्त गर्नुभएको छ। तपाईले यस अध्ययनको मापदण्ड पूरा गरेको हुनाले तपाईलाई अध्ययनमा भाग लिन आमन्त्रित गरिएको छ- तपाई चौबीस वर्ष वा माथिको हुनुहुन्छ, (भूकम्पको समयमा तपाई अठार वर्ष वा सोभन्दा माथिको हुनुहुन्थ्यो र तपाईले नेपाली भाषामा सञ्चार गर्न सक्नुहुन्छ।

म कसरी अनुसन्धानमा भाग लिन सहमत छु?

म तपाईंलाई जानकारी गराउन चाहन्छु कि यस अध्ययनमा तपाईंको सहभागिता पूर्ण रूपमा स्वैच्छिक छ। तपाईंले कुनै पनि समयमा, कुनै डर वा कारण नदिइ, अध्ययनबाट फिर्ता लिन सक्ने पूर्ण अधिकार राख्नुहुन्छ। यदि तपाईंले फिर्ता लिन निर्णय गर्नुभयो भने, तपाईंलाई तपाईंको डेटा हटाउन वा त्यसलाई अध्ययनमा प्रयोग जारी राख्न दिने विकल्प प्रस्ताव गरिनेछ। यद्यपि, एक पटक अनुसन्धान परिणाम तयार भइसकेपछि तपाईंको डेटा हटाउन सम्भव नहुन सक्छ।

तपाईंले प्रदान गर्नुभएको सबै जानकारी गोप्य राखिनेछ र अध्ययनको उद्देश्यका लागि मात्र प्रयोग गरिनेछ। तपाईंको व्यक्तिगत पहिचान कसैसँग साझा गरिने छैन।

यदि तपाईं यस अध्ययनमा भाग लिन सहमत हुनुहुन्छ भने, कृपया अर्को दुई हप्ताभित्र मलाई जानकारी दिनुहोस्। तपाईंले तल दिइएको फोन नम्बरमा ईश्वरी अधिकारी बराललाई सम्पर्क गर्न सक्नुहुन्छ। यदि तपाईं अनुसन्धानकर्तालाई फोन गर्न सक्नुहुन्न भने, तपाईं आफ्नो सहभागिताको इच्छा महिला स्वास्थ्य स्वयंसेविकाको मार्फत पठाउन सक्नुहुन्छ। तपाईंको हस्ताक्षरित सूचित सहमति फारामले अध्ययनमा सहभागी हुने तपाईंको सहमति सुनिश्चित गर्नेछ। यदि तपाईं हस्ताक्षर गर्न असमर्थ हुनुहुन्छ भने, तपाईं आफ्नो औंठा छाप लगाउन सक्नुहुन्छ र सामूहिक छलफलको समयमा बुझाउन सक्नुहुन्छ, जुन म हाम्रो छलफल सुरु हुनु अघि सङ्कलन गर्नेछु।

यो अनुसन्धानमा के हुनेछ?

यो अध्ययन सामुहिक छलफल र व्यक्तिगत अन्तर्वार्ताको रूपमा दुई चरणहरूमा सञ्चालन गरिनेछ। यो निमन्त्रणा सामुहिक छलफलमा भाग लिनको लागि हो।

सामूहिक छलफल

तपाईलाई सामुहिक छलफलमा भाग लिन आमन्त्रित गरिएको छ। म तथ्याङ्क सङ्कलनका बेला २४ वर्ष वा सोभन्दा माथिका महिला सहभागीहरूसँग चारवटा फोकस समूह छलफलहरू सञ्चालन गर्नेछु (किनभने तपाई भूकम्पको समयमा १८ वर्ष वा सोभन्दा माथिका हुनुहुन्थ्यो)। प्रत्येक फोकस समूहमा ४ -५ सहभागी हुनेछन्। छलफलमा भूकम्पको समयमा र पछिको स्वास्थ्यसँग सम्बन्धित समस्या र प्राथमिक स्वास्थ्य सेवाको उपयोगका बारेमा महिलाको अनुभव र दृष्टिकोणको खोजी गरिनेछ। सर्वसाधारणलाई सहज हुने भएकाले आमा समूहको हलमा छलफल हुनेछ ।

यदि तपाइँ सामुहिक छलफलमा भाग लिने निर्णय गर्नुहुन्छ भने

- तपाईं समूहको सहभागीहरू मध्ये एक हुनुहुनेछ।
- छलफल नेपाली भाषामा सञ्चालन गरिनेछ।

- सामुहिक छलफल लगभग डेढ घण्टाको हुनेछ।
- तपाईंले यो जानकारी पानाको साथमा तपाईंलाई पठाइएको सहमति फारममा हस्ताक्षर / थम्बप्रिन्ट गर्न आवश्यक छ। सामूहिक छलफल सुरु हुनु अघि सहमति फारम संकलन गरिनेछ।
- सामूहिक छलफलको सुरुमा, समूहको बारेमा केही सामान्य जानकारी सङ्कलन गरिनेछ(जस्तै मानिसको उमेर, बालबालिकाको संख्या)।
- छलफलको क्रममा, भूकम्प पछि तपाईंको कल्याणको बारेमा तपाईंको दृष्टिकोण अन्वेषण गरिनेछ।
- सहजकर्ताको रूपमा अनुसन्धानकर्ता र अन्य समूह सदस्यहरू मात्र छलफलमा उपस्थित हुनेछन्।
- सहभागीहरूलाई छलफलको सुरुमा फोकस समूह बाहिरका अन्य सहभागीहरूको विवरण प्रकट नगर्न सम्झाइनेछ।
- तपाईंको अनुमति लिएर अन्तर्वार्ता अडियो-रेकर्ड गरिनेछ र उपयुक्त नोटहरू लिइनेछ।
- छलफल पछि, अडियो टेप गरिएका छलफलहरू ट्रान्सक्राइब (नेपालीमा लेखिनेछ) र त्यसपछि अंग्रेजीमा अनुवाद गरिनेछ।
- साथै, अध्ययन पूरा भएपछि, तपाईंले अध्ययनको नतिजा र सिफारिसहरूको सारांश प्राप्त गर्नुहुनेछ।

असुविधा र जोखिम के हो?

अध्ययनको एक सहभागीको रूपमा, तपाईंले नेपालको भूकम्प २०१५ को समयमा र पछिको आफ्नो व्यक्तिगत भावना र अनुभवहरूको बारेमा छलफल गर्नुहुनेछ। यसले भूकम्प पछि तुरुन्तै र दीर्घकालीन रूपमा सामना गर्नुपरेको कठिनाइहरूको सम्झनाहरू ल्याउन सक्छ। यो अप्ठ्यारो हुन सक्छ र केहि शोक निम्त्याउन सक्छ। यसबाहेक, समूहमा केही महत्त्वपूर्ण विषयमा छलफल गर्नु तपाईंको लागि चिन्ताको विषय हुन सक्छ। यदि यी मध्ये कुनै पनि अवस्था उत्पन्न भयो भने, कृपया मलाई सूचित गर्न नहिचकिचाउनुहोस् र म तपाईंलाई सहयोगको व्यवस्था गर्नेछु। तपाईंले समूहको समयमा कुनै पनि कुराहरू छलफल गर्नु पर्दैन जुन तपाईं साझा गर्न चाहनुहुन्न।

एउटै सामूहिक छलफल पाँच जना सहभागी हुने भएकोले, तपाईंको पहिचान समूहका सहभागीहरूले थाहा पाउनेछन् तर समूह बाहिरको गोपनीयता सुनिश्चित गर्न सकिन्छ। सबै सहभागीहरूलाई छलफलको सुरुमा समूह बाहिर अन्य सहभागीहरूको बारेमा जानकारी प्रकट नगर्न सम्झाइनेछ। तर यो जोखिमको कारण, गोपनीयताको ग्यारेन्टी हुन सक्दैन।

यी असुविधा र जोखिमहरू कसरी कम हुनेछ?

यदि तपाईं सामूहिक छलफलमा भाग लिने निर्णय गर्नुहुन्छ र भूकम्पको घटनालाई सम्झँदा भावनात्मक रूपमा विचलित हुनुहुन्छ तथा छलफललाई निरन्तरता दिन असहज महसुस गर्नुहुन्छ भने, तपाईं जुनसुकै समयमा समूहबाट बाहिरिने निर्णय गर्न सक्नुहुन्छ। साथै, तपाईं केही समयका लागि विश्राम लिएर पछि पुनः छलफलमा सहभागी हुन सक्नुहुनेछ।

साथै, आवश्यकता अनुसार निःशुल्क परामर्श सेवा उपलब्ध हुनेछ। एक नर्सको रूपमा, मसँग तपाईंलाई उचित परामर्श दिने सीप छ। यदि तपाईंलाई छुट्टै स्वास्थ्यकर्मीबाट परामर्श आवश्यक छ जस्तो लाग्छ भने, तपाईं नजिकैको स्वास्थ्य कार्यालयमा उपलब्ध मानसिक स्वास्थ्य सेवामा निःशुल्क परामर्श सेवा लिन सक्नुहुन्छ।

सम्पर्क विवरण
स्वास्थ्य कार्यालय
बिदुर, नुवाकोट, नेपाल
संपर्क नम्बर- ९७७ ०१०५६०२३१

के फाइदाहरू छन्?

एक सहभागीको रूपमा तपाईंले आफ्नो अनुभवहरूको बारेमा अरूसँग कुरा गर्नुहुनेछ। यस अध्ययनमा भूकम्पपछिको दीर्घकालीन रूपमा महिलाको स्वास्थ्य र हितका बारेमा महत्वपूर्ण जानकारी आफ्नो शब्दमा उपलब्ध गराएर पनि तपाईंले यस अध्ययनमा महत्वपूर्ण योगदान दिनुहुनेछ। यस अनुसन्धानबाट प्राप्त अर्थपूर्ण ज्ञानले स्वास्थ्य शिक्षा र स्वास्थ्य प्रवर्द्धन गतिविधिहरू मार्फत भूकम्प पीडित महिलाहरूको राम्रो स्वास्थ्य प्रवर्द्धन गर्न महत्त्वपूर्ण प्रभाव पार्न सक्छ। यसबाहेक, अध्ययनको निष्कर्षहरू प्राथमिक स्वास्थ्य सेवा सुविधाहरूद्वारा नियमित स्वास्थ्य प्रवर्द्धन गतिविधिहरूको योजना र कार्यान्वयन गर्न र प्राथमिक स्वास्थ्य सेवाको नियमित उपलब्धता र पहुँचलाई सुदृढ गर्न प्रयोग गर्न सकिन्छ। यस अध्ययनको निष्कर्षले सरकारी तथा गैरसरकारी संस्थाहरूलाई प्राकृतिक प्रकोपको दीर्घकालीन प्रभावलाई न्युनिकरन गर्न उपयुक्त नीति र रणनीतिहरू निर्माण गर्न प्रयोग गर्न सकिनेछ। यो परियोजना डाक्टर अफ फिलोसोफी (पीएचडी) डिग्रीको लागि मेरो अध्ययनको अंश हो।

मेरो गोपनीयता कसरी सुरक्षित हुनेछ?

यस अध्ययनमा सामूहिक छलफल तपाईंलाई पहुँचयोग्य तथा सहज स्थानमा सञ्चालन गरिनेछ। यस अध्ययनमा तपाईंको सहभागिता अनुसन्धानकर्ताद्वारा गोप्य राखिनेछ। म तपाईंलाई आश्वस्त पार्न चाहन्छु कि तपाईंको प्रदान गरिएको जानकारी केवल अध्ययनको उद्देश्यका लागि मात्र प्रयोग गरिनेछ। तपाईंको व्यक्तिगत पहिचान कसैसमक्ष पनि खुलासा गरिने छैन। साथै, ट्रान्सक्रिप्टहरू तयार गर्दा म छद्म नाम (झूटा नाम) प्रयोग गर्नेछु, जुन तपाईंले छलफलका क्रममा निर्धारण गर्न सक्नुहुनेछ।

तपाईंको नाम वा सम्पर्क विवरणहरू सहितको कुनै पनि जानकारी ट्रान्सक्रिप्टहरू छुट्टै लक गरिएको फाइलिङ क्याबिनेटमा राखिनेछ, अनुसन्धान टोलीका सदस्यहरूले मात्र सम्पर्क विवरणहरू, रेकर्डिङहरू, र ट्रान्सक्रिप्टहरूमा पहुँच पाउनेछन्। अनुसन्धान पूरा भएपछि, रेकर्ड गरिएको जानकारी र ट्रान्सक्रिप्टहरू विश्वविद्यालयको लक गरिएको फाइलिङ दराजमा छ वर्षसम्म भण्डारण गरिनेछ। हस्ताक्षरित सूचित सहमति पनि छ वर्षको लागि विश्वविद्यालयमा छुट्टै लक गरिएको फाइलिङ दराजमा भण्डारण गरिनेछ। यस समय पछि, तिनीहरू नष्ट गरिनेछ। यद्यपि, यदि तपाइँ अध्ययनबाट पछि हट्नुभयो भने, तपाइँको जानकारी तुरुन्तै नष्ट हुनेछ।

यस अनुसन्धानमा भाग लिनको लागत के हो?

यस अनुसन्धानमा भाग लिन कुनै पनि मौद्रिक लागत लाग्ने छैन। यद्यपि, तपाईंले छलफलको लागि आफ्नो बहुमूल्य समय (लगभग ९० मिनेट) प्रदान गर्नुपर्नेछ।

यो निमन्त्रणालाई विचार गर्ने मसँग कस्तो मौका छ?

मलाई आशा छ कि तपाईंले यो निमन्त्रणालाई ध्यानपूर्वक विचार गर्नुहुनेछ। यदि तपाईं यस अध्ययनमा भाग लिन सहमत हुनुहुन्छ भने, कृपया मलाई अर्को दुई हप्ता भित्र थाहा दिनुहोस्। तल दिइएको फोन नम्बरमा

ईश्वरी अधिकारी बराललाई फोन गर्न सक्नुहुन्छ। यदि तपाइँ अनुसन्धानकर्तालाई कल गर्न सक्षम हुनुहुन्न भने, तपाइँ यो जानकारी तपाईंको नजिकको स्वास्थ्य स्वयंसेविकालाई तपाइँको सहभागी हुन इच्छुकको बारेमा पठाउन सक्नुहुन्छ। तपाईंको हस्ताक्षरित सूचित सहमतिले पनि यस अध्ययनमा सहभागी हुने तपाईंको सहमति सुनिश्चित गर्नेछ। यदि तपाइँ हस्ताक्षर गर्न सक्नुहुन्न भने, तपाइँ आफ्नो औंठा छाप लगाउन सक्नुहुन्छ र छलफलको समयमा ल्याउन सक्नुहुन्छ जुन म हाम्रो छलफल सुरु गर्नु अघि सङ्कलन गर्नेछु।

म तपाइँलाई तपाइँको सहभागिता स्वैच्छिक हो र तपाइँ कुनै पनि समयमा अध्ययनको क्रममा फिर्ता लिन स्वतन्त्र हुनुहुन्छ भन्ने कुरामा तपाइँलाई एक पटक फेरि आश्वस्त पार्न चाहन्छु। यदि तपाईंले यस अध्ययनबाट पछि हट्ने निर्णय गर्नुभयो भने, डिजिटल रेकर्डिङ र ट्रान्सक्रिप्टहरू सहित सबै सान्दर्भिक जानकारीहरू नष्ट हुनेछन्।

के मैले यस अनुसन्धानको नतिजाहरूको प्रतिक्रिया प्राप्त गर्नेछु?

तपाईंले उपलब्ध गराउनुभएको जानकारीबाट निष्कर्ष निकाल्न समय लाग्नेछ। डाटा विश्लेषण भएपछि, तपाईंको समुदायको बिदुर नगरपालिका स्वास्थ्य कार्यालयमार्फत तपाईंलाई पठाइनेछ।

यदि मलाई यो अनुसन्धानको बारेमा प्रश्न वा जिज्ञासा छ भने मैले के गर्ने?

यस अनुसन्धानको प्रकृति सम्बन्धी कुनै पनि जिज्ञासाहरू परियोजना पर्यवेक्षकहरूलाई सूचित गर्नुहोला।

परियोजना पर्यवेक्षकहरूको सम्पर्क विवरण

<u>प्रथम पर्यवेक्षक:</u>

डा. क्याथरिन कुक
सहप्राध्यापक
अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी
फोन: 649 921 9999 Ext 6651
इमेल: catherine.cook@aut.ac.nz

दोश्रो पर्यवेक्षकहरू

डा जगमाया श्रेष्ठ-रञ्जित
वरिष्ठ लेक्चरर
अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी
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इमेल: jagamaya.shrestha@aut.ac.nz

डा. मार्गरिट जोन्स

वरिष्ठ लेक्चरर
अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी
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इमेल: margaret.jones@aut.ac.nz

अनुसन्धानको आचरण सम्बन्धी चिन्ताहरू AUTEC को कार्यकारी सचिव, ethics@aut.ac.nz, (649) 921 9999 ext 6038 लाई सूचित गरिनु पर्छ।

यस अनुसन्धानको बारेमा थप जानकारीको लागि म कसलाई सम्पर्क गर्न सक्छु ?

कृपया तपाईंको भविष्यको सन्दर्भको लागि यो जानकारी पाना र सहमति फारमको प्रतिलिपि राख्नुहोस्। यदि तपाईंलाई यस परियोजनाको प्रकृतिका बारेमा कुनै प्रश्न वा जिज्ञासा भएमा, कृपया अनुसन्धानकर्ताहरूमध्ये कुनै एकसँग सम्पर्क गर्न नहिचकिचाउनुहोस्।

शोधकर्ता सम्पर्क विवरण

ईश्वरी अधिकारी बराल
विद्यार्थी, डाक्टर अफ फिलोसोफी, अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी, न्यूजील्याण्ड
सम्पर्क : पोखरा, नेपाल
फोन; ९७७-९८४६६५२४११; इमेल: ishadh@iompnc.edu.np

परियोजना पर्यवेक्षकहरूको सम्पर्क विवरण

प्राथमिक पर्यवेक्षक:

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अकल्यान्ड युनिभर्सिटी अफ टेक्नोलोजी एथिक्स कमिटीले अन्तिम नैतिकता स्वीकृति प्रदान गरेको मिति: ३० मार्च २०२३

AUTEC सन्दर्भ नम्बर: २३/१६

Appendix J: Informed Consent form for Focus Group Discussion



Consent Form- Focus Group Discussions

Project Title: **Long-term Influences on Women's Wellbeing in a Nepalese community following the 2015 Nepal Earthquake: A Constructivist Case Study.**

Project Supervisors:

Dr. Catherine Cook, Dr. Jagamaya Shrestha-Ranjit, Dr. Margaret Jones, Auckland University of Technology, New Zealand

Researcher: Ishwari Adhikari Baral

- I have read and understood the information provided about this research project in the Information Sheet dated 13/01/2023.
- I have had an opportunity to ask questions and to have them answered.
- I understand that identity of my fellow participants and our discussions in the focus group is confidential to the group and I agree to keep this information confidential.
- I understand that notes will be taken during the focus group and that it will also be audio-taped and transcribed.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if I withdraw from the study then, while it may not be possible to destroy all records of the focus group discussion of which I was part, I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research.
- I wish to receive a summary of the research findings (please tick one):
  Yes No

Participant's signature/thumb fingerprints .....

Participant's name: .....

Participant's Contact Details (if appropriate):.....

Date:.....

Approved by the Auckland University of Technology Ethics Committee on:

AUTEC Reference number:23/16

Note: The Participant should retain a copy of this form.

सहमति फारम - व्यक्तिगत अन्तर्वार्ता
परियोजनाको शीर्षक: २०१५ को नेपाल भूकम्पपछिको नेपाली समुदायमा महिलाको कल्याणमा दीर्घकालीन प्रभाव: एक रचनावादी केस अध्ययन।

परियोजना पर्यवेक्षकहरू:
डा. क्याथरिन कुक, डा. जगमाया श्रेष्ठ-रञ्जित, डा. मार्गरिट जोन्स, अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी, न्युजिल्याण्ड
अनुसन्धानकर्ता: ईश्वरी अधिकारी बराल

- मैले १३/०१/२०२३ को सूचना पानामा यस अनुसन्धान परियोजनाको बारेमा प्रदान गरिएको जानकारी पढेको र बुझेको छु।
- मैले प्रश्नहरू सोध्ने र जवाफ दिने मौका पाएको छु।
- म बुझ्छु कि अन्तर्वार्ता अडियो-रेकर्ड गरिनेछ र उपयुक्त नोटहरू लिइनेछ। अन्तर्वार्ता पछि, अडियो टेप गरिएको छलफललाई ट्रान्सक्रिप्ट (नेपालीमा लेखिनेछ) र त्यसपछि अंग्रेजीमा अनुवाद गरिनेछ।
- म बुझ्छु कि यस अध्ययनमा भाग लिनु स्वैच्छिक हो (मेरो रोजाइ) र म कुनै पनि हिसाबले बेफाइदा नगरी कुनै पनि समयमा अध्ययनबाट फिर्ता लिन सक्छु।
- म बुझ्छु कि यदि म अध्ययनबाट फिर्ता भएँ भने मलाई मेरो स्वामित्वको रूपमा पहिचान गर्न सकिने कुनै पनि डाटा हटाउन वा प्रयोग गर्न जारी राख्ने बीचको छनौट प्रस्ताव गरिनेछ। यद्यपि, एकपटक निष्कर्षहरू उत्पादन गरिसकेपछि, मेरो डाटा हटाउन सम्भव नहुन सक्छ।
- म यस अनुसन्धानमा भाग लिन सहमत छु।
- म अनुसन्धान निष्कर्षहरूको सारांश प्राप्त गर्न चाहन्छु (कृपया एउटामा टिक गर्नुहोस्):
  हो ☐ होइन ☐

सहभागीको हस्ताक्षर: .....
सहभागीको नाम: .....
सहभागीको सम्पर्क विवरण (यदि उपयुक्त भए).....
अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी एथिक्स कमिटीले अन्तिम स्वीकृति दिएको मिति: **३० मार्च २०२३**
AUTEC सन्दर्भ नम्बर: २३/१६
नोट: सहभागीले यस फारमको प्रतिलिपि राख्नुपर्छ।

Appendix K: Participant Invitation Letter for Individual Interviews



Department Supervisor
Health Office
Bidur Municipality, Nuwakot
An Invitation

Namaskar (Greetings)! I am Ishwari Adhikari Baral from Pokhara. I have been working as Nursing Lecturer in Nepal. Currently, I am doing my PhD in Nursing at a New Zealand University called Auckland University of Technology. For this, I am conducting a research study on a project entitled **Long- term Influences on Women's Wellbeing in a Nepalese community following the 2015 Nepal Earthquake: A Constructivist Case Study.** The main purpose of this study is to explore the long-term influences on the overall wellbeing (physical, psychological, social and spiritual) of women in the Nuwakot district of Nepal following the 2015 earthquake.

Information from the participants will be gathered through Focus Group Discussion with earthquake affected women and Individual interviews with health service providers working in different roles under health office of Nuwakot district providing primary health care services to women of Nuwakot district. Among the health service providers one Public Health Supervisor, one Medical Officer and two Female Community Health Volunteers (Ward 2 and 3) will be interviewed. Therefore, you are kindly requested to provide the Participant invitation letter to the health care workers in these respective roles. Detail information about the study has been clearly stated in the Participant information sheet. As you are also one of the participants, please kindly go through the participant information sheet and let me know your decision about participation in the study. Thank you so much in advance.

Yours Sincerely
Ishwari Adhikari Baral
Student (Doctor of Philosophy, Health)
Nursing Department
Auckland University of Technology, New Zealand

Approved by the Auckland University of Technology Ethics Committee on: AUTEC Reference number:23/16

विदुर नगरपालिका,
स्वास्थ्य महाशाखा
नुवाकोट

निमन्त्रणा

(नमस्कार)! म ईश्वरी अधिकारी बराल । म चिकित्शा शास्त्र अध्ययन संस्थान, पोखरा नर्सिङ क्यम्पसमा नर्सिङ लेक्चररको रुपमा कार्यरत रहेको र हाल, म न्यूजील्याण्डको अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजीमा नर्सिङमा पीएचडी गर्दैछु। यसका लागि, म "२०१५ को नेपाल भूकम्पपछिको नेपाली समुदायमा महिलाको स्वास्थ्य कल्याणमा दीर्घकालीन प्रभावहरू: एक रचनावादी केस अध्ययन" शीर्षकमा अनुसन्धान अध्ययन गरिरहेको छु । यस अध्ययनको मुख्य उद्देश्य २०१५ को भूकम्पपछि नेपालको नुवाकोट जिल्लामा महिलाहरूको समग्र स्वास्थ्य (शारीरिक, मनोवैज्ञानिक, सामाजिक र आध्यात्मिक) मा परेको दीर्घकालीन प्रभावहरूको अन्वेषण गर्नु हो।

नुवाकोट जिल्लाका महिलाहरूलाई प्राथमिक स्वास्थ्य सेवा प्रदान गर्ने नुवाकोट जिल्ला विदुर नगरपालिका, स्वास्थ्य महाशाखा अन्तर्गत विभिन्न भूमिकामा कार्यरत स्वास्थ्य सेवा प्रदायकहरूसँग व्यक्तिगत अन्तर्वार्ता र भूकम्प पीडित महिलासँग फोकस समूह छलफलको माध्यमबाट दुई चरणमा जानकारी सङ्कलन गरिनेछ। स्वास्थ्य सेवा प्रदायकहरूमध्ये एक जनस्वास्थ्य निरीक्षक, एक मेडिकल अधिकृत र दुई महिला सामुदायिक स्वास्थ्य स्वयंसेविका (वडा २ र ३) को अन्तर्वार्ता लिईनेछ । तसर्थ, यी सम्बन्धित भूमिकामा रहनुभएका स्वास्थ्य सेवाकर्मीहरूलाई सहभागी हुनको लागि म विनम्र अनुरोध गर्दछु। यस अध्ययनको बारेमा विस्तृत जानकारी सहभागी जानकारी पानामा स्पष्ट रूपमा उल्लेख गरिएको छ। हजुरको सहयोग को लागि अग्रिम धन्यवाद।

ईश्वरी अधिकारी बराल

विद्यार्थी (डाक्टर अफ फिलोसफी, स्वास्थ्य)

नर्सिङ विभाग

अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी, न्यूजील्याण्ड

अकल्यान्ड युनिभर्सिटी अफ टेक्नोलोजी एथिक्स कमिटीले स्वीकृति दिइएको मिति: ३० मार्च २०२३
AUTEC सन्दर्भ नम्बर: २३/१६

Appendix L: Participant Invitation Letter for Individual Interviews



Date Information Sheet Produced: 13 January 2023

Project Title: Long-term Influences on Women's Wellbeing in a Nepalese community following the 2015 Nepal Earthquake: A Constructivist Case Study

An Invitation

Namaskar (Greetings)! I am Ishwari Adhikari Baral from Pokhara. I have been working as Nursing Lecturer in Nepal. Currently, I am doing my PhD in Nursing at a New Zealand University called Auckland University of Technology. For this, I am conducting a research study. I would like to cordially invite you to participate in this research where together we will explore the influences on your wellbeing following the Nepal earthquake, 2015. Please note that your participation in this study is entirely voluntary. If you agree to take part in this this research, I would like to assure you that you are free to withdraw from this research at any time you want and you do not need to give any reason for your withdrawal. This information sheet will further explore the research study. If you have any queries regarding this study, you can contact on:

Ishwari Adhikari Baral: +977-9846652411

Email: ishadh@iompnc.edu.np

What is the purpose of this research?

The main purpose of this study is to explore the long-term influences on the overall wellbeing (physical, psychological, social and spiritual) of women in the Nuwakot district of Nepal following the 2015 earthquake.

The information obtained from this study will be used to write a thesis report of my PhD degree. The study findings will also be shared at various national and international conferences and will be published in relevant academic journals. The study findings will also be shared to National Commission on Disaster and Humanitarian Responses in Nepal which provides needed evidence of the felt concerns of the disaster survivor women and their view on what is needed. The findings also contribute to local, provincial

and national level disaster plan and policies development to promote overall wellbeing of disaster affected women.

How was I identified and why am I being invited to participate in the research?

As part of the study, I wish to generally identify what primary health care activities have been available and utilized by women of Nuwakot district after the Nepal earthquake 2015 in order to promote their long- term wellbeing. You are identified for this study because you are one of the health professionals in different roles under Health office Bidur Municipality of Nuwakot district who can share your experiences of providing primary health care services to women of Nuwakot district. You have been invited to participate in the study as you meet the criteria for this study.

How do I agree to participate in the research?

I would like to inform you that your participation in this study is voluntary and you have the full right to withdraw from the study at any time without fear and without giving reasons. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible. All the information given by you will be kept confidential and will be used only for study purpose. Your personal identity will not be disclosed to anyone.

If you agree to participate in this study, please let me know within the next two weeks. You can phone Ishwari Adhikari Baral on the phone number given below. Moreover, a consent form is attached to this information sheet. Your signed informed consent will also ensure your agreement to participation in this study. You can carefully read the consent form, sign it and bring it to the interview. I will collect it before starting our interview.

What will happen in this research?

This study will be conducted in the two phases in the form of focus group discussion and individual interviews. I would like to invite you to participate in the phase II: individual interviews of this study.

Individual Interview

An individual face-to-face interview will be conducted with four health service providers to gain understanding of the available health services targeted to survivor women and the utilization of those services by the women in the Nuwakot district.

If you decide to take part in the study

- I will arrange a face-to-face interview with you and at a time and place that is convenient to you
- The interview will be conducted in Nepali Language
- It will take approximately one hour
- You will need to sign the consent form that was sent to you together with this information sheet. The consent form will be collected before the interview starts
- At the beginning of the interview, some of the general information about you such as your age and work experience will be collected.
- During the interview, your perspectives of providing primary health care services to the women will be explored and how these influence the health and wellbeing of the women.
- Only the interviewer (me) and interviewee (you) will be present in the interview.
- With your permission, the interview will be audio-recorded and appropriate notes will be taken
- After the interview, the audio taped discussions will be transcribed (written in Nepali) and then translated into English
- Following the interview, you will be given the opportunity to go through a summary of the transcript. If you have any objections or comments regarding the summary, you can contact me within two weeks after receiving the summary.
- Also, when the study is completed, you will receive a summary of the outcomes and recommendations of the study.

What are the discomforts and risks?

As a participant of the study, you will be discussing about your experiences of providing primary health care services to the women of Nuwakot district during and after the Nepal earthquake 2015. This may bring back memories of the hardships that you had to face while being engaged in providing support services after the earthquake. This may be stressful and upsetting. If any of these situations arise, please do not hesitate to inform me and I will organize support to you.

How will these discomforts and risks be alleviated?

You will not have to share any information you do not wish to. If any of the stressful situation arise that upsets you while taking an interview, you are free to withdraw from the interview and the study at any time. Moreover, if you feel like you have shared some personal information which you didn't want to share, you can contact me at any time and I can delete this information from the study.

What are the benefits?

As a participant, you will make a significant contribution to this study by providing important general information on availability and utilization of primary health care services by women of Nuwakot district to promote their long-term wellbeing. The meaningful knowledge gained through this research can have important implications to promote better health of the survivor women of earthquake through health education and health promotion activities. Moreover, the findings can be utilized by primary health care facilities to plan and implement regular health promotion activities and strengthening regular availability and accessibility of primary health care service. The findings may benefit governmental and non-governmental organizations to develop appropriate policies and strategies to be carried out in long-term aftermath of natural disaster.

This project is part of my studies for a Doctor of Philosophy (PhD) degree at Auckland University of Technology (AUT) in New Zealand.

How will my privacy be protected?

In this study, your participation will be kept confidential by the researchers. Your name will not be used in any reports of the study to protect your privacy and confidentially. You can choose a pseudonym prior to the interview, which will be used in the transcripts as well as publications and conference presentations.

Any information with your name or contact details will be kept in a locked filing cabinet separately to the transcripts, only the members of research team will have access to the contact details, recordings, and transcripts. After the research is completed, the recorded information and transcripts will be stored in a locked filing cabinet of AUT for six years. The signed informed consent will also be stored in a separate locked filing cabinet at AUT for six years. After this time, they will be destroyed. However, if you withdraw from the study, your information will be destroyed immediately.

What are the costs of participating in this research?

There will not be any monetary cost in participating in this research. However, you will have to provide your valuable time (one hour) for the interview.

What opportunity do I have to consider this invitation?

I hope you will consider this invitation carefully. If you agree to participate in this study, please let me know within the next two weeks. You can phone Ishwari Adhikari Baral on the phone number given below or email me on: ishadh@iompnc.edu.np to inform me about your willingness to participate. Your signed informed consent will also ensure your agreement to participation in this study.

Will I receive feedback on the results of this research?

Processing and formulating the data from the information that you have provided will take time. After the analysis of the data, a summary of the findings will be sent to you through the supervisor of health office, Bidur municipality.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this research should be notified in the first instance to the Project supervisors:

Dr. Catherine Cook

Phone: +649 921 9999 Ext 6651; email: Catherine.cook@aut.ac.nz

Dr. Jagamaya Shrestha-Ranjit

Phone: +649 921 9999 Ext 7657; email: jagamaya.shrestha@aut.ac.nz

Dr. Margaret Jones

Phone: +649 921 9999 Ext 7781; email: margaret.jones@aut.ac.nz

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, *ethics@aut.ac.nz*, (+649) 921 9999 Ext 6038.

Whom do I contact for the further information about this research

Please keep this information sheet and a copy of the consent form for your future reference. If you have any questions or concerns regarding the nature of this project, please feel free to contact one of the researchers.

Researcher contact details

Ishwari Adhikari Baral
Student, Doctor of Philosophy, Auckland University of Technology, New Zealand
Contact: Pokhara, Nepal
Phone; +977-9846652411; email: ishadh@iompnc.edu.np

Project supervisors' contact details
Primary Supervisor:
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Email: margaret.jones@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on:
AUTEC Reference number: 23/16

व्यक्तिगत अन्तर्वार्ताका लागि सहभागी सूचना पाना

जानकारी पाना उत्पादन मिति: १३ जनवरी २०२३

परियोजनाको शीर्षक: सन् २०१५ को नेपाल भूकम्पपछि नेपाली समुदायमा महिलाको स्वास्थ्य कल्याणमा दीर्घकालीन प्रभाव: एक रचनावादी केस स्टडी

निमन्त्रणा

नमस्कार (नमस्कार)! म पोखराकी ईश्वरी अधिकारी बराल । म पोखरामा नर्सिङ लेक्चररको रुपमा कार्यरत छु । हाल म न्यूजील्याण्डको अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी भनिने विश्वविद्यालयमा नर्सिङमा पीएचडी गर्दैछु। यसका लागि म अनुसन्धान गरिरहेको छु । म तपाईंलाई यस अनुसन्धानमा सहभागी हुन हार्दिक निमन्त्रणा गर्न चाहन्छु जहाँ हामी सँगै मिलेर नेपालको भूकम्प, २०१५ पछि तपाईंको स्वास्थ्यमा परेको प्रभावको अन्वेषण गर्नेछौं। कृपया ध्यान दिनुहोस् कि यस अध्ययनमा तपाईंको सहभागिता पूर्णतया स्वैच्छिक हो। यदि तपाइँ यस अनुसन्धानमा भाग लिन सहमत हुनुहुन्छ भने, म तपाइँलाई यो आश्वस्त गर्न चाहन्छु कि तपाइँ तपाइँले चाहेको समयमा यो अनुसन्धानबाट फिर्ता लिन स्वतन्त्र हुनुहुन्छ र तपाइँले यसको लागि कुनै कारण दिन आवश्यक छैन। यस जानकारी पानाले अनुसन्धान अध्ययनलाई थप अन्वेषण गर्नेछ। यदि तपाइँसँग यस अध्ययनको बारेमा कुनै प्रश्नहरू छन् भने, तपाइँ सम्पर्क गर्न सक्नुहुन्छ:

ईश्वरी अधिकारी बराल: ९७७-९८४६६५२४११

इमेल: ishadh@iompnc.edu.np

यो अनुसन्धानको उद्देश्य के हो?

यस अध्ययनको मुख्य उद्देश्य २०१५ को भूकम्पपछि नेपालको नुवाकोट जिल्लामा महिलाहरूको समग्र स्वास्थ्य (शारीरिक, मनोवैज्ञानिक, सामाजिक र आध्यात्मिक) मा परेको दीर्घकालीन प्रभावहरूको अन्वेषण गर्नु हो। यस अध्ययनबाट प्राप्त जानकारी मेरो पीएचडी डिग्रीको थीसिस रिपोर्ट लेख्न प्रयोग गरिनेछ। अध्ययनका नतिजाहरू विभिन्न राष्ट्रिय र अन्तर्राष्ट्रिय सम्मेलनहरूमा पनि साझा गरिनेछ र प्रासंगिक शैक्षिक जर्नलहरूमा प्रकाशित गरिनेछ। अध्ययनका नतिजाहरू नेपालको विपद् र मानवीय प्रतिक्रियासम्बन्धी राष्ट्रिय आयोगलाई पनि साझा गरिनेछ जसले विपद् पीडित महिलाहरूको महसुस गरेको चासो र दीर्घकालीन रुपमा के आवश्यक छ भन्ने बारे उनीहरूको दृष्टिकोणको आवश्यक प्रमाण प्रदान गर्दछ। खोजहरूले स्थानीय, प्रादेशिक र राष्ट्रिय स्तरको विपद् योजना र विपद् पीडित महिलाहरूको समग्र स्वास्थ्य कल्याणलाई प्रवर्द्धन गर्न नीति निर्माणमा पनि योगदान पुऱ्याउँछ।

मलाई कसरी पहिचान गरियो र मलाई किन अनुसन्धानमा भाग लिन आमन्त्रित गरिएको छ?

अध्ययनको एक भागको रूपमा, म नुवाकोट जिल्लाका महिलाहरूले भूकम्प २०१५ पछि उनीहरूको दीर्घकालीन स्वास्थ्यलाई प्रवर्द्धन गर्नका लागि के-कस्ता प्राथमिक स्वास्थ्य सेवाहरू उपलब्ध गराए र उपयोग गरे भन्ने कुरा सामान्य रूपमा पहिचान गर्न चाहन्छु। तपाइँ नुवाकोट जिल्लाको विदुर नगरपालिकाको स्वास्थ्य कार्यालय अन्तर्गत विभिन्न भूमिकामा रहेका स्वास्थ्य सेवाकर्मी मध्ये एक हुनुहुन्छ जसले नुवाकोट जिल्लाका महिलाहरूलाई प्राथमिक स्वास्थ्य सेवा उपलब्ध गराउँदा आफ्ना अनुभवहरू बाँड्न सक्ने भएकाले तपाईंलाई यो अध्ययनका लागि पहिचान गरिएको हो। तपाईंले यस अध्ययनको मापदण्डहरू पूरा गर्नुभएकोले तपाईंलाई अध्ययनमा भाग लिन आमन्त्रित गरिएको छ।

म कसरी अनुसन्धानमा भाग लिन सहमाती दिन सक्छु छ?

म तपाईंलाई यो जानकारी गराउन चाहन्छु कि यस अध्ययनमा तपाईंको सहभागिता स्वैच्छिक छ र तपाईंसँग कुनै पनि समय बिना डर र कारण नदिई अध्ययनबाट फिर्ता लिने पूर्ण अधिकार छ। यदि तपाइँ अध्ययनबाट फिर्ता लिने छनौट गर्नुहुन्छ भने, तपाइँलाई तपाइँसँग सम्बन्धित रूपमा पहिचान गर्न सकिने कुनै पनि डेटा हटाउन वा प्रयोग गर्न जारी राख्न अनुमति दिने बीचको छनौट प्रस्ताव गरिनेछ। यद्यपि, एक पटक खोजहरू उत्पादन गरिसकेपछि, तपाईंको डाटा हटाउन सम्भव नहुन सक्छ। तपाईले दिनुभएको सबै जानकारी गोप्य राखिनेछ र अध्ययन उद्देश्यको लागि मात्र प्रयोग गरिनेछ। तपाईंको व्यक्तिगत पहिचान कसैलाई खुलासा गरिने छैन।

यदि तपाईं यस अध्ययनमा भाग लिन सहमत हुनुहुन्छ भने, कृपया मलाई अर्को दुई हप्ता भित्र थाहा दिनुहोस्। तल दिइएको फोन नम्बरमा ईश्वरी अधिकारी बराललाई फोन गर्न सक्नुहुन्छ। यसबाहेक, यो जानकारी पानामा एक सहमति फारम संलग्न छ। तपाईंको हस्ताक्षरित सूचित सहमतिले पनि यस अध्ययनमा सहभागी हुने तपाईंको सहमति सुनिश्चित गर्नेछ। तपाईंले सहमति फारम ध्यानपूर्वक पढ्न सक्नुहुन्छ, हस्ताक्षर गर्न सक्नुहुन्छ र अन्तर्वार्तामा ल्याउन सक्नुहुन्छ। म हाम्रो अन्तर्वार्ता सुरु गर्नु अघि यसलाई सङ्कलन गर्नेछु।

यो अनुसन्धानमा के हुनेछ?

यो अध्ययन सामुहिक छलफल र व्यक्तिगत अन्तर्वार्ताको रूपमा दुई चरणहरूमा सञ्चालन गरिनेछ। म तपाईंलाई दोस्रो चरणमा भाग लिन आमन्त्रित गर्न चाहन्छु।

व्यक्तिगत अन्तर्वार्ता

नुवाकोट जिल्लामा महिलाहरूलाई लक्षित उपलब्ध स्वास्थ्य सेवाहरू र ती सेवाहरूको उपयोगिताका बारेमा बुझ्नका लागि चार स्वास्थ्य सेवा प्रदायकहरूसँग व्यक्तिगत आमने-सामने अन्तर्वार्ता लिइनेछ।

यदि तपाइँ अध्ययनमा भाग लिने निर्णय गर्नुहुन्छ भने

- म तपाइँसँग तपाइँको अफिसमा र तपाइँलाई उपयुक्त समयमा अन्तर्वार्ता गर्नेछु।
- अन्तर्वार्ता नेपाली भाषामा सञ्चालन हुनेछ।
- यो अन्तर्वार्ताको लागि लगभग एक घण्टा लाग्नेछ।
- तपाईंले यो जानकारी पानाको साथमा तपाईंलाई पठाइएको सूचित सहमति फारममा हस्ताक्षर गर्न आवश्यक छ। अन्तर्वार्ता सुरु हुनु अघि सहमति फारम संकलन गरिनेछ।

- अन्तर्वार्ताको सुरुमा, तपाइँको बारेमा केहि सामान्य जानकारी जस्तै तपाइँको उमेर र कार्य अनुभव संकलन गरिनेछ।
- अन्तर्वार्ताको क्रममा, महिलाहरूलाई प्राथमिक स्वास्थ्य सेवाहरू प्रदान गर्ने तपाईंको दृष्टिकोण र यसले महिलाहरूको स्वास्थ्य र कल्याणलाई कसरी प्रभाव पार्छ भनेर अन्वेषण गरिनेछ।
- अन्तर्वार्ता लिने व्यक्ति (म) र अन्तर्वार्ता दिने (तपाई) मात्र अन्तर्वार्तामा उपस्थित हुनुहुनेछ।
- तपाईंको अनुमति लिएर अन्तर्वार्ता अडियो-रेकर्ड गरिनेछ र उपयुक्त नोटहरू लिइनेछ।
- अन्तर्वार्ता पछि, अडियो टेप गरिएको छलफललाई ट्रान्सक्रिप्ट (नेपालीमा लेखिनेछ) र त्यसपछि अंग्रेजीमा अनुवाद गरिनेछ।
- अन्तर्वार्ता पछि, तपाईंलाई ट्रान्सक्रिप्टको सारांश सुन्ने अवसर दिइनेछ। यदि तपाईंसँग सारांशको बारेमा कुनै आपत्ति वा टिप्पणीहरू छन् भने, तपाईंले सारांश प्राप्त गरेको दुई हप्ता भित्र मलाई सम्पर्क गर्न सक्नुहुन्छ।
- साथै, अध्ययन पूरा भएपछि, तपाईंले अध्ययनको नतिजा र सिफारिसहरूको सारांश प्राप्त गर्नुहुनेछ।

असुविधा र जोखिम के हो?

अध्ययनको सहभागीको रूपमा, तपाईंले नुवाकोट जिल्लाका महिलाहरूलाई २०१५ भूकम्पको समयमा र पछि प्राथमिक स्वास्थ्य सेवाहरू प्रदान गर्ने अनुभवहरू बारे छलफल गर्नुहुनेछ। यसले तपाईंलाई भूकम्प पछि सहयोग सेवा प्रदान गर्न संलग्न हुँदा सामना गर्नुपरेको कठिनाइहरूको सम्झना ल्याउन सक्छ। यो तनावपूर्ण र अप्ठ्यारो हुन सक्छ। यदि यी मध्ये कुनै पनि अवस्था उत्पन्न भयो भने, कृपया मलाई सूचित गर्न नहिचकिचाउनुहोस् र म तपाईंलाई सहयोगको व्यवस्था गर्नेछु।

यी असुविधा र जोखिमहरू कसरी कम हुनेछ?

यस अन्तर्वार्तामा तपाईंले भन्न नचाहेको कुनै पनि जानकारी साझा गर्नु पर्दैन। अन्तर्वार्ता लिने क्रममा कुनै पनि तनावपूर्ण अवस्था उत्पन्न भएमा, तपाईं कुनै पनि समयमा अन्तर्वार्ता र अध्ययनबाट पछि हट्न स्वतन्त्र हुनुहुन्छ। यसबाहेक, यदि तपाईलाई केहि व्यक्तिगत जानकारी साझा गरेको जस्तो लाग्छ जुन तपाईले साझा गर्न चाहनुहुन्न भने, तपाईले मलाई कुनै पनि समयमा सम्पर्क गर्न सक्नुहुन्छ र म यो जानकारी अध्ययनबाट मेटाउन सक्छु।

के फाइदाहरू छन्?

एक सहभागीको रूपमा, तपाईंले नुवाकोट जिल्लाका महिलाहरूले उनीहरूको दीर्घकालीन स्वास्थ्य प्रवर्द्धन गर्न प्राथमिक स्वास्थ्य सेवाहरूको उपलब्धता र उपयोगको बारेमा महत्त्वपूर्ण जानकारी प्रदान गरेर यस अध्ययनमा महत्त्वपूर्ण योगदान दिनुहुनेछ। यस अनुसन्धानबाट प्राप्त अर्थपूर्ण ज्ञानले स्वास्थ्य शिक्षा र स्वास्थ्य प्रवर्द्धन गतिविधिहरू मार्फत भूकम्प पीडित महिलाहरूको राम्रो स्वास्थ्य प्रवर्द्धन गर्न महत्त्वपूर्ण प्रभाव पार्न सक्छ। यसबाहेक, अध्ययनको निष्कर्षहरू प्राथमिक स्वास्थ्य सेवा सुविधाहरूद्वारा नियमित स्वास्थ्य प्रवर्द्धन गतिविधिहरूको योजना र कार्यान्वयन गर्न र प्राथमिक स्वास्थ्य सेवाको नियमित उपलब्धता र पहुँचलाई सुदृढ गर्न प्रयोग गर्न सकिन्छ। यस अध्ययनको निष्कर्षले सरकारी तथा गैरसरकारी संस्थाहरूलाई प्राकृतिक प्रकोपको दीर्घकालीन प्रभावलाई न्युनिकरन गर्न उपयुक्त नीति र रणनीतिहरू निर्माण गर्न प्रयोग गर्न सकिनेछ।

यो परियोजना डाक्टर अफ फिलोसोफी (पीएचडी) डिग्रीको लागि मेरो अध्ययनको अंश हो।

मेरो गोपनीयता कसरी सुरक्षित हुनेछ?

यस अध्ययनमा तपाईंको सहभागितालाई गोप्य राखिनेछ। तपाईको गोपनीयता र गोप्यताको रक्षा गर्न अध्ययनको कुनै पनि रिपोर्टमा तपाईको नाम प्रयोग गरिने छैन। तपाईंले अन्तर्वार्ता अघि एक बनावटी (झूटा नाम) नाम रोज्न सक्नुहुन्छ, जुन ट्रान्सक्रिप्टहरू साथै प्रकाशनहरू र सम्मेलन प्रस्तुतीकरणहरूमा प्रयोग गरिनेछ।

तपाईंको नाम वा सम्पर्क विवरणहरू सहितको कुनै पनि जानकारी ट्रान्सक्रिप्टहरू छुट्टै लक गरिएको फाइलिङ क्याबिनेटमा राखिनेछ, अनुसन्धान टोलीका सदस्यहरूले मात्र सम्पर्क विवरणहरू, रेकर्डिङहरू, र ट्रान्सक्रिप्टहरूमा पहुँच पाउनेछन्। अनुसन्धान पूरा भएपछि, रेकर्ड गरिएको जानकारी र ट्रान्सक्रिप्टहरू विश्वविद्यालयको लक गरिएको फाइलिङ दराजमा छ वर्षसम्म भण्डारण गरिनेछ। हस्ताक्षरित सूचित सहमति पनि छ वर्षको लागि विश्वविद्यालयमा छुट्टै लक गरिएको फाइलिङ दराजमा भण्डारण गरिनेछ। यस समय पछि, तिनीहरू नष्ट गरिनेछ। यद्यपि, यदि तपाइँ अध्ययनबाट पछि हट्नुभयो भने, तपाइँको जानकारी तुरुन्तै नष्ट हुनेछ।

यस अनुसन्धानमा भाग लिनको लागत के हो?

यस अनुसन्धानमा भाग लिन कुनै पनि मौद्रिक लागत लाग्ने छैन। यद्यपि, तपाईंले अन्तर्वार्ताको लागि आफ्नो बहुमूल्य समय (एक घण्टा) प्रदान गर्नुपर्नेछ।

यो निमन्त्रणालाई विचार गर्ने मसँग कस्तो मौका छ?

मलाई आशा छ कि तपाईंले यो निमन्त्रणालाई ध्यानपूर्वक विचार गर्नुहुनेछ। यदि तपाईं यस अध्ययनमा भाग लिन सहमत हुनुहुन्छ भने, कृपया मलाई अर्को दुई हप्ता भित्र थाहा दिनुहोस्। तल दिइएको फोन नम्बरमा ईश्वरी अधिकारी बराललाई फोन गर्न सक्नुहुन्छ वा मलाई इमेल गर्नुहोस्: ishadh@iompnc.edu.np मा सहभागी हुन इच्छुक हुनुहुन्छ भनी जानकारी गराउन सक्नुहुन्छ। तपाईंको हस्ताक्षरित सूचित सहमतिले पनि यस अध्ययनमा सहभागी हुन तपाईंको सहमति सुनिश्चित गर्नेछ।

के मैले यस अनुसन्धानको नतिजाहरूको प्रतिक्रिया प्राप्त गर्नेछु?

तपाईंले उपलब्ध गराउनुभएको जानकारीबाट निष्कर्ष निकाल्न समय लाग्नेछ। तपाईंलाई तथ्याङ्कको विश्लेषणपछि निष्कर्षको सारांश स्वास्थ्य कार्यालय, विदुर नगरपालिकाको पर्यवेक्षकमार्फत पठाइनेछ ।

यदि मलाई यो अनुसन्धानको बारेमा प्रश्न वा जिज्ञासा छ भने मैले के गर्ने?

यस अनुसन्धानको प्रकृति सम्बन्धी कुनै पनि जिज्ञासाहरू परियोजना पर्यवेक्षकहरूलाई सूचित गर्नुहोला।

परियोजना पर्यवेक्षकहरूको सम्पर्क विवरण

<u>प्रथम पर्यवेक्षक:</u>

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दोश्रो पर्यवेक्षकहरू

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यस अनुसन्धानको बारेमा थप जानकारीको लागि म कसलाई सम्पर्क गर्न सक्छु ?

कृपया तपाईंको भविष्यको सन्दर्भको लागि यो जानकारी पाना र सहमति फारमको प्रतिलिपि राख्नुहोस्। यदि तपाईंलाई यस परियोजनाको प्रकृतिका बारेमा कुनै प्रश्न वा जिज्ञासा भएमा, कृपया अनुसन्धानकर्ताहरूमध्ये कुनै एकसँग सम्पर्क गर्न नहिचकिचाउनुहोस्।

शोधकर्ता सम्पर्क विवरण

ईश्वरी अधिकारी बराल
विद्यार्थी, डाक्टर अफ फिलोसोफी, अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी, न्यूजील्याण्ड
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फोन; ९७७-९८४६६५२४११; इमेल: ishadh@iompnc.edu.np

परियोजना पर्यवेक्षकहरूको सम्पर्क विवरण

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अकल्यान्ड युनिभर्सिटी अफ टेक्नोलोजी एथिक्स कमिटीले अन्तिम नैतिकता स्वीकृति प्रदान गरेको मिति: ३० मार्च २०२३

AUTEC सन्दर्भ नम्बर: २३/१६

Appendix M: Consent form for Individual Interviews



Project Title: Long-term Influences on Women's Wellbeing in a Nepalese community following the 2015 Nepal Earthquake: A Constructivist Case Study.

Project Supervisors:
Dr. Catherine Cook, Dr. Jagamaya Shrestha-Ranjit, Dr. Margaret Jones, Auckland University of Technology**,** New Zealand
Researcher: Ishwari Adhikari Baral

- I have read and understood the information provided about this research project in the Information Sheet dated 13/01/2023.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research.
- I wish to receive a summary of the research findings (please tick one):
  Yes No

Participant's signature :.....
Participant's name:.....
Participant's Contact Details (if appropriate):.....
Date:

Approved by the Auckland University of Technology Ethics Committee on: 30 March 2023
AUTEC Reference number:23/16

Note: The Participant should retain a copy of this form

सहमति फारम - व्यक्तिगत अन्तर्वार्ता

परियोजनाको शीर्षक: २०१५ को नेपाल भूकम्पपछिको नेपाली समुदायमा महिलाको कल्याणमा दीर्घकालीन प्रभाव: एक रचनावादी केस स्टडी।

परियोजना पर्यवेक्षकहरू:

डा. क्याथरिन कुक, डा. जगमाया श्रेष्ठ-रञ्जित, डा. मार्गरिट जोन्स, अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी, न्युजिल्याण्ड

अनुसन्धानकर्ता: ईश्वरी अधिकारी बराल

- मैले 13/01/2023 को सूचना पानामा यस अनुसन्धान परियोजनाको बारेमा प्रदान गरिएको जानकारी पढेको र बुझेको छु।
- मैले प्रश्नहरू सोध्ने र जवाफ दिने मौका पाएको छु।
- म बुझ्छु कि अन्तर्वार्ता अडियो-रेकर्ड गरिनेछ र उपयुक्त नोटहरू लिइनेछ। अन्तर्वार्ता पछि, अडियो टेप गरिएको छलफललाई ट्रान्सक्रिप्ट (नेपालीमा लेखिनेछ) र त्यसपछि अंग्रेजीमा अनुवाद गरिनेछ।
- म बुझ्छु कि यस अध्ययनमा भाग लिनु स्वैच्छिक हो (मेरो रोजाइ) र म कुनै पनि हिसाबले बेफाइदा नगरी कुनै पनि समयमा अध्ययनबाट फिर्ता लिन सक्छु।
- म बुझ्छु कि यदि म अध्ययनबाट फिर्ता भएँ भने मलाई मेरो स्वामित्वको रूपमा पहिचान गर्न सकिने कुनै पनि डाटा हटाउन वा प्रयोग गर्न जारी राख्ने बीचको छनौट प्रस्ताव गरिनेछ। यद्यपि, एकपटक निष्कर्षहरू उत्पादन गरिसकेपछि, मेरो डाटा हटाउन सम्भव नहुन सक्छ।
- म यस अनुसन्धानमा भाग लिन सहमत छु।
- म अनुसन्धान निष्कर्षहरूको सारांश प्राप्त गर्न चाहन्छु (कृपया एउटामा टिक गर्नुहोस्): हो☐ होइन ☐

सहभागीको हस्ताक्षर: .....

सहभागीको नाम: .....

सहभागीको सम्पर्क विवरण (यदि उपयुक्त भए): .....

अकल्याण्ड युनिभर्सिटी अफ टेक्नोलोजी एथिक्स कमिटीले अन्तिम स्वीकृति दिएको मिति: ३० मार्च २०२३

AUTEC सन्दर्भ नम्बर: २३/१६

नोट: सहभागीले यस फारमको प्रतिलिपि राख्नुपर्छ।

Appendix N: AUTEC Ethics Approval



Auckland University of Technology Ethics Committee (AUTEC)

30 March 2023

Catherine Cook
Faculty of Health and Environmental Sciences

Dear Catherine

Re Ethics Application: **23/16 Long term Influences on Women's Wellbeing in a Nepalese Community following the 2015 Nepal Earthquake: A Constructivist Case Study**

Thank you responding to AUTEC's conditions.

Your ethics application has been approved for three years until 29 March 2026.

Non-Standard Conditions of Approval

1. Update of the Information Sheet for interview participants to include advice that given the participants are volunteering from a small potential group of participants only limited confidentiality can be assured.

Non-standard conditions do not need to be submitted to or reviewed by AUTEC unless requested but must be completed before commencing your study.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC.
2. All public facing documents must have the AUTEC approval number and be of a high standard of spelling and grammar. Dates on the Information Sheet(s) and Consent Form(s) must be consistent.
3. Any amendments to the project must be approved by AUTEC prior to being implemented.
4. A progress report is due annually on the anniversary of the approval date.
5. A final report is due at the expiration of the approval period, or, upon completion of project.
6. Any serious or adverse events must be reported to AUTEC, this includes unforeseen issues that might affect continued ethical acceptability of the project.
7. AUTEC grants ethical approval only. You are responsible for obtaining management permission for access from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

The application number and title need to be referenced on all correspondence related to this project.

All forms are available online http://www.aut.ac.nz/research/researchethics

For any enquiries, please contact ethics@aut.ac.nz
(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
Auckland University of Technology Ethics Committee

Cc: ishadh@iompnc.edu.np; jagamaya.shrestha@aut.ac.nz; margaret.jones@aut.ac.nz

Auckland University of Technology, D-88, Private Bag 92006, Auckland 1142, New Zealand.
T: +64 9 921 9999 ext. 8316: E: ethics@aut.ac.nz: www.aut.ac.nz/researchethics

Appendix O: NHRC Ethics Approval

Government of Nepal

Nepal Health Research Council (NHRC)

Estd. 1991

Ref. No.: 2956

9 May 2023

Ms. Ishwari Adhikari Baral
Principal Investigator
Auckland University of Technology
New Zealand

Ref: Approval of thesis protocol

Dear Ms. Baral,

This is to certify that the following protocol and related documents have been reviewed and granted approval through the expedited review process for its implementation.

Protocol Registration No/ Submitted Date	239/2023 4 April 2023	**Sponsor Protocol No**	NA
Principal Investigator/s	Ms. Ishwari Adhikari Baral	**Sponsor Institution**	NA
Title	Long term Influences on Women's Wellbeing in a Nepalese Community following the 2015 Nepal Earthquake: A Constructivist Case Study		
Protocol Version No	NA	**Version Date**	NA
Other Documents	1. Informed consent form 2. Data collection tools 3. Work plan	**Risk Category**	Minimal risk
Co-Investigator/s	1. Assoc. Prof. Catherine Cook		
Study Site	Nuwakot District of Nepal		
Type of Review	√ **Expedited** ☐ Full Board **Review Date:** 9 May 2023	**Timeline of study** May 2021 to August 2024 **Duration of Approval** 9 May 2023 to May 2024 **This approval will be valid for one year**	**Frequency of continuing review** Every one year
Total budget of research	**$ 9,500.00**		
Ethical review processing fee	**$ 100.00**		

Investigator Responsibilities

- Any amendments shall be approved from the ERB before implementing them
- Submit the support letter from the regulatory authorities in Nepal like DDA, FWD, DoHS, before implementing the

Tel: +977 1 4254220, Ramshah Path, PO Box: 7626, Kathmandu, Nepal
Website: http://www.nhrc.gov.np, E-mail: nhrc@nhrc.gov.np

Ref. No.: 2956

study
- Submit progress report every 6 months
- Submit final report after completion of protocol procedures at the study site
- Comply with all relevant international and NHRC guidelines
- Abide by the principles of Good Clinical Practice and ethical conduct of the research

If you have any questions, please contact the Ethical Review M & E Section at NHRC.

Thanking you,

Dr. Pradip Gyanwali
Member Secretary

Appendix P: Formal Request Letter for Data Collection

Auckland University of Technology
Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999
www.aut.ac.nz

11 May 2023

To:
Bidur Municipality,
Health Department
Nuwakot

To whom it may concern,

I am the primary academic supervisor for Ishwari Adhikari Baral, who is a nursing academic at Tribhuvan University. Her co-supervisors are Dr Jagamaya Shrestha-Ranjit and Dr Margaret Jones. Ishwari is undertaking her doctoral studies through Auckland University of Technology, in Auckland, New Zealand. I request that you kindly permit Ishwari Adhikari Baral to undertake data collection. Ishwari has gained ethics approval both in New Zealand and Nepal. Her research topic explores the long-term Influences on women's well-being in a Nepalese community following the 2015 Nepal earthquake. She is undertaking her research using a constructivist case study. The research process involves focus groups with affected women in the community and interviews with health workers. Ishwari has shown herself to be a very hard-working and capable student and we believe that the findings from her study will have significant relevance in terms of future public health preparedness and disaster management. Ishwari's ethics application has been approved by the Auckland University of Technology Human Ethics Committee (approval number 23/16). Please let me know if you require any further information to enable this research to progress,

Kind regards,



Catherine Cook, RN, PhD, Associate Professor
Catherine.cook@aut.ac.nz

Appendix Q: Formal Permission Letter for data collection by Bidur Municipality

BIDUR MUNICIPALITY
OFFICE OF MUNICIPAL EXECUTIVE
Bidur, Nuwakot
Bagmati Province, Nepal

Ref No :- 3792

Date :- 22 May 2023

2073

To Whom It May Concern

This is to confirm that Ms. Ishwari Adhikari Baral, Doctor of Philosophy student of Auckland University of Technology, New Zealand has informed to Health office, Bidur Municipality, Nuwakot regarding her interest to conduct a PhD Research Project which explores the long term influences on women's wellbeing in a Nepalese community following the 2015 Nepal earthquake. Ms. Ishwari has been doing regular consultation with health service providers and community stakeholders through telephone and in person during 2022-2023 in order to seek information for her project.

We believe that the findings from this study will have significant relevance for future disaster preparedness and management in Nepalese health sector. Therefore, we have full support to her research project and grant the permission to collect the data.

.....

Purnadhwaj Shrestha
Public Health Officer

पूर्णध्वज श्रेष्ठ
जन स्वास्थ्य अधिकृत तथा
स्वास्थ्य शाखा प्रमुख

Appendix R: Formal Permission to Collect Data from Health Personnel



Permission to Access Staffs (Organization)

Project title: Long term Influences on Women's Wellbeing in a Nepalese Community following the 2015 Nepal Earthquake: A Constructivist Case Study

Project Supervisors:

Dr. Catherine Cook, Dr. Jagamaya Shrestha-Ranjit, Dr. Margaret Jones, Auckland University of Technology, New Zealand

Researcher: Ishwari Adhikari Baral

- O I have read and understood the information provided about this research project in the Information Sheet dated 13 January 2023.
- O I give permission for the researcher to undertake research within Health Department, Bidur Municipality, Nuwakot District
- O I give permission for the researcher to access the employees of Health Department, Bidur Municipality, Nuwakot District

Principal's CEO's signature: .....

Principal's CEO's name: PURNA DHWAJ SHRESTHA

Principal's CEO's Contact Details (if appropriate):

9851107450

dspdsp3232@gmail.com

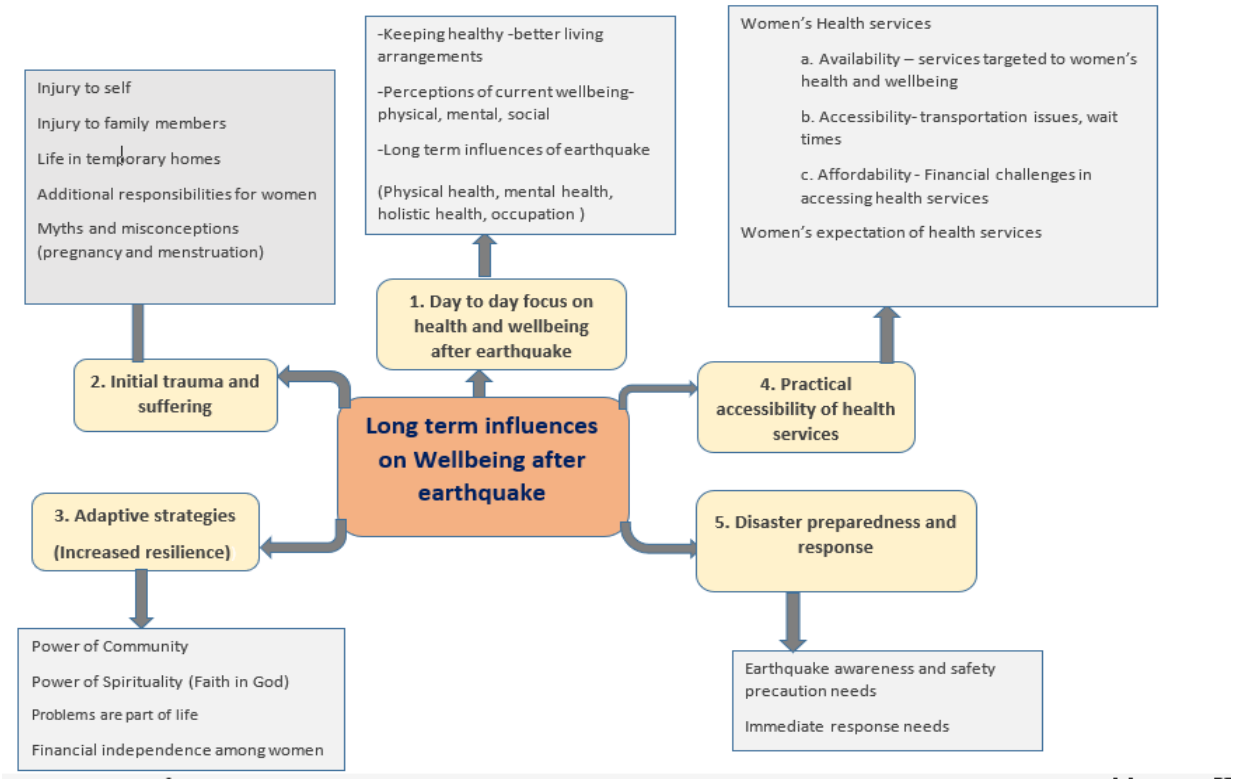
Bidur Municipality Municipal Office Bidur, Nuwakot Province, Nepal 2073

Date:

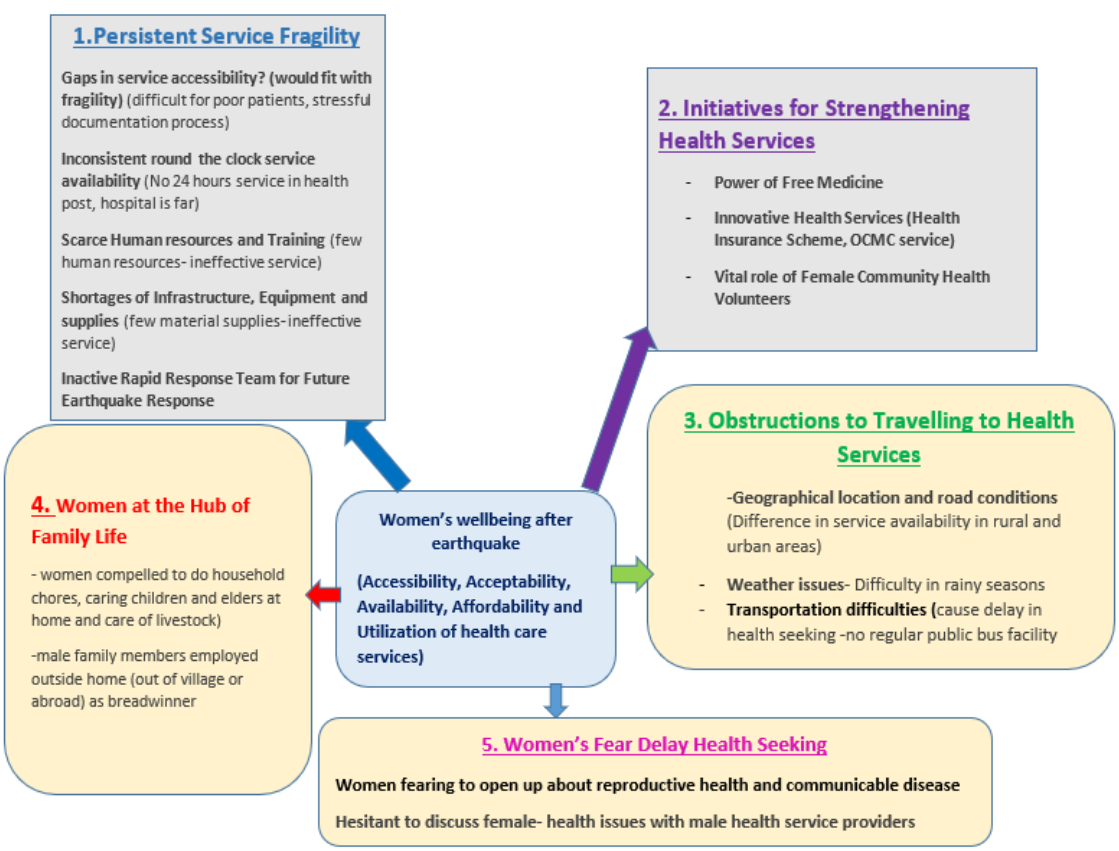
Approved by the Auckland University of Technology Ethics Committee on: 30 March 2023

AUTEC Reference number: 23/16

Appendix S: Initial Thematic Map -Focus Group Discussion



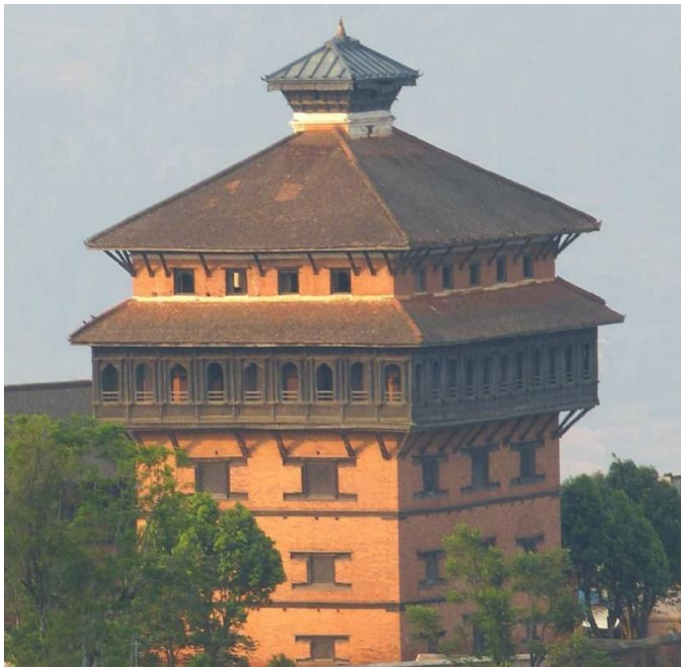
Appendix T: Initial Thematic Map -Individual Interviews



Appendix U: Pictures of Physical Context of Nuwakot District

Figure U1

Nuwakot Durbar Before the Earthquake.



From Sandesh Neupane (2014). https://thesandeshneupane.com/nuwakot-district. Public domain.

Figure U2

Nuwakot Durbar Under reconstruction



(Note. Photos of Nuwakot Palace under reconstruction taken on April 2023. Own work)

Figure U3

Remnants of houses damaged in Nuwakot by the 2015 Nepal earthquake.



(Note. Photo of remnants of damaged house by earthquake taken on June 2023. Own work)

Figure U4

Sampada village in Nuwakot (Houses constructed after the 2015 earthquake)



(Note. Photos of Sampada Village taken on June 2023. Own work)

Figure U5

Temporary metal shacks after 2015 earthquake. Picture taken- 2016



(Note. Photos of temporary metal-galvanised sacks, taken on February 2016. Own work)

Figure U6

Rural houses in Nuwakot after reconstruction



(Note. Photos of houses in Nuwakot after reconstruction taken June 2023. Own work)

Figure U7

Cattle rearing in one of the houses in Nuwakot



(Note. Photo of cattle rearing in Nuwakot taken in June 2023. Own work)

Figure U8

District Hospital, Nuwakot, running in makeshift tents after 2015 earthquake



Note. District hospital in Nuwakot running in tents after earthquake. From Balakrishna Thapa, 2015. hehimalayantimes.com/multimedia/nuwakot-district-hospital-in-tents. Public domain

Figure U9

Provincial Hospital, Nuwakot after Reconstruction



(Note. Photo of Provincial Hospital after reconstruction taken in June 2023. Own work)

Figure U10

The muddy gravel road on the way to Health Post



(Note. Photo on the way to health post taken in June 2023. Own work)

Figure U11

Health Posts (Ward number 2 and 3)



(Note. Photos of Health Posts of Nuwakot taken in June 2023. Own work)

Figure U12

Bidur Municipality (Urban town)



Note. Urban town houses of Bidur Municipality, Nuwakot. From Sandesh Neupane, 2023. *https://thesandeshneupane.com/nuwakot-district/*, Public domain

Figure U13

Bidur Municipality (Rural village)



Note. Rural hilly villages of Bidur Municipality, Nuwakot. From Sandesh Neupane, 2023. *https://thesandeshneupane.com/nuwakot-district/*, Public domain

Figure U14

Bidur Municipality (Road conditions in rural village during rainy season)



(Note. Photos of Muddy roads of rural Nuwakot taken in June 2023. Own work)

Figure U15

Bidur Municipality (Women working in field- 2023)



(Note. Photo of women working in field taken in June 2023. Own work)

Figure U16

FCHVs in their uniform



Note. Identifying mental health patients through female health volunteers, 2023. From The Kathmandu Post. https://kathmandupost.com/health/2023/10/07/identifying-mental-health-patients-through-female-health-volunteers, Public domain.