

**The knowledge, attitudes and behaviour of
young Māori women in relation to sexual health:
A descriptive qualitative study.**

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Master of Health Science

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Attestation of Authorship

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

Signed.....

Date.....

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Abstract

Good sexual and reproductive health is fundamental to the overall health status of Māori communities. In 2001, the Ministry of Health reported that New Zealand was facing a chlamydia epidemic. This epidemic has not abated as rates of chlamydia have increased significantly in the past five years, with disproportionately high rates in young Māori women compared to non-Māori women. Despite significant sexual health disparities, young Māori have had limited opportunities to participate in research focussed on sexual health and voice their opinions and concerns on sexual health issues.

This qualitative descriptive study has used a Māori inquiry paradigm and approached the research from a Kaupapa Māori perspective. The primary research question asked what the knowledge, attitudes and reported behaviours of young urban Māori women were in regards to sexual health and in particular, the sexually transmitted infection chlamydia. Secondary aims were to ascertain the sources of information used and accessibility of sexual health services, as well as identifying resilience factors associated with protection against chlamydia infection. The data was collected from semi-structured interviews with 16 young Māori women living in the Auckland region. Data analysis involved the inductive approach of categorical content analysis to identify major categorical themes to answer the specific questions posed.

The main conclusion was that there are a number of barriers to accessing quality sexual health information and services for young Māori women. Participants' level of knowledge varied reflecting their personal experiences and many were unaware that chlamydia is asymptomatic and that delayed diagnosis can lead to fertility problems. The main sources of sexual health information accessed were whānau, peers, school, and contact with health professionals. Racism was identified as one of the barriers to sexual healthcare services. The young women expressed a clear preference for sexual health services to be delivered by Māori. Most importantly, for sexual health interventions to be successful it is essential that Māori communities, including young people and their whānau, are an integral part of creating positive solutions.

Resilience factors that may help protect young women from contracting chlamydia characteristic of this group were having a strong connection with a caring adult or friend and parents who viewed sexuality as a normal part of adolescent development. In addition, having a positive Māori cultural identity with an ability to understand bicultural differences was strongly associated with participants accessing sexual healthcare services despite identified barriers.

Chapter One: Introduction

Good sexual and reproductive health is a fundamental right and an integral component to the overall health status of every human being (Shaw, 2006). The development of a fulfilling and healthy sexuality is one of the things young people become more cognisant of during adolescence, learning about sexuality in a number of ways and from a variety of sources. Their knowledge, attitudes, and behaviours shape their sexual lives leading to fulfilling and satisfying experiences but may also lead to negative consequences such as sexually transmitted infections (STIs). The bacterial infection chlamydia is an STI that is having a devastating impact on young people in New Zealand and particularly for young Māori women (ESR, 2006; Sherwood, 2006). Although young Māori have been the focus of many research projects in the fields of health, education and justice, to date they have had limited opportunities to participate and voice their opinions and concerns on sexual health issues. This research project provides a platform for young Māori women to have their viewpoints recorded.

This introductory chapter contextualises the study by highlighting the significance of the study and in particular the inequitable impact it is having on indigenous communities. An overview of chlamydia and its clinical management is provided, an outline of the national STI surveillance and monitoring systems is presented, then a description of current STI trends for young people in New Zealand is given. This is followed by placing sexual health in the wider context of Maori health perspectives. The chapter concludes by defining the research question and my positioning as the researcher. Finally, an outline of each chapter is provided to help the reader navigate the thesis.

Significance

STIs are among the most common causes of illness in the world with an estimated 340 million new cases diagnosed annually resulting in significant health, social and economic costs (World Health Organization, 2001). They are a major public health concern in many countries as the national public expenditure on STI healthcare can be substantial (World Health Organization, 2003). Epidemiological surveys demonstrate the prevalence and incidence of STIs vary widely between countries, as well as urban and rural populations reflecting different social, political, cultural, economic factors and access to appropriate treatment (World Health Organization, 2001). The prevalence of

STIs are generally higher in individuals living in urban centres, those who are unmarried and young people (World Health Organization, 2001). The reported incidence is even higher in indigenous populations (Canadian Institute for Health Information, 2004; ESR, 2007; Rose, Lawton, Brown, Goodyear-Smith, & Arroll, 2005; Wright, Giele, Dance, & Thompson, 2005).

In particular, the sexually transmitted bacterium *chlamydia trachomatis* (chlamydia) is a serious public health problem globally because of its high incidence among young people and long-term ramifications for the reproductive health of women. It has also been shown to facilitate the acquisition and transmission of the Human Immunodeficiency Virus (AIDS Epidemiology Group, 2007; Centers for Disease Control and Prevention, 2005). The World Health Organization (WHO) estimated more than 92 million new cases of chlamydia worldwide in 1999 (World Health Organization, 2001). Chlamydia is a preventable, sexually transmissible infection of the genitals, rectum, or throat caused by the bacterium *chlamydia trachomatis* (Currie & Bowden, 2007). It affects both males and females if exposed however, the rates of infection are significantly higher for women as the majority of cases are asymptomatic and go undetected. In some circles it has been endearingly tagged the 'love bug' (DeNoon, 2001), but more fittingly referred to as the 'silent', or 'hidden' epidemic (ESR, 2002). Adverse outcomes such as pelvic inflammatory disease that can lead to infertility, is largely preventable and can be avoided through preventative strategies or timely treatment. Worldwide, the highest rates of chlamydia infection are observed in young women who are 20 to 24 years followed by the 15 to 19 year age group (World Health Organization, 2005). However, due to surveillance system issues and the level of undetected chlamydial infection, STI figures only give an estimate of the extent of the problem. The actual incidence and prevalence rates are likely to be much higher than figures reported (Blum & Nelson-Mmari, 2004; ESR, 2007).

Epidemiological evidence also draws attention to the disproportionate rates of chlamydia among indigenous peoples. In the United States, although African American's aged 15 to 24 years have the highest rates of chlamydia, the American Indian and Alaska Native women are second highest (Centers for Disease Control and Prevention, 2006). In Canada the prevalence is six times higher for the indigenous peoples than the all-Canadian population, and higher for Nunavut Inuit people than for

First Nations on-reserve populations (Canadian Institute for Health Information, 2004). Disparate rates of infection are also seen between Aboriginal Australian women and their non-indigenous counterparts (Miller, Law, Torzillo, & Kaldor, 2001). The situation is comparable in New Zealand with Māori women reported to have higher rates of chlamydia infection than non-Māori women (ESR, 2007). The inequitable burden of STI rates among indigenous and minority groups requires further investigation to develop targeted interventions and reduce sexual health disparities (Canadian Institute for Health Information, 2004; Miller et al., 2004; Shaw, 2006).

Young Māori people continue to be at significant risk of contracting chlamydia with the number of confirmed cases increasing across all sexual health settings including sexual health clinics (SHCs), Family Planning Clinics (FPCs) and Student Youth Health Clinics (SYHCs) (ESR, 2007). Over the last decade the problem has worsened to such an extent that the Ministry of Health reported that New Zealand was facing a chlamydia epidemic (Ministry of Health, 2001b). The epidemic has not abated, with genital chlamydia the most commonly diagnosed STI in New Zealand (ESR, 2007; Sherwood, 2006). Equally concerning is the recognised problem of under-reporting adding credence to the view that the incidence of chlamydia for the Māori community is far greater than is actually being reported (Te Pūawai Tapu, 2004).

As chlamydia rates continue to rise the outlook for Māori communities is devastating, “the worst-case scenario we predict is that we are looking at an infertility crisis for Māori in the coming years” (Te Pūawai Tapu, 2007, p. 1). The call for further research to investigate sexual health issues for young people and particularly young Māori (Fenton, 2001; Jackson, 2004; Shaw, 2006) needs to be actioned without further delay to inform public health messages and develop targeted interventions.

Chlamydia

This section sets out to inform the reader about the sexually transmitted infection chlamydia and begins by providing an overview of the clinical management of chlamydia. The information has been set out in a way that corresponds with questions posed of participants about their knowledge of chlamydia and as presented in the findings chapter. This is followed by highlighting the extent of the chlamydia problem in New Zealand, outlining current STI surveillance and monitoring systems and

providing an epidemiological overview of chlamydia trends as they relate to young people and in particular, young Māori women.

Clinical management

Signs and symptoms

The WHO estimates that as many as 70 to 75 percent of women may be unaware that they have chlamydia remaining infectious for months or even years (World Health Organization, 2001). If symptoms develop this generally occurs within seven to 21 days after exposure to infection, and may include a change in vaginal discharge, lower abdominal pain, pain when urinating or vaginal bleeding between periods (Ministry of Health, 2003b). Health professionals advocate regular STI testing to detect undiagnosed asymptomatic infection.

Transmission

Chlamydia trachomatis is a gram-negative obligate intracellular bacterium only able to infect human epithelial cells (Currie & Bowden, 2007). Anyone who is sexually active is at risk of acquiring chlamydial infection. The bacterium is passed from one person to another through unprotected sexual intercourse with an infected person, and in rare cases through oral sex. It can also be transmitted from mother to baby as the baby passes through the birth canal (Ministry of Health, 2003b). Those who are young at sexual debut, have multiple sexual partners and use condoms inconsistently are more likely to be infected (World Health Organization, 2004b). In addition, early adolescent women are regarded as more biologically susceptible as they may be yet to develop protective mucus secretions that line the vaginal tract and help increase resistance to infection (World Health Organization, 2004b).

Prevention

The only way to completely prevent contracting chlamydia is to abstain from all types of sexual intercourse, otherwise the best protection is to always use a condom to provide a barrier to prevent the infection passing from person to person (Ministry of Health, 2003b). The prevention of neonatal chlamydial infection would be assisted by the introduction of routine testing of mothers during pregnancy as antibiotic treatment is available that is safe and effective during pregnancy (Lawton et al., 2004).

Diagnosis and treatment

Testing is required to diagnose chlamydia and may include analysis of either a swab taken from a woman's cervix or from a sample of urine. Testing is said to be safe, simple and reliable, however standardised laboratory testing has not been introduced into all New Zealand laboratories (Sherwood, 2006). Chlamydial infections are easily treated and cured with a standard seven day antibiotic treatment of doxycycline or a single dose antibiotic treatment of azithromycin is now available (Ministry of Health, 2003b). However, recent evidence suggests that early antibiotic treatment may contribute to reinfection rates by interfering with the body's normal immune response to the chlamydia bacterium (Rekart & Brunham, 2008). Partner notification is also strongly recommended and sexual partner(s) of an infected person is advised and treated regardless of symptoms or test results.

Sequelae

In women, if left untreated chlamydia can lead to long-term complications to the reproductive health of women including pelvic inflammatory disease, an infection of the reproductive organs (uterus, ovaries and/or fallopian tubes). For young women the long-term consequences of pelvic inflammatory disease have the potential to unwittingly thwart future plans for children as there is convincing evidence of the association between chlamydia infection and infertility (Ministry of Health, 2003b). Infertility is related to scarring caused by the infection on the fallopian tubes making getting pregnant difficult. pelvic inflammatory disease can also cause ectopic pregnancies or chronic pelvic pain.

There is some evidence that approximately 50 to 70 percent of neonates born to mothers with chlamydia become infected during delivery and are at risk of conjunctivitis and pneumonitis (Currie & Bowden, 2007). Rarely chlamydial infection may trigger Reiter's syndrome, a disease that causes joint pain, skin rashes and eye inflammation.

STI surveillance in New Zealand

Contrary to many other developed countries, in New Zealand chlamydia is a non-notifiable infection (Johnston, Fernando, & MacBride-Stewart, 2005). The Institute of Environmental Science and Research (ESR) is the national coordinating centre for the STI surveillance database on behalf of the Ministry of Health. Traditionally data has been based on voluntary reporting from SHCs but over the last two decades there have

been gradual changes to the surveillance system. The New Zealand Venereological Society collated STI data from 1986 to 1995 (Lyttle & Lindsay, 1995). Then in 1996 the ESR took over the role and two years later introduced the collection of age, sex and ethnicity data as well as expanding reporting to include FPCs and SYHCs (McNicholas, Bennett, Turley, & Garrett, 2001). Laboratory based surveillance has been operating since 1998 in the Waikato and Bay of Plenty, and in Auckland since 2000. Additional laboratories from Northland, Tairāwhiti, Hawkes Bay, Taranaki, Mid Central, Hutt Valley, Capital Coast, Canterbury, West Coast, Otago and Southland District Health Boards (DHBs) are now sending data (ESR, 2007).

Although current STI surveillance data provides the most comprehensive source of information on the epidemiology of STIs in New Zealand it does not represent the true burden of chlamydia as under-reporting of cases is widely recognised as a continuing problem (ESR, 2007; Sherwood, 2006). Part of the solution lies with primary care practitioners, including General Practitioners (GPs) who see 70 percent of people who present with STIs (Johnston, Fernando, & MacBride-Stewart, 2005). Sherwood (2006) indicates that Māori are more likely to attend their GP for sexual healthcare however GPs are not currently required to submit STI data to the ESR. Primary care practitioners have an important part to play in the management and control of STIs but are not required to provide surveillance data directly to the ESR, their data is subsumed within laboratory surveillance figures (ESR, 2007). Implementation of the ethnicity data protocols within sexual healthcare settings will also help improve data completeness, for example in 2006 ethnicity data was not collected for over 40 percent (41.1%) of all SYHC attendees (ESR, 2007).

In order to inform ongoing public health action STI surveillance data needs to reliably reflect the extent of the STI burden in New Zealand as well as identify and monitor the most affected population groups. In its report to the Director-General of Health, the National Screening Advisory Committee advised that a national screening programme is not necessary but made several recommendations (National Screening Advisory Committee, 2007). Recommendations included; that each DHB, primary healthcare organisation (PHO), sexual health service and laboratory performing chlamydia tests supply data to the Ministry of Health to enhance monitoring and, ensure that information is provided in a useful format including ethnicity data, as well as

prioritising screening for high risk populations (National Screening Advisory Committee, 2007). A pilot study conducted by the Family Planning Association showed that opportunistic screening was feasible, practical and acceptable by both health professionals and the young people surveyed (Sparrow et al., 2007).

Young people and Māori have consistently been cited as high risk groups in ESR annual reports since surveillance began in 2001 (ESR 2002; 2003; 2004; 2005; 2006; 2007). This makes young people who identify as Māori people a particularly high risk group and suggests that current sexual healthcare interventions have failed young Māori and that this population group are likely to have unmet sexual healthcare needs.

Current trends in New Zealand

Chlamydia is the most commonly diagnosed STI in New Zealand with the number of confirmed cases steadily increasing. There has been a 27.7 percent increase in the number of diagnosed cases in SHCs (38.9%) from 2002 to 2006, and more than double in FPCs and SYHCs (ESR, 2007). In Auckland, the rate of chlamydia infection for females (1,049 per 100,000) was nearly three times the rate in males (373 per 100,000). Whether these increases are a reflection of a true increase in the prevalence and incidence of chlamydia is unclear. It is likely the increase can be partly attributed to factors including increased screening/testing due to greater awareness by health professionals and more sensitive testing methods now used in some laboratories (ESR, 2007). Two independent studies have attempted to measure the prevalence of chlamydia in student populations in Christchurch (Baker et al., 2005) and Wellington (Dickson, 1996). These studies reported a prevalence of 2.0 percent and 2.7 percent, respectively, of students with asymptomatic chlamydia trachomatis infections.

Young people

Young people are at greater risk of contracting chlamydia. In 2006, the majority of chlamydia cases (72%) at all clinics were diagnosed in young people under the age of 25 years (ESR, 2007). In the Auckland region, the highest rates of chlamydia were diagnosed in females aged 20 to 24 years, followed by those aged 15 to 19 years (ESR, 2007).

The difference in chlamydia rates between young people and older adults are related to a complex interaction of social, economic, behavioural and biological changes. Some of these factors include an increased likelihood of unprotected sex, an increased number of sexual partners and the provision of, and access to, appropriate services (World Health Organization, 2004b). In addition, there is some evidence that shows young people are more biologically susceptible to chlamydia infection than older people (World Health Organization, 2004b).

Figure 1 shows reported chlamydia cases (number of confirmed plus the number of probable cases) in 2006 for females by ethnicity. Nearly 80 percent (79.8%) of chlamydial infections reported in this group were in patients under the age of 25 years, peaking in the 15 to 19 year age group, with young Māori representing a greater proportion of cases in the younger age groups (ESR, 2007).

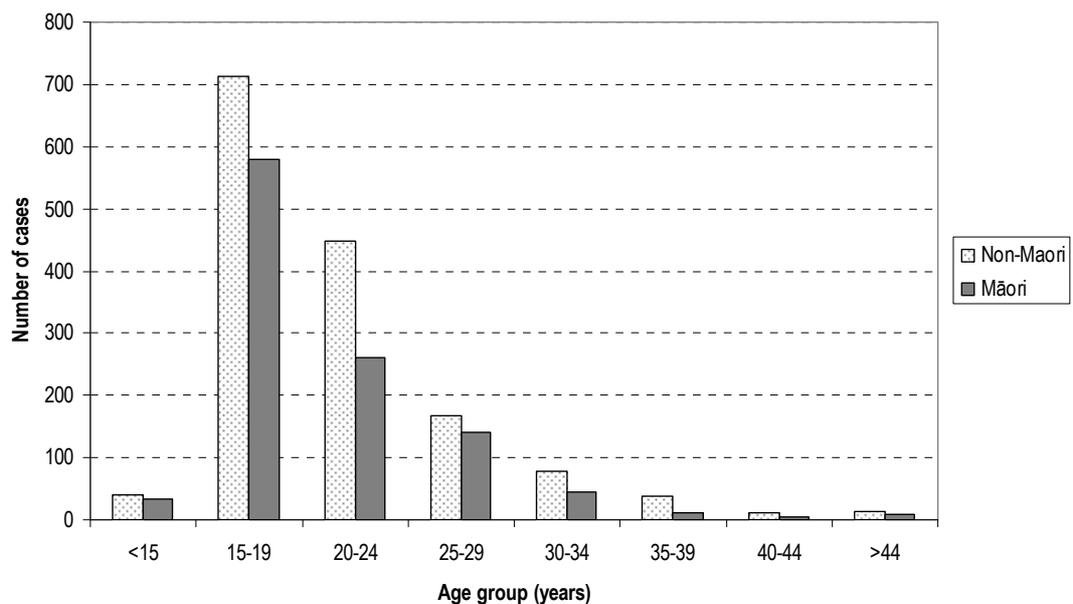


Figure 1. Chlamydia rates among Māori and non-Māori females attending sexual health clinics in 2006.

(Source: ESR, 2007)

Māori

The rates of chlamydia are greater for Māori across all sexual health settings (ESR, 2007; Sherwood, 2006). Māori females are most affected with rates disproportionately high across all age groups and in particular among the younger age groups 15 to 19 years, and 20 to 24 years (ESR, 2007; Sherwood, 2006). Young Māori also have the

highest rate concurrent infections and reinfection rate (ESR, 2007). The total burden of STIs for Māori is likely to be substantially higher than reported by ESR annual reports due to incomplete surveillance data as mentioned earlier (ESR, 2007).

The number of confirmed cases of chlamydia in SHCs has continued to rise overall (Figure 2), with a greater proportion of Māori being positively diagnosed than non-Māori (ESR, 2007).

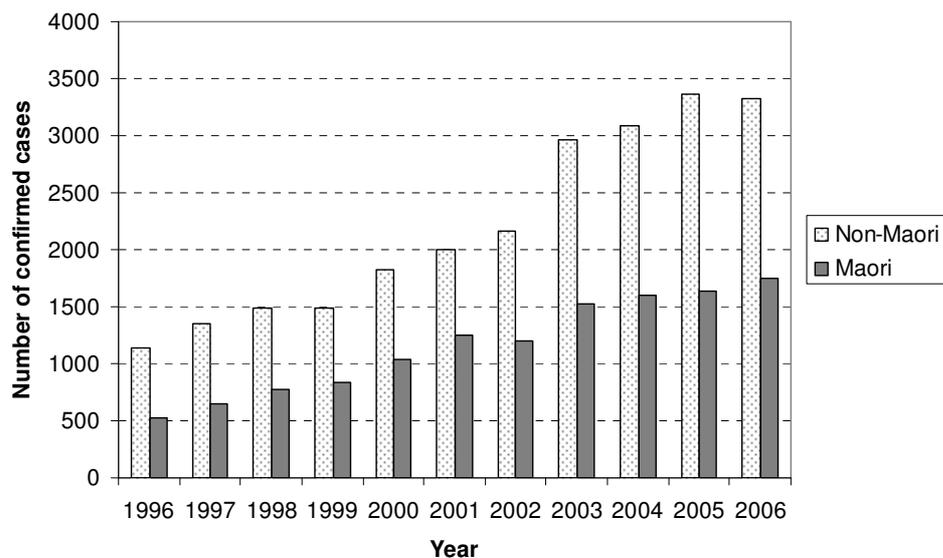


Figure 2. Chlamydia trends at SHCs by ethnicity: 1996-2006. (Source: ESR, 2007)

The ESR suggest that higher chlamydia rates reported from SHCs among Māori may be partly explained by accessibility and appropriateness of services, in terms of health access behaviour, and choice of health care providers by certain age groups and ethnic groups (ESR, 2006). In addition to these structural issues, the broader determinants of health that impact on Māori health including social, economic, political and cultural factors discussed in the next section help to explain wider factors that add to the complexity of the issue.

Māori health

Rates of chlamydial infection among young Māori women must be considered within the wider context of Māori health. The following section provides an historical overview of the Treaty of Waitangi, a brief background of New Zealand's colonial history and its impact on Māori sexuality. It also explores the issue as it relates to health inequalities including the broader determinants of health and Māori concepts of health

are discussed in relation to sexual health. Ethnicity issues involved in the processes of data collection are presented as well as the influence of public policy on Māori sexual health status.

Treaty of Waitangi

The signing of the Treaty of Waitangi (the Treaty) in 1840 set the foundation for the British to formally settle in New Zealand. The Treaty is a formal agreement between Māori hapū, through their tribal leaders, and the Crown. It guaranteed Crown protection of Māori interests in resources and control of those resources, confirmed Māori right to self-determination and guaranteed equity between Māori and other New Zealand citizens (Durie, 1998; Ramsden, 1994). Yet subsequent decisions and actions made by the New Zealand government have ignored the provisions of the Treaty adversely affecting Māori, including the health status of Māori.

Despite the importance of the Treaty of Waitangi as a founding document in New Zealand's political system, most organisations do not refer directly to the Treaty but instead purport to apply the principles of the Treaty. The principles of the Treaty are said to interpret the intentions and spirit of the Treaty arising from the interpretative differences in the English and Māori texts (Ministry for Culture and Heritage, 2005). Government organisations including those in the health sector have adopted some of the main principles including; partnership, active protection and participation to be responsive to the Treaty. The Sexual and Reproductive Health Strategy (Ministry of Health, 2001b) acknowledges the special relationship between Māori and the Crown as a Treaty partner and the important role each has in the development and implementation of strategies for Māori sexual health.

The right to good health for Māori is implicit under the Treaty of Waitangi (Durie, 1998) and health inequalities between Māori and non-Māori are considered a breach of the Treaty (Robson & Reid, 2001). The right to good sexual health is a fundamental aspect to the health and wellbeing of Māori and attention to reducing inequitable rates of chlamydia infection for young Māori women is an area in which the government, through its health, education and youth agencies must give urgent attention.

Health inequalities

Over the past two decades improvements in the health status of Māori people are starting to be seen in some areas including an increase in the range of Māori providers, increased life expectancy and a reduction in morbidity and mortality in some disease categories (Ajwani, Blakely, Robson, Tobias, & Bonne, 2003; Ministry of Health, 2006). However, wide disparities remain between Māori and non-Māori health status, including sexual health disparities and in particular the prevalence and incidence of chlamydia (ESR, 2007). As outlined in the previous section, figures show that Māori rates of chlamydia are disproportionate to non-Māori (ESR, 2007; Sherwood, 2006).

Determinants of health

Ethnic differences in health outcomes can be attributed more directly to broader health determinants and environmental influences such as social, political, cultural, and economic factors (Durie, 1994; National Advisory Committee on Health and Disability, 1998; Pearce, Foliaki, Sporle, & Cunningham, 2004). However some researchers continue to be fixated with ethnic variations in genetic makeup as a leading cause for differences in health outcomes. Opponents to this narrow approach have reported that, “gene hunting is a new form of colonialism” (Pearce, Foliaki, Sporle, & Cunningham, 2004, p. 1071). Although genetic factors do contribute to disease causation they can be excluded as a major explanation for health inequalities (Ellison-Lochsmann, 2004).

The youth development literature views adolescent health and wellbeing from a similar perspective whereby the social environment is closely related to health outcomes. Figure 3 shows four main social environments in which young people live, learn and develop that are linked to healthy outcomes. These include the family and whānau, peers, educational settings, workplaces and the community, which are effected by societal influences and the wider environment (Ministry of Youth Affairs, 2002).

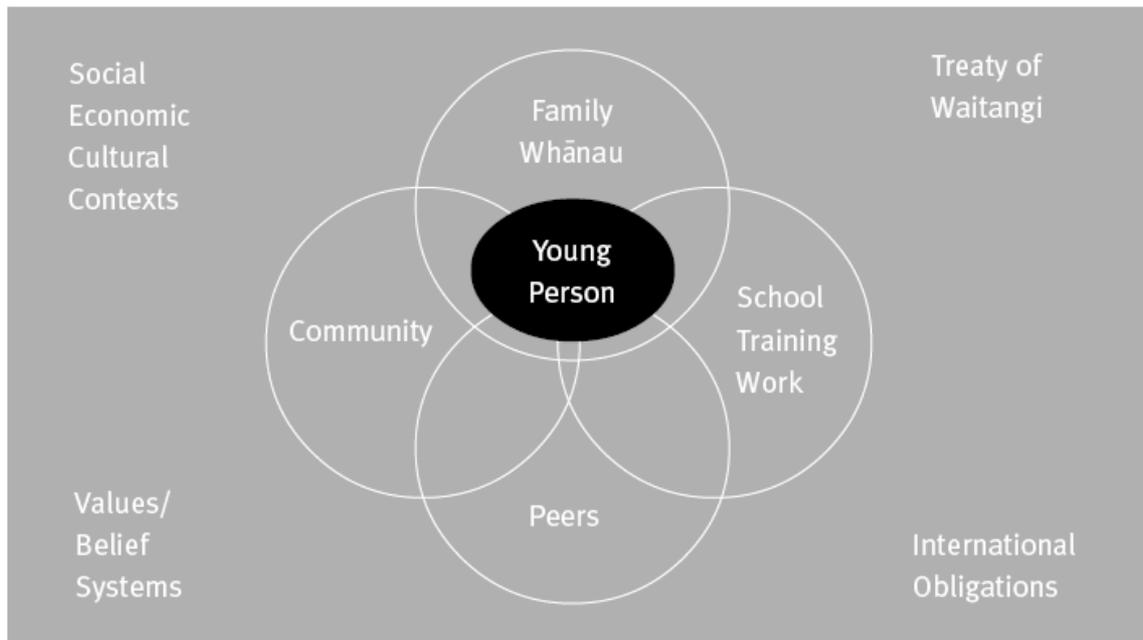


Figure 3. Social environments that shape youth development

Source: Ministry of Youth Affairs (2002)

Wider societal factors such as low educational achievement, unemployment, inadequate income and poor housing have all been shown to contribute to a range of health problems for Māori and foster lifestyles that engender greater risk of injury and disease (Te Puni Kōkiri, 2000) endangering adolescent health (Call et al., 2002).

These factors represent inherent structural barriers imposed by society on Māori. Jones (2000) describes these structural barriers as perpetuated by institutionalised racism highlighting the effect different levels of racism have on health outcomes. Institutionalised racism is defined as, “differential access to goods, services and opportunities of society by race” (Jones, 2000, p. 1212). Two further levels of racism that impact more obviously on the individual are; personally mediated racism defined as prejudice and discrimination, and internalised racism defined as the acceptance of negative societal messages about worth and ability. Racism, both interpersonal and institutional, has been shown to contribute to inequitable health outcomes between Māori and Europeans (Harris et al., 2006). With repeated exposure to societal messages perpetuating stereotypes of young Māori as risk-takers and under-achievers young Māori may come to accept these negative messages as predestined and unavoidable patterns of behaviour. They may not be cognisant of the often biased, victim-blaming

reporting presented in mainstream media (McGregor & TeAwa, 1996) and internalise these views as the only ‘truth’ on Māori issues.

Structural barriers also impact negatively on access to health services with increasing evidence of inequitable access to health services for Māori (Cormack, Robson, Purdie, Ratima, & Brown, 2005; Crengle, 2000; Robson, 2002). Population groups with high healthcare needs should have high exposure to medical care, however recent studies have found that exposure to primary health care is higher among Europeans than Māori despite greater health needs of Māori (Crampton, Jatrana, Lay-Yee, & Davis, 2007; Health Utilisation Research Alliance, 2006). Furthermore, STI surveillance data indicates there is low attendance of Māori in all sexual health settings, including FPCs and SYHCs, which may reflect access issues and the appropriateness of sexual health care provision for young people (ESR, 2006). Young people experience additional barriers to healthcare. Barriers to accessing sexual healthcare services for young people include a lack of information about existing services, unaccommodating opening hours and a reluctance to seek help because of concerns about cost and social stigmatization (Fenton, 2001; World Health Organization, 2002). Structural barriers that hinder access to sexual health care for young Māori women need to be addressed so that information and delivery of sexual health services occur in a way that better meet their needs as they are a population group shown to be at high risk.

Māori concepts of health

Māori concepts of health contribute to greater understanding of a Māori worldview of health and provide guidance for health providers to deliver services that are culturally responsive to Māori. Two Māori models of health are briefly described to demonstrate the link between wider health determinants and how the achievement of good sexual health and well-being requires a broad, coordinated approach rather than addressing issues in isolation by focussing on individual behavioural factors and biomedical solutions.

Durie’s (1984) Te Whare Tapa Whā model has gained widespread recognition and is used across many health settings. It views health in a wholistic manner with four interacting dimensions; te taha tinana (physical), te taha wairua (spiritual), te taha hinengaro (thoughts and feelings) and te taha whānau (family and community). In order to achieve well-being there must be a balance between these interacting dimensions.

Pere (1984) offers a further perspective in which to consider Māori health. This model, Te Wheke, illustrates the main features of health from a family perspective using the octopus as a metaphor. Each tentacle represents a dimension of health while the body and head symbolise the whole family unit. These dimensions parallel those in Durie's model (1984) with the addition of further elements at the community level.

Presenting these models of health reinforces the importance of a wholistic approach and the inclusion of supportive family and community dynamics to sustain health and well-being of the individual. Sexual health interventions to reduce disparate chlamydial infection rates and promote the health and well-being of young Māori women need to address all these aspects as they are wholly entwined with responsible sexual activity. Furthermore, it requires not only a level of individual responsibility but family and community involvement is necessary to facilitate responsible sexual activity. There appear to be limited programmes and interventions that extend over each of these levels.

Ethnicity and Māori health statistics

Health policy and decision-making is informed by statistical data and research evidence (Robson, 2002). Accurate information is integral to support the identification of opportunities and risks for Māori, inform development and implementation of appropriate interventions and to monitor improvements in health outcomes (Robson, 2002; Robson & Reid, 2001).

Undercounting of Māori in official health statistics is a recognised limitation to improving Māori health outcomes and a concern for continued Māori health advancement. Part of the difficulty is due to inconsistent and poor ethnicity data collection (McLeod et al., 2000; Robson, 2002; Robson & Reid, 2001). Changes to the New Zealand census ethnicity question from a biological concept of blood quantum to demonstrating Māori ancestry and now the use of self-identification emphasising cultural affiliation has made it difficult to compare data sets and epidemiological trends over time (Robson & Reid, 2001). The recent introduction of standardised ethnicity data protocols was aimed at helping the government track trends by ethnicity and monitoring its performance in reducing health disparities (Ministry of Health, 2004a).

Robust research is critical to improving adolescent sexual health to identify major issues for young Māori and uncover new ideas for interventions. However, despite disparate

chlamydia rates described in surveillance data, there has been a paucity of sexual health research that reflects young Māori as a distinct population group. Robson (2002) describes the importance of appropriate sampling in research studies to ensure there is sufficient power in statistical calculations and requires that the proportion of Māori in a study sample reflect the national population. In general, New Zealand sexual health research has tended to reflect non-Māori trends as Māori are often under-represented in the study samples limiting the findings of the studies to the general Māori population. Furthermore, much of the research has been conducted using traditional western methodologies carried out by non-Māori researchers. Two major longitudinal studies have provided much of the literature pertaining to New Zealand adolescent sexual health and sexual behaviour, the Dunedin Multidisciplinary Health and Development Study (Silva & Stanton, 1996), and the Christchurch Health and Development Study (Fergusson & Horwood, 1989). These studies have produced a plethora of papers on adolescent development and sexual health issues over the past two decades. However, due to the relatively small number of Māori participants in these cohorts the findings are useful, but cannot be reliably applied to Māori adolescents generally.

Over the past five years there has been a shift toward a greater emphasis to address these issues with research projects such as the Māori sexuality project (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006), Youth2000 project (Adolescent Health Research Group, 2004) and the follow-up survey Youth2007 due for release in October 2008, Te Puāwai Tapu, an independent public health organisation (2004) and Te Mauri Tū, Mauri Ora tripartite project in progress at the University of Auckland adding considerable expertise and depth to Māori sexuality research. This research project will contribute to the steadily growing body of Māori sexuality research. I set out to collect and thematically analyse the stories of 16 young Māori women and describe their views and opinions to gain greater understanding of their position and requirements for STI knowledge and sexual health care services. In turn, this knowledge will contribute to public health interventions to improve sexual health outcomes for young Māori women and in turn, the overall health and well-being of whānau, hapū and iwi.

Impact of colonisation on Māori sexuality

In order to contextualise Māori sexuality in contemporary society it is necessary to discuss the colonial history Māori share with Pākehā New Zealanders and its continuing influence on Māori sexual health. This section discusses the impact changes to whānau structures, the role of Māori women and the concepts of tapu and noa has had on Māori sexual health. In recounting the past and reframing traditional accounts of New Zealand history a greater understanding of the environment and position in which young Māori women are raised is provided. Mikaere (1994) aptly expressed this as, “caught in the contradictions of a colonised reality” (p. 125).

Historically, Māori had a well developed society with tribal structures and systems of health, education, justice, spirituality and a common language (Orange, 1987). Māori society was based on kinship groups, collectively responsible for the survival of the hapū with a deep connection and appreciation for all living things and their surrounding environment. Sex was viewed as a normal everyday part of life with evidence that in pre-European times Māori society enjoyed greater sexual freedom and diversity (Aspin & Hutchings, 2007). Close inspection of whakapapa often reveals frequent occurrences of some tupuna having many partners (Karetu, 1995), as well as stories recounting females actively pursuing sexual companions (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006) both of which were an accepted part of hapū life.

The arrival of early missionaries and settlers in New Zealand led to increased interaction between Māori and Pākehā. Many Pākehā women expressed their disapproval and contempt in journal writings and letters for what they perceived as uncivilised cultural practices and beliefs, including Māori sexual expression (Rountree, 2000). Māori society underwent substantial change, adapting to a changing cultural landscape based on introduced understandings centred on Christianity and Pākehā ideals as tools of colonisation (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006). The loss of land, language and culture led to rapid changes. Māori were forced to adapt to the new environment, cut off from their economic base, food sources, social networks and battling against the introduction of a raft of new diseases. Respiratory diseases such as tuberculosis, whooping cough and influenza took a huge toll on Māori, consequently there was a sharp decline in the Māori population as the impact of these conditions took effect (Durie, 1994; Orange, 1987). The introduction of venereal diseases (now referred

to as STIs) by Europeans also took a huge toll on the Māori population wiping out many families (Buck, 1952). Missionaries noted many women had become barren resulting in a dearth of children in many villages considered to be symptomatic of reduced fertility rates threatening adequate replacement levels (Owen, 1984). The continuation of descent lines was of great importance and, as babies often died in infancy and other tribal members were killed in battle, people of high rank would have a number of children to ensure survival of their lineage (Penniman, 1986). A child inherited a number of birth rights depending on their lineage, gender and birth order (Mead, 2003). Inheritance may have included mana and status, safe keeping of knowledge, land and other resources.

Whānau

One of the most detrimental effects of colonisation on Māori society has been the weakening of whānau structures. The makeup of a whānau was wide-ranging but often consisted of three generations with several nuclear families residing within it (Mead, 2003). Many whānau and hapū groups were forced to break into smaller nuclear family groups and move to towns and cities to look for work contributing to a trend toward smaller family sizes and the Pākehā model of dependence on the nuclear family. Child rearing was the collective responsibility of the wider family unit allowing child rearing practices to be shared among the generations. Parents would be expected to devote time and energy to work requiring physical energy (Pennimann, 1986), while grandparents less physically able to manage a heavy work tended to lighter tasks applying their patience and wisdom to caring for, and educating, grandchildren (Buck, 1952). Children were reared in an environment that was surrounded by tradition and protocol and nurtured in an environment of acceptance of sexual activity. Matters of sex were discussed openly in everyday conversations between adults with children absorbing knowledge when they were present.

Māori women

Another hugely destructive consequence of colonisation has been the devaluation and disregard for Māori understandings of sexuality, and in particular, the role of Māori women. Rountree (2000) expresses the determination of missionary women to ‘help’ Māori women by transforming them into the English ideal of womanliness through her appearance, aptitude for domestic chores and restriction of sexual expression. The

introduction of Christian morality through religious beliefs and cultural practices declared the intimacies of sexual experiences as immoral and sinful (Buck, 1952) and the role of women as passive and subservient to men (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006).

Central to the construction of gendered perspectives of female passivity has been different interpretations of Māori cosmogony by early ethnographers. Mikaere (1994) contends that the retelling of traditional stories through the eyes of Pākehā males has had a particularly negative influence on the role of Māori women.

Western civilisation when it arrived on Aotearoa's shore, did not allow its womenfolk any power at all - they were merely chattels in some cases less worthy than the men's horses. What the colonizer found was a land of noble savages narrating . . . stories of the wonder of women. Their myths and beliefs had to be reshaped and retold... in the re-telling of our myths, by Māori male informants to Pākehā male writers who lacked the understanding and significance of Māori cultural beliefs, Māori women find their mana wahine destroyed. (Jenkins, 1988, p. 76)

In traditional accounts of Māori cosmogony, the story of Io, the creation of human kind and the stories of Maui and his kuia were dominated by resilient female figures of Papatūānuku, Hineahuone, Hinetitama and others. These stories conveyed the high regard for, and significance of, the reproductive ability of women recited in the themes of sexual union, reproduction and womb symbolism (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006). The more familiar versions of these stories written by Pākehā males render women secondary to male figures with the interpretation of Io as the overarching male creator and Ranginui creating the first human, bearing a striking semblance to that of Christian narratives. Pihama and colleagues argue that,

The ultimate tragedy of colonisation has been the extent to which Māori have internalised the patriarchy of Christian teachings, and have come to believe them as representing their own traditions. (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006, p. 131)

Concepts of tapu and noa

Concepts of tapu and noa have also been reinterpreted. These were an integral part of daily life helping to maintain social control, discipline and protection of people and property, essential to the well-being and survival of the community. Violations of tapu often led to adverse and potentially life-threatening consequences (Walker, 1990), while noa was the ability to lift the restrictions imposed by tapu (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006). The power of women to whakanoa, or lift tapu, demonstrated a distinct recognition of the role and status of women as *whare tangata* and the nurturing and protective role played in their communities. One example of whakanoa often recounted is that of men returning from battlefield. To be able to return to the community, the tapu of the battlefield had to be lifted. This was done by passing between the legs of a high standing woman (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006), demonstrating the importance and power of women and their reproductive ability to the community.

This is the mana and the tapu of women, in that they have the ability to free areas, things and people from the restrictions imposed by tapu. Women...are agents to whakanoa...This is their tapu, and they are tohunga because of their own specific areas of activity. (Henare, 1998 - cited in Pihama te al, 2006, p.72)

However, the concepts of tapu and noa are now more commonly perceived as mutually exclusive and hierarchical reducing the importance and power of women by minimising the spiritual element of tapu and noa. This is evident in simplistic explanations of tapu in the context of menstruation and childbirth where women appear to be restricted to participate in various activities reasoned by its uncleanness (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006).

The reinterpretation of traditional stories and cultural practices by early ethnographers has played a central part in the way Māori women perceive themselves and suppression of their innate sexuality (Pihama, Tuhiwai-Smith, Aspin, Newth, & Mikaere, 2006). Considering the role gendered power dynamics plays in diminishing women to an inferior position to men as passive and vulnerable objects of male desire (Allen, 2003), it is plausible to consider that associated decisions and choices made by young women that contribute to unsafe sexual practices and the transmission of chlamydia may

contribute to the perpetuation of this stereotype. Attempts to suppress female sexuality may also contribute to secrecy and concealment of normal sexual desires from whānau as well as confidence to seek sexual health information and services.

Not all young Māori will be cognisant of the impact colonisation has had on Māori sexuality and its potential ongoing effect on them as individuals. Nevertheless increasing their awareness and understanding and that of the family, wider whānau and Māori society of the influence both traditional and contemporary societal views may have on shaping their understandings, attitudes, behaviours and outlook on life would be beneficial. This requires prioritisation of Māori sexual health at a national, regional and local level.

Prioritisation of Māori sexual health

Over the last decade, amid growing concern the area of sexual health has been identified by the government as a health priority area for Māori. In 1997 a paper outlining the broad public health issues on rangatahi sexual wellbeing was published to accompany the National Strategy on Sexual and Reproductive Health (Ministry of Health, 1997). Then in 2001, the Ministry of Health published the first phase of the Sexual and Reproductive Health Strategy, reporting that New Zealand was facing a chlamydia epidemic. The current New Zealand Health Strategy (Ministry of Health, 2001a) does not include sexual health as a priority area, however, it is included as one of the health priorities set out in He Korowai Oranga, the Māori Health Strategy (Ministry of Health, 2002a). The follow-up STI Action Plan was planned but replaced by a resource book, published by the Ministry of Health to assist District Health Boards and Primary Health Organisations find ways of improving sexual and reproductive health among the populations they serve including addressing strategies to improve access and make existing services more user-friendly for Māori (Ministry of Health, 2003a). The Ministry of Health conducted a pilot survey in 2006, the New Zealand Sexual Health Survey, on health-related risk and protective behaviours associated with sexual health. To date the results are not publicly available and a decision to conduct the full survey is still on hold (Ministry of Health, 2008a). A report from the New Zealand Parliamentarians' Group on Population and Development (NZPPD, 2007) urged the government to establish a Ministerial Taskforce to address youth sexual health issues. Nominations for a sexual health advisory group to consider strategies to address

chlamydia screening and other sexual health issues pertinent to New Zealand are currently being taken by the Ministry of Health.

The Ministry of Health's 'Youth health: Guide to action' (2002c) acknowledges that the well-being of young people is dependent on their interacting with people in their environment including whānau, school, peers, work and training, culture and the environment. Goal seven outlines measurable improvement in the health of young Māori with specific focus on sexual health. Recommendations from the report for the area of sexual health include; improving the best practice guidelines for educators delivering to young Māori, reviewing effectiveness of current programmes, providing Māori language resources and programmes from a kaupapa Māori perspective, providing parent education programmes for knowledge and support to families, health promotion community action models and involving young people in the design of programmes. The Ministry of Health's recent establishment of the Child, Youth, and Maternity policy team in July 2007 also signals a commitment to advancing youth health.

In the Auckland District Health Board (ADHB) region, part of the region where this study was conducted, close to one third of Māori are under the age of 15 years and almost 20 percent are aged 15 to 24 years (Ministry of Health, 2006). The health of children and young people has been identified as an ADHB population health priority, consistent with a number of national health policies. ADHB has identified youth health, in particular young Māori health needs, as an area for future health gain in both the Strategic Plan (Auckland DHB, 2006a) and Child Health Improvement Plan (Auckland DHB, 2006b). ADHB District Strategic Plan to 2010 (Auckland DHB, 2006a) intends to lead and drive a wellness strategy focussed on improving sexual health for young Māori, acknowledging the high rate of sexually transmitted infections in young people aged 15 to 24 years. Implementation strategies are still being looked at and are yet to be rolled out, however the development of the draft ADHB Youth Health Strategy includes sexual health targets and may feature as a priority area.

Research question

The research question came about as a result of discussions with Māori health researchers and those working in the area of sexual health. We discussed how important it is that professionals who work with young people understand the distinctive needs of young Māori in relation to sexually transmitted infections. My attention was drawn to the alarmingly high rates of chlamydia among young Māori women and finding solutions to the question of how to reduce it. This research set out to gather information that could be used to contribute to comprehensive community-based preventative strategies to lower the rates of chlamydia among young Māori women.

The primary research question is: What are the knowledge, attitudes and reported behaviours of young urban Māori women in relation to sexual health and, in particular to the sexually transmitted infection, chlamydia?

Issues regarding sexuality and sexual health encompass a number of dimensions and can be broadly defined. A comprehensive definition of sexuality used by Te Puāwai Tapu, a Māori health organisation that specialises in Māori sexual and reproductive issues, is presented here as a useful starting point to frame ensuing discussions. Sexuality, as referred to in this thesis, is defined as;

Being about the acceptance of ourselves as sexual beings, our feelings about being male or female, the way we express our sexual feelings and the way in which we communicate these feelings to others. It can be expressed in various ways throughout the various stages of the life cycle. Self control, self-determination, and self-worth are critical dimensions of human sexuality. Sexuality is culturally defined and therefore influenced by family, peers, religion, economics, education, media, law and science. (Te Pūawai Tapu, 2000, p. 6)

Secondary aims were to identify resilience factors that young women use to protect themselves against sexually transmitted infections, to ascertain appropriateness of sexual health services and accessibility of information about chlamydia with a view to developing recommendations for public health interventions for young Māori women.

In summary, the objectives of the research project were to:

1. Determine what young Māori women know about sexually transmitted infections (STIs), with particular reference to chlamydia.
2. Identify sources of information young Māori women access (or not) to gain information on prevention and management of STIs, with particular reference to chlamydia.
3. Identify young Māori women's attitudes concerning STIs.
4. Explore young Māori women's views concerning the appropriateness and accessibility of information and services with particular reference to chlamydia.
5. Analyse data to identify resilience and protective factors.
6. To develop recommendations concerning:
 - a) Accessibility to services for young Māori women for the prevention and management of STIs, with particular reference to chlamydia,
 - b) Culturally appropriate educational materials for young Māori women for the prevention and management of STIs, and
 - c) Possible culturally appropriate public health interventions for the prevention and management of STIs among young Māori women.

Positioning of the researcher

Research findings are influenced according to the particular worldview, or lens, through which the researcher analyses the findings. This study will undoubtedly be influenced and shaped by my upbringing, personal experiences and cultural background.

I was brought up in an urban environment and have been fortunate that my parents always made an effort to take us 'back home' for holidays, hui and tangihanga. However, on sharing some of my experiences with peers at school I quickly learnt that things that were 'normal' to me were perceived as 'strange' and 'bizarre' to them. I remember being told I was Māori by kids at school, and being Māori made me different

in some way. I did not want to be different, so instinctively I learnt to suppress my cultural identity.

As for sex and sexuality, it was not something formally taught when I went through school and not something I remember talking about with my whānau. At an early age I became pregnant and a mum by the time I was 20 years old. I've experienced the label of being a young Māori solo-mum, condescending looks of disapproval if we turned up late for a doctor's appointment and looks of bewilderment as if to say "you're too young to be his mum" but this was offset to some extent by the support received living in a three generational household.

Through tertiary education I came to understand the impact of dominant discourses on shaping perspectives including my own Māori identity, and became more adept at recognising and articulating structural and systemic failings that impact on Māori. These thoughts and experiences developed my interest in contributing to making a difference for other young Māori women, and reflecting on what information and health services would be helpful to make their journey easier.

Thesis outline

Sexual health issues cannot merely be viewed as distinct physical functions but are shaped by societal influences and the groups in which we live. In summary, health inequalities for young Māori in the area of sexual health, and in particular in relation to rates of chlamydia, are influenced by structural social, economic, political, and cultural factors. The government needs to be more responsive as a Treaty partner to improving Māori health disparities by incorporating Māori concepts of health, improving ethnicity data collection, and completeness of STI surveillance data. In a society dominated by a patriarchal culture, young Māori women contend with being marginalised as Māori, as women and adolescents, and it is time to scrutinise how the needs of young women can be addressed and improve sexual health outcomes for this vulnerable group of our population.

Chapter One of this thesis has placed this study in context by presenting the significance of the study. It provided an overview of the impact chlamydia has on the reproductive health of women, how the extent of the problem is monitored in New Zealand, and the devastating effect it may have on Māori whānau, hapū, and iwi in the future. It has also

placed chlamydia infection rates for young Māori within the wider context of Māori health. The research question and secondary objectives of the study were presented and clearly outlines my position as the researcher in terms of potential bias.

Chapter Two presents an overview of the available literature relating to the demography of young New Zealanders, developmental perspectives, and their reported sexual behaviour, sources of knowledge, and access to health services. This is followed by an introduction to the concept of resilience and its application to adolescent sexual health. Literature specific to young Māori adolescents has been used where available.

Chapter Three describes the research approach and methodology giving reasons for their selection. A Māori inquiry paradigm and Kaupapa Māori research practices are described. Appendices relating to this section can be found following the references and includes a glossary of Māori terms (Appendix A).

Chapter Four provides a description of the findings in order to answer the research question. The chapter presents information concerning reported sexual behaviour, sources of sexual health and STI knowledge, and impressions of accessibility and appropriateness of sexual health services.

Chapter Five concludes this thesis by discussing the research findings and identifying protective factors. Limitations of the study are outlined and recommendations for future research are made. The chapter concludes by making eight recommendations to strengthen educational approaches and sexual health service delivery to better meet the needs of young Māori women.

Chapter Two: Sexual and reproductive health of young Māori

The true measure of a nation's standing is how well it attends to its children – their health and safety, their material security, their education and socialization, and their sense of being loved, valued, and included in the families and societies into which they are born (UNICEF, 2007, p. 1).

Introduction

Sexuality, sexual desire, and the development of sexual identity are a normal part of adolescent development. The formation of sexual attitudes, behaviours and preferences are shaped by wider societal beliefs and values which often serve to constrain, and thought to protect, acting positively and negatively on the expression of young people's sexuality and their sexual healthcare behaviour. As adolescents take steps towards increased independence as young adults, they make decisions and develop habits that can have life-long implications for their sexual health and well-being. To make informed decisions about their sexual health young people require quality information and services. Ensuring information and services are accessible and appropriate for young people is part of a comprehensive solution to reduce chlamydia rates among young Māori women.

To understand the magnitude of the potential impact rising chlamydia rates will have on Māori communities an overview of the status of young people in New Zealand is presented showing relevant demographic features of the youth population including a profile of young Māori in New Zealand. This chapter also provides definitions and classifications of 'adolescence' as used in the literature, followed by a discussion of adolescent developmental perspectives in relation to young people's sexual health. Further to this an outline of the reported sexual behaviours and main sources of information reported by young people relating to sexual and reproductive health are presented to give an indication of potential areas for intervention. Access to, and appropriateness of sexual healthcare services for young people, including youth-health initiatives are also discussed with literature pertaining to STIs, and in particular chlamydia, where available.

One of the objectives of this study was to identify resilience factors associated with preventing chlamydia infection. The concept of resilience has developed out of interest in why some individuals faced with adversity manage to cope well, while others faced with similar circumstances do not manage to do so. This chapter concludes by defining the concept of resilience and provides a brief overview of the link to risk and protective factors considered in relation to adolescent sexual health.

Definitions of young people

The youth health literature uses a range of terms to describe people during adolescence including young person, teenager, adolescent and young adult. There are many culturally specific terms used in the Māori language to describe the period of adolescence or youth, with particular iwi and dialectal distinctions. Northern iwi use the term taitama, however one of the most widely used terms to refer to young Māori people is rangatahi. In this thesis youth, young person, and adolescent are used interchangeably to describe this population group.

The WHO defines youth as the 15 to 24 year age group, dividing adolescence into three stages of early, middle and late (World Health Organization, 1995), while the New Zealand Youth Health Status Report (Ministry of Health, 2002b) and Youth Development Strategy Aotearoa (Ministry of Youth Affairs, 2002) classify young people as aged 12 to 24 years inclusive. However, defining adolescence in terms of chronological age fails to take into account the large variability in the onset of puberty and other developmental characteristics.

Adolescence may also be defined in terms of social transitions, such as moving to greater independence and reduced reliance on family and whānau. Furhmann's (1990) definition of adolescence acknowledges the transition and distinguishes between childhood restrictions and boundaries imposed by adults,

Adolescence is the bridge between childhood and adulthood. It is a time of rapid development, of growing to sexual maturity, discovering one's self, defining personal values and finding ones vocation and social directions. It is also a time of testing: of pushing one's capabilities and the limitations imposed by adults (p.15).

There are also legal definitions associated with adult behaviours in society, such as learning to drive a car (15 years), leave school (16 years), have sex (16 years), buy alcohol (18 years) or vote (18 years) set out in New Zealand legislation. For the purpose of this thesis, young people are referred to those aged 15 to 24 years in line with the WHO definition and age group classifications used by ESR.

Young New Zealanders

There were over half a million young people (571,176) aged 15 to 24 years recorded in the 2006 New Zealand census accounting for 14.2 percent of the total New Zealand population (4,027,947) (Statistics New Zealand, 2007c). Within the 15 to 24 year old age bracket, figures show that Māori, Asian and Pacific people have higher proportions of young people when compared within their ethnic group than those who identified as New Zealand European (Statistics New Zealand, 2007c). The majority of New Zealand's young people were more likely be born in New Zealand, to reside in urban areas and were more geographically mobile compared to the rest of the population (Statistics New Zealand, 1998).

Demographic features of young Māori people

The total Māori population makes up 14.6 percent (565,326) of the total New Zealand population and has a more youthful age structure (Figure 4) compared to the overall New Zealand population (Figure 5). Nearly 20 percent (17.9%) of the Māori population are in the 15 to 24 year age bracket compared with less than ten percent (8.2%) for non-Māori (Statistics New Zealand, 2007c). The Māori population is projected to grow faster than non-Māori. Factors contributing to this include a higher fertility rate and a younger child bearing age (Statistics New Zealand, 2008). Immediate action to address chlamydia rates for young Māori is vital as the extent of the problem could rapidly escalate considering the projected growth of the young Māori population. This would not only have a devastating effect on Māori whānau, hapū and iwi, but there is an associated financial cost to the health sector now and in the future.

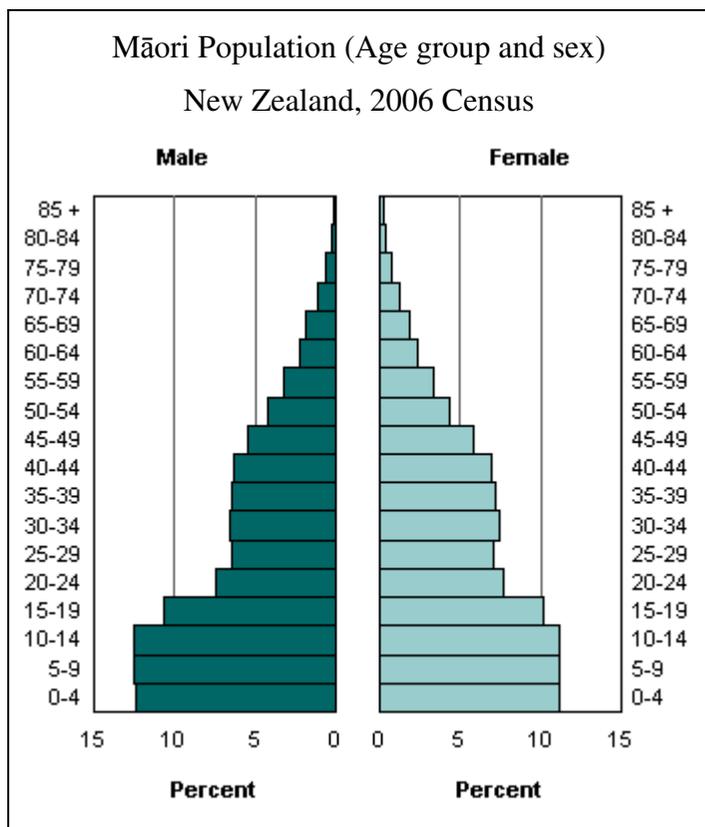


Figure 4. Total Māori population (Age group and sex).

Source: Statistics New Zealand (2008).

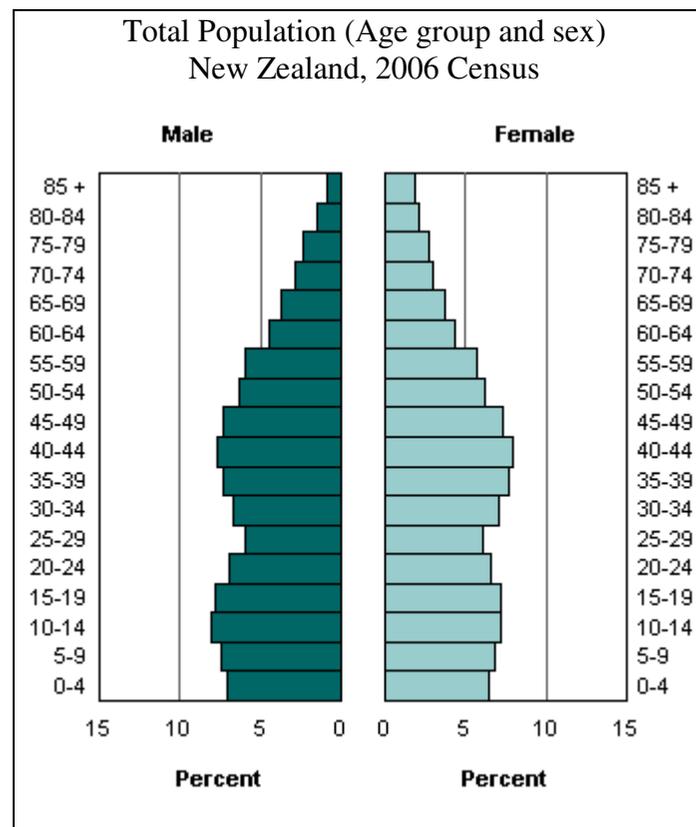


Figure 5. Total New Zealand population (Age group and sex).

Source: Statistics New Zealand (2008).

Auckland region

Significant population growth is expected in the Auckland region over the next two decades (Statistics New Zealand, 2008). Already, one quarter (25%) of the total Māori population reside in the Auckland region and more than 60 percent of the population growth over the next twenty years is expected to occur in the Auckland region and the number of young Māori residing in the city is expected to grow as a result. Factors contributing to this growth include natural growth as well as net migration attributed to the lure of major tertiary education facilities, lifestyle and work opportunities. Young Māori living in the city contend with various issues and challenges of an urban lifestyle. Maintaining good sexual health is one of the challenges young Māori face with chlamydia diagnosis rate three times higher in Auckland for young women than young men (ESR, 2007).

Developmental perspectives

Adolescence is often viewed as a transitional period between childhood and adulthood or, youth and maturity. It is characterised by dynamic changes including immense physical, cognitive, social and moral development (Santrock, 2005). Many young people traverse this developmental stage with few difficulties, however for others it can be a time of turmoil and confusion as some young people grapple with their identity and place in the world. Theorists such as Gesell, Erikson, Piaget and Freud led the way in human developmental theories (Salkind, 2004). This led to exploration of the interplay between physiological, cognitive, and behavioural perspectives such as Bandura's social cognitive theory self-efficacy processes in human adaptation (Bandura, 1997) and Vygotsky's socio-cultural theory which argues that human development cannot be separated from its social context (Salkind, 2004). The next section looks at the main biological, cognitive and psychosocial developmental tasks that occur which tend to follow a predictable and sequential pattern of development to produce an adult-like body (Kaplan, 2000).

Biological development

As this study focuses on the sexual health of young women an overview of the biological changes that females experience to achieve reproductive maturity is presented. The onset of puberty, the stage at which an individual becomes physiologically capable of sexual reproduction, is generally marked by a growth spurt

followed by the development of genital organs (Petersen, 1993). The female experience of puberty generally starts earlier than their male counterparts both taking around five years to complete (O'Sullivan, Graber, & Brooks-Gunn, 2001).

In young women the first external changes occur in late childhood with development of breasts and the appearance of pubic hair. Breast buds may appear as early as eight years old with full breast development completed by about 12 or 18 years (Kaplan, 2000). Pubic hair growth begins about nine or ten years old and gets to adult distribution at around 14 years (Hetherington & Parke, 2006). Menarche, or menstruation generally follows two years after initial pubescent changes and can be as early as ten years old. Mucosal changes occurring in the genital tract around this time helping to increase a young woman's resistance to vaginal infection (World Health Organization, 2004b).

Researchers have noted a decline in the mean age of menarche in many developed countries (McDowell, Brody, & Hughes, 2007). The onset of menarche is reported to be related to genetics, nutrition, behaviour and other environmental factors (Obeidallah, Brennan, Brooks-Gunn, Kindlon, & Earls, 2000). Maskill (1991) considers reaching a height of approximately 149 centimetres to be the most reliable predictor of when a girl could expect her first period. Ethnic differences in the age of pubertal onset are reported in a number of studies (McDowell, Brody, & Hughes, 2007; Obeidallah, Brennan, Brooks-Gunn, Kindlon, & Earls, 2000) with historical references describing young Māori women maturing earlier than non-Māori (Buck, 1952; Penniman, 1986). Some researchers have linked these ethnic differences to socio-economic status (Obeidallah, Brennan, Brooks-Gunn, Kindlon, & Earls, 2000), racial discrimination (Geronimus, 1996), while others suggest a link with childhood obesity (McDowell, Brody, & Hughes, 2007; Styne, 2004). Regardless of the explanation, it appears that early physiologic maturers may lack psychological and cognitive skills to guide decision-making in regard to their emerging sexuality contributing to early sexual behaviour (Talashek, Montgomery, Moran, Paskiewicz, & Jiang, 2000).

The rapid physical changes experienced by young women during puberty can lead to a preoccupation with body image and becoming self-conscious and sensitive as they learn to cope, and become comfortable with the changes. These are generally characterised by individuals being shy and modest with a preference for privacy (Kaplan, 2000). In later adolescence, the outward appearance of physical maturation can lead to increased

expectations for a young person to assume greater responsibility and take on more adult roles.

Cognitive development

Cognitive ability, the ability to think, reason and make decisions, progresses as neural pathways in the brain continue to develop throughout adolescence. Early adolescence is characterised by concrete thought, or the inability to see beyond the immediate and to deal with remote, future, or hypothetical problems (Kaplan, 2000). The adolescent fails to differentiate the concerns of his own thought from those of others and believes that their experiences and thoughts are absolutely unique. This may arise from the adolescent egocentrism, that 'it will never happen to me' referred to by Elkind as 'the personal fable' (1967). This is often linked to adolescents who often think they are less vulnerable than others to negative and unwanted consequences and may contribute to why some young people fail to use condoms when having sex to protect them from chlamydial infection. Sexual behaviour during this early adolescent period tends to be focused on sexual attractiveness often expressed by frequently changing relationships (Kaplan, 2000). This may contribute to a greater risk of contracting chlamydia if multiple sexual partners are taken.

Once many of the physical changes of early adolescence are complete there is a shift toward greater cognitive changes. The egocentrism of the early adolescent tends to diminish at about 15 or 16 years (Elkind, 1967), overcoming their own preoccupations and the ability to appreciate the feelings of others. At this stage, young people begin to develop the ability to reflect on past experiences and are more confident about making choices that may diverge from the peer group. This allows expansion in areas of emotional control, intimacy, moral development, social justice and spirituality (Kaplan, 2000) and the development of a stronger sense of self and personal identity (World Health Organization, 2002).

The acquisition of skills required for greater independence from parents takes the lead in later adolescence. This includes key decision-making with respect to occupation and marriage and by consolidation of a distinct identity and greater ease with oneself. The importance of peers diminishes in later adolescence with sexual behaviour focused on favouring romantic partners, serious relationships and a clearer sexual identity (Kaplan, 2000).

Psychosocial development

A range of socialisation agents influence adolescent sexuality and generally include people in their immediate sphere of influence such as whānau, peers, friends, teachers, health professionals as well as external influences such as societal and cultural norms.

Socially constructed gendered identities contribute significantly to the way we see ourselves and are seen by others. The physical changes that occur during puberty increase differentiation between the sexes and can intensify gender roles bringing pressure for young people to engage in gender-appropriate behaviour. Heterosexuality is generally the dominant discourse used when adolescents talk about their sexual selves reflecting what is often portrayed as 'normal' (Allen, 2003). For young people who identify as homosexual, lesbian, transgender, or bisexual this can be a difficult period.

Stereotypical gender roles of women as carers and nurturers sustain existing power relations subjugating women to the role of men who, as protectors and providers, can be viewed by society as more powerful and important. Such unequal power relations can spill over into sexual relationships influencing how men and women treat each other, where femininity dictates that women are sexually coy and passive partners (Ricardo, Barker, Pulerwitz, & Rocha, 2006). Feminine labels of passivity, dependence and shyness potentially contribute to female acceptance of male control in sexual decision-making. Early sexual experiences of young Māori women have been shown to be associated with elements of male coercion (Pouwhare, 1998). This may in part be attributed to conforming to gender roles whereby young women feel in a position of lesser control, conceding to participate in sexual acts. One New Zealand study found seven percent of women reported their first episode of intercourse as 'forced' and a greater tendency to be reported by young women having earlier intercourse (Dickson, Paul, Herbison, & Silva, 1998).

As some young people toil with concerns of fitting in, peer membership becomes vitally important. The magnitude of wanting to fit in can be so immense that the companionship, the perspectives and opinions of friends become more important than parents. Part of this desire to fit in is said to arise from the adolescent mental construction of 'the imaginary audience', or the belief that everyone else is looking at them (Elkind, 1967). Drummond and Bowler (1998) consider the pressure to conform to group expectations and risk-taking of sexual activity can stem from this unseen

presence of peer group expectations and their attitudes towards sex and sexual behaviour. A young person whose concrete thought is dominated by the imaginary audience may think and act differently, as they consider their actions as being judged by the group and feel increased pressure to participate in sexual activity.

Identity formation is a key aspect in adolescent development. Some young people find themselves living in two cultures, a dominant culture and one shaped by their own ethnicity (Kaplan, 2000). Pubertal adolescents may not have developed cognitive skills to clearly distinguish their own cultural identity and struggle to make sense of conflicting views espoused by parents, whānau, school and the wider community. Individuals that do not identify with the majority culture may internalise views of their own group held by the majority and accept negative self-images projected onto them by society. Many young Māori have come to experience this difficulty as differences in world views and cultural values conflict, and can result in a stronger sense of wanting to be the same and fitting in. Peters (1985) suggests raising physically and emotionally healthy young people who are not part of the majority culture requires a suit of armour to protect children against the hostilities of the environment. This is reinforced by Thomas and Nikora (1996), who identified that Māori secondary school students are frequently exposed to negative connotations which undermine Māori identity by promoting dominant Pākehā cultural patterns and lifestyles as normal and desirable.

Kaplan (2000) considers that young people struggling to determine their ethnicity and culture have four choices; separate from the dominant group, assimilate and cut off from their own, integrate into both, or become marginalised and lack involvement in either. A lack of cultural identity can leave a young person isolated and vulnerable which may lead to participation in risky behaviours including early sexual activity and unsafe sexual behaviour to fit in.

Sexual behaviour

A number of quantitative studies have contributed to the sexual health literature surveying young people's sexual behaviour patterns providing information about age at first sex, number of partners, contraceptive use, and teenage pregnancy rates. Although the majority of this data represents non-Māori sexual behaviour, it is helpful nonetheless to gain a broader picture of adolescent sexual behaviour.

New Zealand studies that have employed Māori representative sample sizes include the nationally representative Youth2000 survey of secondary school students (Adolescent Health Research Group, 2004), a regional study conducted with fourth form students in the Hawkes Bay (Fenwicke & Purdie, 2000), a survey of risk-taking behaviours among 16 to 21 year olds (Coggan, Patterson, Disley, & Norton, 1995), and a survey of knowledge, attitudes and behaviours of students from 14 schools across New Zealand (Lungley & Paulin, 1993). Relevant information from these and other international studies has been presented in this section.

Sexual debut

In New Zealand, the age at which young people become sexually active varies considerably, most are aged between 12 and 24 years (Ministry of Health, 2002b). The median age of first sexual intercourse for women is 16 years of age (Dickson, Paul, Herbison, & Silva, 1998), and approximately one in five females (21.6%) attending secondary school reported to be sexually active (Adolescent Health Research Group, 2003). There is some evidence to suggest that in New Zealand the age of first sexual intercourse is getting younger (Dickson, Paul, Herbison, & Silva, 1998) similar to trends being seen in other industrialised countries (Wellings et al., 2006). The most common reason reported by all adolescents for having sex was ‘curious about what it would be like’ (Adolescent Health Research Group, 2003).

Research indicates that young Māori are more likely to ever report having had sex than European students (Adolescent Health Research Group, 2004; Fenwicke & Purdie, 2000), more likely to become sexually active at an earlier age than non-Māori peers (Adolescent Health Research Group, 2004; Dickson, Sporle, Rimene, & Paul, 2000; Fenwicke & Purdie, 2000), and Māori females are more likely to be sexually active and initiate sex earlier (Clark, Robinson, Crengle, & Watson, 2006). There is evidence to suggest that women who report having sex at an earlier age later regret it (Dickson, Paul, Herbison, & Silva, 1998). In addition, there is a link between early sexual debut and increased risk of contracting STIs (Fenwicke & Purdie, 2000), however it is unclear whether this is related to increased sexual activity or less frequent condom use.

There are a number of individual, family and school factors associated with early sexual intercourse for girls. These include socio-economic status in the middle range, having a mother who had her first child before the age of 20 years, middle range IQ, being in

trouble at school, planning to leave school early, cigarette smoking, higher self-esteem (Paul, Fitzjohn, Herbison, & Dickson, 2000) and living away from parents (Davey, 2000). Religion has also been shown to be an important factor in decisions to delay sexual intercourse (Paul, Fitzjohn, Eberhart-Phillips, Herbison, & Dickson, 2000).

Engaging in early sexual behaviour, including sexual intercourse, puts young people at risk of serious health and emotional risks. The only theoretically definitive means of avoiding the risks of unwanted consequences of sexual intercourse is through abstinence. However, controversy arises when abstinence is presented to young people as a sole choice, abstinence-only education programmes have been considered to threaten human rights to health, information, and life (Santelli et al., 2006) and little evidence of their efficacy in delaying the onset of intercourse or reduced sexual activity among teens (Clark, 2002; Ott & Santelli, 2007; Young & Penhollow, 2006).

Teenage pregnancy

New Zealand has the third highest teenage pregnancy rate of all OECD (Organisation for Economic Co-operation and Development) countries, with total pregnancy rates three times higher for Māori teenagers than European teenagers, and birth rates five times higher for Māori (Dickson, Sporle, Rimene, & Paul, 2000). This indicates that Māori are more likely to be pregnant resulting in a live birth, and much less likely to have an abortion (Ministry of Health, 2002b). Stigmatisation of teen pregnancy is a huge concern to Māori communities as it further marginalises young pregnant Māori women and deters them from engaging with fertility control agents (Te Pūawai Tapu, 2007).

Induced abortions

In 2006, three in every ten abortions were performed on women aged 20 to 24 years, and more than double the number of abortions were performed on European women (9,859) than those women who identified as Māori (4,097) (Statistics New Zealand, 2008). Although the rate of abortions is slightly higher for Māori than European women, statistical data shows that European teenagers who become pregnant are more likely to undergo an abortion (Dickson, Sporle, Rimene, & Paul, 2000). Two Auckland clinics revealed a high rate (12.9%) of chlamydia amongst women seeking abortion (Rose, Lawton, Brown, Goodyear-Smith, & Arroll, 2005).

Sexual coercion and abuse

There are few studies that explore non-consensual sex among adolescents as it is difficult to research this sensitive topic (Blum & Nelson-Mmari, 2004). Nearly one quarter (24.6%) of young Māori reported an experience of sexual abuse or coercion, and had been touched in a sexual way, or made to do sexual things they did not want to do (Adolescent Health Research Group, 2004). The median age for onset of sexual abuse of girls is nine years (Fanslow, Robinson, Crengle, & Perese, 2007). A study by Pouwhare (1998) found early sexual experiences of young Māori women were associated with elements of male coercion, manipulation and violence (Pouwhare, 1998).

Sexually transmitted infections

As described in Chapter One, young people are at significant risk of contracting STIs and have greater potential for more severe consequences than older people (Ministry of Health, 2002b). The rates of STIs are higher among young Māori women than non-Māori for chlamydia and gonorrhoea, and they are twice as likely to be diagnosed with concurrent infections (ESR, 2007). Two New Zealand studies have attempted to measure the prevalence of asymptomatic chlamydia in student populations. A Christchurch study of Year 12 and 13 urban, student population reported 2.0 percent of students presented with asymptomatic chlamydia trachomatis infections (Baker et al., 2005), and a Wellington study reported a prevalence rate of 2.7 percent asymptomatic infection (Dickson, 1996).

Number of partners

Sexual intercourse with a greater number of partners increases the risk of contracting an STI due to the increased probability of having sexual intercourse with an infected partner. Young people tend to have a larger number of sexual partners compared to the rest of the sexually active population which contributes to an increased risk of contracting chlamydia (World Health Organization, 2004b). In addition, the age at which young people form a long-term sexual union appears to be increasing, extending the period for sexual relationships with multiple partners to occur (Dickson, 1996). Research also shows that women tend to under-report the number of sexual encounters while men tend to over-report sexual activity in response to social expectations (Wellings et al., 2006). Surveyed at age 21, the Dunedin cohort reported that among the

sexually active, 46.5 percent of females had more than one partner in the previous 12 months (Paul, Fitzjohn, Herbison, & Dickson, 2000) and 14 percent of sexually active young people surveyed had sexual intercourse with more than three partners (Coggan, Patterson, Disley, & Norton, 1995).

Contraception

Condoms are the most common form of contraception used by young people in early sexual encounters, followed by the oral contraceptive pill (Coggan, Patterson, Disley, & Norton, 1995; Lungley & Paulin, 1993). Dickson (1996) reports the oral contraceptive pill as the most popular method of contraception for young women. Over two thirds (70%) of sexually active female Māori students who had ever had sex, reported consistent use of contraception (Adolescent Health Research Group, 2003), however, overall Māori were less likely to report using contraception than Europeans (Adolescent Health Research Group, 2004). Pouwhare (1998) identified a lack of sexual and contraceptive health knowledge prevented informed decision-making by young Māori women regarding contraceptive choices. To make an informed decision about contraceptive methods young people require timely and appropriate contraceptive advice which requires access to appropriate sexual health information and services. The provision of information to young adolescents raises issues that the medical professionals have to weigh up patient privacy versus parental consent.

As sexual activity increases and more stable relationships are formed, young women appear more likely to rely on oral contraceptive methods rather than condoms according to a study of young African American and Hispanic youths (Norris & Ford, 1999). Norris and Ford (1999) found that sexually active young women were less likely to use condoms, preferring oral contraceptive methods, when in a monogamous relationship. Oral contraceptives provide a high degree of protection against pregnancy when taken correctly, however many users find it difficult to take pills consistently (Ornstein & Fisher, 2006). Research suggests that less than 41 percent of adolescents take their pill every day (Rosenberg, Burnhill, Waugh, Grimes, & Hillard, 1995).

The decision to abandon condoms for hormonal contraceptive methods places young women at increased risk of contracting chlamydia, and may also contribute to an increased risk of becoming pregnant at a young age due to irregular use of the oral contraceptive.

Condom use

Condoms are made from latex rubber and when used consistently and correctly can have a dual purpose to protect against sexually transmitted infection and pregnancy. Consistent condom use is an important component in protecting against chlamydia infection and other STIs (World Health Organization, 2000). Young Māori surveyed following the Hubba Hubba campaign agreed that the best form of protection against STIs was to use a condom (Ministry of Health, 2005). However there is strong evidence to suggest that young people use condoms inconsistently (World Health Organization, 2004b). The Durex Global Sex Survey (2004) reported that more than one in three (35%) young people have unprotected sex without knowing their partners sexual history.

In New Zealand, just over one third (39%) of young people are reported to always use protection to prevent STIs, with nearly one quarter (24%) never using protection (Coggan, Patterson, Disley, & Norton, 1995). The main reasons reported for not using protection included, 'did not have condom' (23%), 'couldn't be bothered' (10%), while the majority 'did not specify' (41%). Other reasons given by females include being on the pill or in a monogamous relationship (World Health Organization, 2004b). These figures appear to be relatively stable as more recent evidence showed that more than two thirds (76.5% males, 68.8% females) of sexually active young New Zealanders had used a condom during their most recent episode of sexual intercourse (Adolescent Health Research Group, 2003).

There are a range of complex social factors that influence safe sex choices that contribute to a lack, or inconsistent use of condoms. These include having access to condoms, power dynamics and negotiating condom use, trust issues, romance, stage of relationship, gender role expectations and subjective meanings of condoms (World Health Organization, 2005).

Sources of sexual health knowledge

In some quarters there is continued fear that providing information to young people will result in 'undesirable' sexual behaviour such as increased promiscuity and teenage pregnancy (Senanayake, Nott, & Faulkner, 2001). However, information and advice on sexual health including contraception and STIs is needed by young people to support

them to engage in safe sexual behaviour. It is important that young people are equipped with knowledge so that they are prepared and able to make informed choices before engaging in sexual activity. Recent research suggests that many New Zealand teenagers have incomplete or inaccurate knowledge about the practice of safe sex (Education Review Office, 2007). There is a growing body of evidence that demonstrates that increased knowledge does not increase sexual activity (Fenwicke & Purdie, 2000; UNAIDS, 1997; World Health Organization, 2004a), that responsible sexual behaviour can be learned and good quality education can delay the onset of sexual activity protecting sexually active young people from unintended consequences such as STIs and pregnancy (UNAIDS, 1997).

There is a wealth of information available on sexual health, STIs and chlamydia, yet its appropriateness and accessibility to young Māori women has not been explored. In order to make useful recommendations for preventative strategies consideration must be given to the influence society and the wider environment has on adolescent knowledge and decision-making in regards to safe sexual behaviour. A recent survey has shown that young people derive their sexual knowledge from a number of sources with the most common sources cited as formal education in school and informal sources from family, peers, television and personal experience (Adolescent Health Research Group, 2004). These four main sources are discussed here in greater depth.

School

Formal education in the school setting has been cited as a major source of sexual health information in two New Zealand studies (Adolescent Health Research Group, 2004; Lungley & Paulin, 1993). Teaching the sexual health curriculum can be a controversial and somewhat emotive topic with students, parents, Boards of Trustees and teachers each having an opinion on what should be taught and how best to deliver the curriculum. Much of the debate reflects societal, moral and religious opinion coupled with parental concern that increased knowledge may lead to increased sexual activity (Ricardo, Barker, Pulerwitz, & Rocha, 2006). This persistent perception contradicts expert reviews (UNAIDS, 1997). International research on school-based programmes have shown that sexual health education increases student awareness of risk, knowledge of risk reduction strategies and delays rather than hastens the onset of sexual activity (Wellings et al., 2006).

In 2001, compulsory sexuality education was introduced for students up to Year 10 (Education Review Office, 2007). The Education Review Office (ERO) recently completed an evaluation of the current sexual education curriculum finding that, “the majority of sexuality education programmes were not meeting students’ learning needs effectively” (Education Review Office, 2007, p. 1). It appears schools had taken a ‘one size fits all’ approach, failing to address the needs of diverse groups of students such as young Māori. At best sexual health education in schools can be described as variable and poorly monitored (NZPPD, 2007) and current recommendations by the ERO, including the need to adapt programmes to meet the needs of all students, are long overdue.

A report on youth sexual health by the New Zealand Parliamentarians Group on Population and Development (NZPPD) noted that the delivery of the sexual health curriculum in New Zealand has been variable with a number of submissions highlighting a lack of trained teachers comfortable to teach the sexual health curriculum with many schools opting for external providers (NZPPD, 2007). Very few external providers deliver kaupapa Māori sexuality education programmes (Te Pūawai Tapu, 2007). One provider, an independent kaupapa Māori public health organisation in Wellington, has developed a sexuality education programme with input from young Māori students and has employed and trained young Māori as specialist sexuality educators (Te Pūawai Tapu, 2007). This provider offers schools a programme for Year 9 and 10 students based on a youth education framework called ‘Tō Tātou Hōkakatanga - Six Concepts of Sexuality Framework’ utilising te reo and tikanga Māori as much as possible. A formal evaluation of the programme is yet to be completed, however anecdotally the impact of this programme is positive for young Māori with potential for the framework to be applied nationally.

Peer-led interventions have also gained increased recognition as an effective means of influencing adolescents’ attitudes and behaviours. In 1994 the Auckland Sexual Health Service developed the Peer Sexuality Support Programme (PSSP) introducing it into a number of secondary schools across the Auckland region (Elliott & Lambourn, 1999). The programme draws on existing peer networks and is delivered by senior students who receive training to provide a support and referral role for other students. A process evaluation was conducted concluding that the programme was effective in teaching

senior students skills to deliver sexual health support, however accessibility for students and their health outcomes were not measured (Ritchie, 1999). Peer-led approaches are useful but need to be a component of a comprehensive configuration of sexual health education and programme interventions. They should not be relied upon as the sole conduit for the dissemination of sexual health information in a school.

Friends and parents

Young people have expressed a clear preference for talking with friends as well as parents to find out about sex and related matters (Lungley & Paulin, 1993; World Health Organization, 2004b; Wright, Gabb, & Ryan, 1991). However, young people do not always find parents easy to talk to and this uneasiness may in part, arise from disconcerted parents at odds with providing sexual information for their children and refrain from discussing issues or withhold information for fear that it might encourage sexual activity (Ricardo, Barker, Pulerwitz, & Rocha, 2006). Yet young people whose parents talk more openly about sex tend to have more accurate information about sexual reproduction and contraception, and are more likely to develop sexual attitudes and values similar to that of their parents than those who speak less with their children about sex (Fisher, 1986). However, parents do not tend to discuss STI information with young people (Fisher, 1986; Pouwhare, 1998). Providing quality sexual health information and resources for whānau to facilitate age-appropriate conversations with their children may contribute to, and encourage more informed sexual health discussions and the normalisation of sexual development and responsible attitudes toward sexual activity prior to sexual experimentation.

Young Māori women tend to seek out friends and peers for information on sexual health and contraception (Pouwhare, 1998). Although Lungley and Paulin (1993) suggest knowledge gained from friends may be inaccurate and cannot necessarily be relied upon, young people consider close friends and peers to be more accessible, easy to talk to, and more likely to listen in a non-judgemental way (Wright, Gabb, & Ryan, 1991). Peer support programmes gain access to these informal social networks through selected students to connect other young people with health information and professional support.

Television and other media

Television poses threats and opportunities to educate and inform young people about sexuality. On one hand the accessibility and popular appeal of television make it an excellent tool of communication however, on the other hand commentators often remark on its limited range and portrayal of stereotypical characterisations (Ward & Rivandenyra, 1999). Robust studies are required to examine the effects of mass media on adolescent sexual attitudes and behaviour (Escobar-Chaves et al., 2005).

Two New Zealand surveys have reported television media as major source of information by young people (Adolescent Health Research Group, 2004; Lungley & Paulin, 1993). Yet the influence television media has had on young Māori and their sexual activity has been more difficult to ascertain as studies report conflicting results (Ministry of Health, 1997). Interestingly, the 'No Rubber, No Hubba Hubba' campaign, aimed at reducing the incidence of STIs among young people, reported to have successfully raised awareness of safer sex issues through television advertising yet STI knowledge for young Māori remained similar (Ministry of Health, 2005). Further research is warranted to determine how television, as a widely accessible communication medium, should be incorporated into a comprehensive strategy to prevent chlamydia rates for young Māori.

Even less is known about the influence new technology such as the internet, email, chat rooms, mobile phones, text messaging and gaming has on adolescent concepts of sexuality and sexual health. There is a call for research to examine the impact new media is having on traditional cultural values around the world (Call et al., 2002). Many websites are dedicated to promoting youth health issues, for example the Ministry of Health (www.hubba.co.nz), Youth Line (www.urge.co.nz) and Auckland Sexual Health Service (www.sexfiles.co.nz) websites and others provide valuable information. Despite the availability of web-based information there is little evidence to suggest that young people are accessing it. Encouragingly, in Auckland just over two thirds (68.9%) of people had access to the internet with high usage reported among 15 to 24 year olds (Statistics New Zealand, 2007b). However, of all New Zealanders who have access to the internet less than one third (28.4%) of people browse the internet to obtain information on health and health services (Statistics New Zealand, 2007b). It is therefore conceivable that a relatively small number of young Māori would access

sexual health information via the internet. Incorporating internet-based learning into school-based sexual health programmes where young people have access to computers and the internet would introduce them to the websites potentially engaging more students and accommodating different learning styles.

Knowledge / practice gap

Sexual health education is premised on the belief that the acquisition of knowledge will translate into safer sexual practices. Yet there is evidence to suggest that increased knowledge does not necessarily support behaviour change (Allen, 2001; World Health Organization, 2004b). Allen (2001) refers to it as the knowledge/practice gap and considers the gap between knowledge and action arises from a divergence between knowledge taught in the sexual education curriculum and young people's own sexual knowledge derived from experience. Young people are said to be more interested in discussion centred on a 'discourse around erotics' and Allen (2001) proposed that this aspect of sexual health knowledge be included into the curriculum as a way of closing the knowledge/practice gap. In an evaluation of Te Ahurei a Rangatahi sexual health programme, Nikora and colleagues (2001) found a measured reduction in knowledge of young Māori following programme attendance. They considered the maxim, 'the more you learn, the less you know', aptly described the findings and considered the reduction in knowledge related to an idealised or inflated view of what young people think they know, compared to a shift or reassessment of current knowledge based on new information. This could imply that the knowledge/practice gap may diminish over time as reassessment of sexual health knowledge and its application takes place and may well be associated with cognitive development that progresses during adolescence.

The gap, or delay in translating knowledge into behavioural change is an important aspect to address in any preventative strategy to reduce chlamydia infection rates for young Māori women. Sexual health education programmes need to reflect the realities of young people's experiences including their cultural values and beliefs. Involving young Maori people in programme and content development would ensure this occurs and may contribute to reducing the knowledge/practice gap.

Access to services

Access to health services is about, “obtaining entry into, and through health services, and encompasses the timeliness and quality of both the process and the outcomes” (Cormack, Robson, Purdie, Ratima, & Brown, 2005, p. 31). The literature identifies a number of factors that impact on an individual’s capacity to access health services which operate at three levels; health system factors, health care process factors, and patient-level factors. Most often studies focus exclusively on patient-level factors such as socio-economic position, access to transport, and the individual’s knowledge, attitudes and beliefs. Yet health care process factors, or things at the level of the health care provider/person such as age, gender, communication skills, training, their values and beliefs also influence a person’s ability to access services. Lastly, health system factors which patients have little control over including policy decision-making, resource allocation, waiting times, cost and physical accessibility are often highlighted in research but can be more difficult to address. At any one level there may be multiple factors at play that either assist or hinder a person’s access to health services (Cormack, Robson, Purdie, Ratima, & Brown, 2005).

High rates of STIs among young people can be in part be attributed to reduced access to adequate sexual health care at each of the three levels (World Health Organization, 2004a). A number of barriers have been identified that hinder adolescent treatment seeking behaviour. Fenton (2001) describes adolescent avoidance of sexual health services despite apparent availability. This has been shown to be associated with health care process factors such as stigmatization and attitudinal barriers from parents, teachers, health care providers and reception staff who may be uncomfortable with, and deny youth sexuality (World Health Organization, 2004b).

In New Zealand, access barriers to health care services for young people tend to focus on patient-level factors but include a number of healthcare process factors. A review of the literature pertaining to primary health care services for young people identified; affordability, concerns of confidentiality, embarrassment, transportation, inconvenient times and lack of cultural appropriateness as the main barriers experienced by young people (Mathias, 2002). The Youth2000 survey (Adolescent Health Research Group, 2003) reported similar barriers for secondary school students accessing healthcare services. Over half of all students surveyed identified barriers to health services

(Adolescent Health Research Group, 2003), the most common barriers were; not wanting to make a fuss, couldn't be bothered, cost, not feeling comfortable with the health provider, too scared and worries that the consultation would not be kept private.

There is increasing evidence that health disparities for Māori have arisen out of differential access to health services (Ajwani, Blakely, Robson, Tobias, & Bonne, 2003; Cormack, Robson, Purdie, Ratima, & Brown, 2005; Tukuitonga & Bindman, 2002). With this in mind, it is feasible that issues regarding access to sexual health services may be further compounded for young people who identify as Māori.

Youth-specific services

The health needs of adolescents differ greatly from younger children and adults. There is increasing support for connecting young people with health services through the provision of school-based and youth-specific services to enhance access (Mathias, 2002; Ministry of Health, 2002c; World Health Organization, 2002). Involving young people in the monitoring and planning services has shown to be valuable (Gray, Hughes, & Klein, 2003; World Health Organization, 2004b). There is also growing evidence noting the importance of culturally appropriate health services for adolescents through the recognition and acceptance of Māori cultural values and beliefs (Sporle, 1993; Te Puni Kōkiri, 1994). Te Puāwai Tapu, based in the Wellington region, is the only kaupapa Māori provider that focuses specifically on sexual and reproductive health issues (Te Pūawai Tapu, 2007).

Cultural safety can also be applied in the context of youth culture to improve relations between adolescent users of health services and adult healthcare providers. It is essential that health professionals recognise and accept that they might not understand adolescent lifestyles, that reflecting on one's own youth is inappropriate as young people change from one generation to the next, and that comparing patients with their own adolescent children is inappropriate as young people are not a homogenous group (Gray, Hughes, & Klein, 2003). Healthcare professionals who have young people among their healthcare consumers need training and education to improve their communication and interactions with young people in order to facilitate improved understanding of, and access for adolescents.

School-based and community-based youth-specific health services are emerging across the country as part of the many recommended actions made in the Youth Health Action Plan (Ministry of Health, 2002c). These services have grown out of recognition that youth health needs are not being particularly well met by adult-focussed health services. The Ministry of Health has provided guidelines to set up school-based healthcare drawing on local initiatives and existing models to help health professionals work with schools to improve overall health outcomes for students (Ministry of Health, 2004b).

There is also a growing network of community-based youth health services, sometimes referred to as ‘one-stop-shops’, that provide ‘wrap around services’ for young people (Bagshaw, 2006). The Ministry of Health currently has 17 youth health services from Whangarei to Dunedin listed on their Youth Health website page (Ministry of Health, 2008b) listing services that range from health and well-being including sexual health services, counselling, recreational programmes, alcohol and drug programmes, to involvement with different agencies including youth justice at some centres. A recent survey of school-health services acknowledged recent advances in this area of primary health while drawing attention to the variability and quality of current school-based services (Bagshaw, 2006). Many of these services are located in urban centres with limited accessibility for those who live in rural areas.

While there is huge potential for school-based and youth-focussed community health services to connect young people with healthcare services there is a pressing need for greater funding to maintain and grow these types of services (Bagshaw, 2006). It is also important that the transition between youth-focussed services and other primary healthcare services is facilitated for young people into adulthood.

Resilience

Resilience is a broadly defined concept and has been referred to as, “positive adaptation to negative environmental influences” (Miller & MacIntosh, 1999, p. 159), the ability to, “bounce back and recover,” (Zunz, Turner, & Norman, 1993, p. 170) and as, “a dynamic process encompassing positive adaptation within the context of significant adversity” (Luthar, Cicchetti, & Becker, 2000, p. 543). A key feature of resilience has been its changeable, dynamic nature, rather than a static personal trait. These definitions also suggest that it can only be present with exposure to risk and adversity and by successfully overcoming the challenge, rather than evasion of risk altogether (Dekovic,

1999; Luthar, Cicchetti, & Becker, 2000; Rutter, 1993) and requires an interaction between the individual and their environment (Blum, 1998). One of the criticisms of the resilience literature is the difficulty in comparing studies resulting from inconsistencies and ambiguity in definitions and the application of terminology (Glantz & Sloboda, 1999; Kalil, 2003).

Resilience is also said to operate at three levels, individual, familial and societal, interacting to protect a person from adverse events and comprehensive programmes should occur simultaneously and intervene in each of the relevant settings (i.e. family, school and peer group) (Miller, 1999). Blum (1998) considers resilience to be less about the stress that an individual experiences placing more emphasis on the resources available to the individual to deal with stress. Resources may include family, financial, educational and community. Few studies internationally have examined resilience among urban youth population and ethnic minority groups (Garmezy, 1991; Miller & MacIntosh, 1999).

Risk factors

Resilience is integrally related to the concept of risk. Risk has been defined as something that, “renders the person vulnerable” to unfavourable outcomes as well as an, “early predictor” of adversative outcomes (Kaplan, 1999, p. 36). There is a considerable amount of literature pertaining to risk factors for contracting chlamydia and other STIs including; premature sexual experiences, conduct disorder, poor educational performance, early maturation, child sexual abuse, ethnicity and socio-economic disadvantage (Jackson, 2004). However, there has been a paradigm shift in the adolescent health literature from looking at high risk behaviours to identifying variables which facilitate and enable young people to overcome adversity and investigate protective factors (Resnick et al., 1997).

Protective factors

Protective factors safeguard against negative events and risk behaviours that contribute to adverse health outcomes. Clark (2002) outlines protective factors as belonging to four fundamental groups; environmental influences (neighbourhood, school, community groups, peer group), family processes (family resources, parental characteristics, parental behaviour), self-system processes (competence, nurturing, connectedness,

social responsibility) and individual characteristics (self-belief, health, development, cognition, genetic disposition). Inter-related to these and important to emphasise is a positive ethnic identity (Miller, 2002; Miller, 1999; Resnick et al., 1997). Miller (1999) argues that a positive racial identity is an important protective factor for young people from minority groups. Clark (1991) concurs stating that young African-American's who are able to view cultural differences as an asset and develop a bicultural identity through exposure to, and active participation in both cultures, are better equipped to deal with stress and do better academically. A secure cultural identity is also important for the well-being of Māori requiring access to, and connection with te ao Māori including resources such as the Māori language, family networks and ancestral land (Durie, 1999).

The Youth2000 survey identified two key protective elements for young New Zealanders, positive connection with family and school connectedness as critical to adolescent wellbeing for New Zealand young people (Adolescent Health Research Group, 2003). More specifically, these included getting enough time with parents, having a family meal together, teachers who cared about them, having an adult they can talk to and feeling neighbourhoods are safe. These factors may serve to protect, as well as promote responsible sexual behaviour among young people as Miller (2002) found that parent-child connectedness had a positive association to the postponement of sexual intercourse by young people and more consistent use of contraception.

Typically, adolescents spend less time in the family and more time in new contexts with peers, in the community, in a work setting and in romantic or sexual relationships. Their expansion of their world and the contexts in which they live can maintain well-being, support resiliency or increase risk. They may present new threats, such as the availability of alcohol, drugs and exposure to STIs. For many adolescents such threats are compounded by other circumstances, such as living in impoverished surroundings, experience ethnic, gender discrimination or moving to a new community where they have fewer familiar resources to draw on. Strong family and community connections help adolescents to develop resilience and coping skills, and support young people to choose healthy behaviours. It is not simply parents, but older siblings and peers, extended family and community members (neighbours, teachers, employers, religious communities, youth groups and elders) who need to take responsibility for the healthy upbringing and socialisation of adolescents.

Summary

In New Zealand nearly 18 percent (17.9%) of young people identify as Māori with rapid growth in numbers predicted over the next few decades. Adolescent sexual and reproductive health is important to the health and well-being of our young people. Values, beliefs and lessons learned by young people in adolescence can significantly influence sexual behaviour and decision-making later in life.

Adolescence is a period of rapid biological, cognitive and psychosocial developmental changes that impact on the sexual identity of young people. Adolescents have a propensity to want to fit in and be the same as everyone else, which can bring considerable pressure for young Māori to assimilate and conform to the dominant majority Pākehā culture. Young people construct their sexual identity influenced by the changes that take place around them and, importantly for young Māori, defining their own cultural identity as a young person growing up in New Zealand society. Adolescent developmental theories help contextualise this development and its role in establishing their sexual identity, sexual behavioural patterns and sexual relationships.

Typically, adolescents spend less time in the family and more time in new contexts being exposed to new experiences, opportunities and threats. Strong family and community connections will help adolescents to develop resilience and coping skills to aid young people to opt for healthy and safe behaviours. Developing responsible sexual behaviour in adolescence is complex and occurs in response to a person's values, beliefs and attitudes toward sexuality influenced by the social contexts young people participate in and wider societal norms. In relation to reducing chlamydia infection rates responsible sexual behaviour includes delaying or abstaining from having sexual intercourse, consistent use of condoms and regular STI testing.

The main sources of sexual health information reported by young people come predominantly from the people in their immediate environment including parents, school, peers and television. However, increased knowledge does not necessarily translate into responsible sexual behaviour. Making information more accessible and relevant to the lived experiences of young people and delivered in a manner that captures and engages their interest is critical to bring about behaviour change.

Young people are more at risk of contracting chlamydia through a combination of factors including lifestyle, developmental stage and behavioural choices, as well as experiencing additional barriers in accessing sexual health services. The introduction of youth-focussed health services including school-based clinics and community one-stop-shop services have the potential to improve access to health services for young people however, these services are more likely to be located in urban areas.

Chapter Three: Research Approach and Methods

Kaupapa Māori research is both less and more than a paradigm.

(Smith, 1999b, p. 7)

Introduction

Over the past two decades there has been a shift in New Zealand health research towards employing more culturally sensitive research and utilisation of Kaupapa Māori research processes (Smith, 1999b). In this study it has been important to approach the research in a manner that acknowledges, validates and legitimises a Māori worldview, and the existence of Māori cultural values within the research process.

This chapter describes the research approach and research methods used in this study. Initially I give an overview of the Māori inquiry paradigm and Kaupapa Māori research approach with discussion of how they influenced the study. Specifically, I outline how culturally-specific practices were integrated within the qualitative descriptive methodology. The final sections of the chapter discuss the rigour of the study, ethical considerations and the approach taken in the data analysis.

Inquiry paradigm

An inquiry paradigm is a set of assumptions, values and practices that constitutes a way of reality for the community that shares them outlining what is important, legitimate and reasonable (Patton, 1990). Kuhn (1970) describes the value of using a particular paradigm as its ability to solve a particular problem or answer a particular question. This suggests that one paradigm may be more useful than another, raising the question of which inquiry paradigm to use. To ensure the project outcomes from this study would be useful and meaningful for Māori, it was important that the research approach respected Māori cultural values and beliefs and employed distinctly Māori processes.

Grant and Giddings (2002) outline a range of Western inquiry paradigms utilising a paradigm framework underpinning how different methodologies and methods may be applied and the association between the researcher-researched. They note the emergence of indigenous inquiry paradigms, making links between Kaupapa Māori methodology and critical theory, yet distinguishing its position within a Māori framework. Unequal

power relations constructed by society maintain inequalities underpinning the foundation of critical theory and has synergies with a Māori inquiry paradigm (Pihama, 1993).

The continued subjugation and marginalisation of Māori in New Zealand society influenced the approach to the research question and research process used in this study. This study has been led and conducted by Māori and involved Māori at all stages of the research process. It was also important that a theoretical framework that acknowledges, validates and legitimises a Māori worldview, and the existence of Māori cultural values within the research process was used. Hence, a Māori inquiry paradigm was chosen to frame the study strengthening the research process and steering away from research processes that facilitate continued marginalisation of Māori through deficit-based and victim-blaming approaches.

Māori inquiry paradigm

Although Māori academics are yet to reach consensus on what constitutes a Māori inquiry paradigm, one view described by Ratima (2003) states that a Māori inquiry paradigm requires the integration of Māori worldviews acknowledging that what can be known is dependent on the cultural lens through which people view the world. The themes for a Māori inquiry paradigm set out by Ratima (2001) are; interconnectedness, Māori potential, Māori control, collectivity and Māori identity. Table 1 sets out how these themes may be applied in a health research setting. A Māori inquiry paradigm has yet to be fully articulated and affirmed within the Māori research community, however there is agreement that Māori health research should be Māori led, owned and meet the priorities set by Māori.

Table 1. Themes of a Māori inquiry paradigm

<i>Themes</i>	<i>Implications for Māori health research</i>
<i>Interconnectedness</i>	Māori understand the world in holistic terms, recognising connections between times, realms and situations. Therefore, the links between health and historical, cultural, spiritual, social, economic and political factors should be emphasised.
<i>Māori potential</i>	Research should lead to positive health outcomes for Māori, and greater opportunities for Māori to fulfil their own potential.
<i>Māori control</i>	Control of Māori health research should rest with Māori. Issues of intellectual property rights should be considered in relation to this theme.
<i>Collectivity</i>	Māori collectives will be a legitimate focus of Māori health research, and research should lead to positive outcomes for Māori collectives (e.g. iwi, hapū, whānau). Further, Māori health research should be accountable to Māori collectives.
<i>Māori identity</i>	Māori cultural heritage, Māori institutions and links to the environment are central to the Māori worldview and, therefore, need to be taken into consideration when practising Māori health research. Research should endorse Māori identity.

Source: Ratima (2001)

Methodology

Qualitative methodologies assist in the understanding of social phenomena, valuing the meaning, experiences and views of participants (Patton, 1990). A qualitative descriptive methodology was chosen for this study, framed within the underlying assumptions, principles and values derived from a Kaupapa Māori research approach (Smith, 1999a).

Kaupapa Māori approach

The development of Kaupapa Māori research has stemmed from concerns by Māori at being “researched to death” (p.1), and the desire to regain control and autonomy over

generating knowledge that is useful and relevant for Māori (Smith, 1999b). It is being used more and more in the academic arena creating space for conversations of how research can better meet the needs of Māori and challenging commonly practised deficit-based research (Cram, Phillips, Tipene-Matua, Parsons, & Taupo, 2004). In respect to research with Māori, Moewaka Barnes considers that, “the issues, usefulness and ownership of the research are most important, the methodology has to fit with that rather than the other way around” (Rankine, 2004, p. 2).

Inherent to Kaupapa Māori methodology is the respect, validation and connectedness with Māori cultural values and beliefs. It is at the cutting edge of indigenous research methodologies smoothing the progress of health research that is more meaningful and useful for Māori health advancement and other indigenous people across the world. Smith (2006) provides an outline for researcher conduct, seven culturally-specific Kaupapa Māori practices, that support Māori understandings of research ethics and endorse Māori cultural values as integral to the research process when researching with Māori communities. A Kaupapa Māori research approach has also been important in this study to ensure safety and integrity of the knowledge shared by the young women in this study, and that the research outcomes are useful to, and meet the needs of Māori communities and not solely used for personal academic advancement.

Smith (1999b) notes that these practices are often taken for granted by Māori researchers, but are important to articulate (Table 2). This was highlighted when the AUT Ethics Committee (AUTEK) requested clarification on how the research approach would apply in the study. I had taken for granted the approach used in developing the research proposal and when engaging with the participants and had not specified how these would be applied. To clarify these aspects for the committee I submitted a memo outlining Kaupapa Māori research practices that would be employed in the research process.

Table 2. A community-up approach to defining researcher conduct (Source: Smith, 2006)

Cultural Values (Smith 1999)	Researcher Guideline (Cram 2001)
<i>Aroha ki te tangata</i>	A respect for people – allow people to define their own space and meet on their own terms.
<i>He kanohi kitea</i>	It is important to meet people face to face especially when introducing the idea of the research, ‘fronting up’ to the community before sending out long complicated letters and materials.
<i>Titiro, whakarongo... kōrero</i>	Looking and listening (and then maybe speaking). This value emphasizes the importance of looking/observing and listening in order to develop understandings and find a place from which to speak.
<i>Manaaki ki te tangata</i>	Sharing, hosting, being generous. This is a value that underpins a collaborative approach to research, that enables knowledge to flow both ways, acknowledges the researcher as a learner and not just a data gatherer or observer. It also facilitates the process of ‘giving back’, of sharing results and of bringing closure if that is required to a project but not to a relationship.
<i>Kia tūpato</i>	Be cautious. This suggests that the researchers need to be politically astute, culturally safe, and reflective about their insider/outsider status. It is also a caution to insiders and outsiders that in community research things can come undone without the researcher being aware of being told directly.
<i>Kaua e māhaki te mana o te tangata</i>	Do not trample on the ‘mana’ or dignity of a person. This is about informing people, guarding against being paternalistic or impatient because people do not know what the researcher may know. It is also about simple things like the way westerners use wit, sarcasm and irony as discursive strategies of where one sits down, for example Māori people are offended when someone sits on a table designed and used for food.
<i>Kaua e māhaki</i>	Do not flaunt your knowledge. This is about finding ways to share knowledge, to be generous with knowledge without being a ‘show off’ or being arrogant. Sharing knowledge is about empowering a process but the community has to empower itself.

These include the research topic which investigates a Māori health priority area and that the findings would contribute to the progression of health outcomes for young Māori women, flowing on to whānau and the wider Māori community. Legitimising the cultural identity, values, beliefs and worldviews of the young Māori women interviewed was central to data collection and the analysis with links being drawn between health and historical, cultural, spiritual, social, economic and political factors. At interviews, manaakitanga and whānaungatanga were important aspects of making participants and whānau feel respected and at ease. It also included arranging venues and times that suited the participant and letting the participant make the final decision on the arrangements, helping with transport if needed, providing kai, encouraging whānau and friends to be present if needed, ensuring participants were not out of pocket through their participation and leaving a koha to acknowledge their support and participation. Dissemination of findings will be shared with Māori collectives at hui, meetings and conferences, as well as providing participants with a summary report.

It was also important to recognise and appreciate the diversity of the young Māori women and acknowledge that being Māori was different for each one of them. One thing that was consistent was their desire to contribute to making a positive difference for Māori well-being through their involvement in the project.

Relevance for Māori

As outlined in the previous chapter there are disproportionately high rates of chlamydia among young Māori women. Despite these overwhelming health needs, there is a lack of sexual health research that focuses on how STIs affect Māori. To develop and implement effective interventions to address the current epidemic ideas, opinions, and information from those most affected is required. The aim of this research project is to create a space for Māori voices to be heard and to help inform sexual health education and services for Māori.

This research project will also contribute data to the larger, Mauri Tū, Mauri Ora study, looking at sexually transmitted infections in indigenous communities, being conducted at the University of Auckland. The Mauri Tū, Mauri Ora project is a five year study being funded under the tripartite International Collaborative Indigenous Health Partnership between the Health Research Council of New Zealand, the Canadian

Institutes of Health Research, and the National Health and Medical Research Council of Australia.

Research Methods

Research methods in this study have been selected to address the main research question, which align to the project objectives set out in the introductory chapter. A qualitative descriptive approach was chosen as it allows the topic to be covered in greater depth and detail than a quantitative survey. The primary means for data collection were from semi-structured interviews.

Sexual health was not a topic area that I was familiar with. This both facilitated and hindered the reading of the literature and during the interview stage. In the initial stages I read widely, possibly too widely, to gain an understanding of the subject matter spending considerable time sorting through literature for material that was relevant and important to the study. In contrast, this lack of expertise was also an advantage in the field during interviews. Not being ‘the expert’ allowed me to be drawn into the women’s stories and experiences rather than being tempted to coax them into an answer that would fit a particular hypothesis. The participants were the experts and I was the pupil.

Sampling approach

A purposive sampling method was used to select young Māori women to participate in the study. Purposive sampling allows selection of participants rich in information for the purpose of the study in order to gather a range of views and opinions (Patton, 1990).

To ensure the study would generate findings that would be useful and responsive to Māori, only young women who self-identified as Māori (either mixed Māori or sole Māori ethnicity) were invited to participate. They were also required to be aged 16 to 24 years, and live in the Auckland region. The age range was selected as it is consistent with the ESR data collection groupings; 15 to 19 years and 20 to 24 years. To obviate the need for parental consent, 15 year olds were excluded from the study. It was very difficult to find younger participants willing to volunteer. Two 16 year olds showed initial interest agreeing to an interview, then withdrew. The Auckland region was selected as the primary study location as it has the highest rate of chlamydia for young

women matching ESR laboratory and clinic data coverage (ESR, 2007), and minimising travel costs.

Participants were drawn from the researcher's community contacts including Māori health and community networks, sporting groups, as well as volunteers from the tertiary student body at AUT University and the University of Auckland. AUT Health and Wellbeing Clinic staff, Māori Student Liaison Officers and personnel in the Māori Department at the University of Auckland were asked to assist by informing students of the study and displaying posters on campus notice boards (Appendix B). This was followed by an introductory email and text message sent out to known contacts. Using email and text messaging allowed young people to volunteer discreetly and targeted forms of communication frequently used by young people that were relatively cheap and accessible.

From the outset I was concerned that there would be very few young Māori women interested in participating in the study as talking about sexual health with an unfamiliar person may cause embarrassment and may be viewed as a private or, sensitive topic area not to be discussed openly. Therefore the approach to finding volunteers was aimed at maintaining participant privacy throughout the recruitment process. Text messaging (n=5) and an email (n=5) distributed via the 'kumara vine'¹ lead to more than half of the volunteers for the study, as opposed to the poster approach (n=2). Four additional volunteers were encouraged to take part by a participant who had already been interviewed for the study.

I set out with the intention of interviewing 16 to 20 young Māori women. Initially twenty two potential participants volunteered to take part in the project. Six of these young women were not interviewed as a result of non-response to ongoing communications (n=4) and availability issues (n=2). The final number of participants interviewed totalled 16 as there had been a reduction in the number of new volunteers, no new information was being gathered and the time constraints relating to keeping the project timeline on course. Interviews were conducted on a one-on-one basis, except for one, where two young women requested to be interviewed together. Both participants

¹ The 'kumara vine' is a term used to refer to an informal network of communication and can be likened to the 'grapevine'

spoke openly about their individual experiences and showed interest in their different upbringing and backgrounds which prompted further discussion and insights.

The sample included participants aged 17 to 23 years with the median age 19.5 years. Figure 6 presents the number of participants in age categories used in ESR surveillance data. It shows a fairly even distribution of participants between those aged 19 years and under (n=9), and 20 years plus (n=7). There were no participants aged 16 or 24 years.

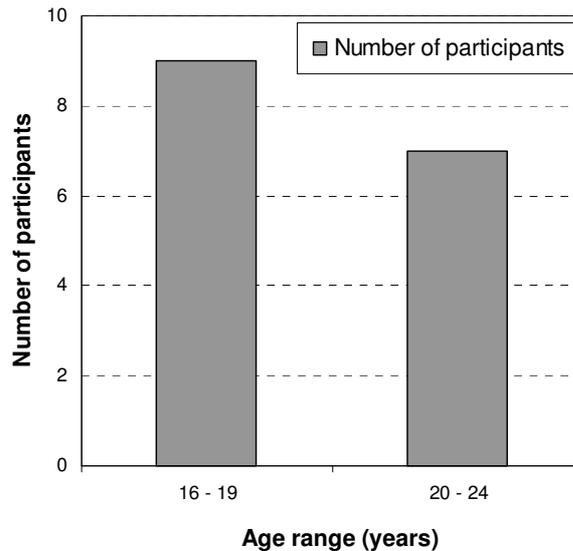


Figure 6. Age of participants

All participants resided within the Auckland region. Table 3 presents participant age by their city of residence showing that most of the participants lived in Auckland City (n=7), followed by Manukau City (n=4), Waitakere City (n=3) and North Shore City (n=2). The large number of participants living in Auckland City reflected the large proportion of participants enrolled as full-time tertiary students living and studying in the Auckland central business district.

Table 3. Participant age by city of residence within the Auckland region.

<i>City of residence</i>	<i>Age (years)</i>									<i>Total</i>
	<i>16</i>	<i>17</i>	<i>18</i>	<i>19</i>	<i>20</i>	<i>21</i>	<i>22</i>	<i>23</i>	<i>24</i>	
<i>Auckland</i>	-	1	1	2	1	1	1	-	-	7
<i>Manukau</i>	-	1	1	1	1	-	-	-	-	4
<i>North Shore</i>	-	-	-	1	1	-	-	-	-	2
<i>Waitakere</i>	-	1	-	-	1	-	-	1	-	3
<i>Total</i>	0	3	2	4	4	1	1	1	0	16

Participant age by highest level of education is presented in Table 4. Just over half of the participants were enrolled in a tertiary course (n=9), either pursuing an undergraduate certificate (n=3), diploma (n=1) or degree (n=5). Of those enrolled in a tertiary course, one participant was a single parent with a five year old and one was pregnant expecting her first child. Three participants were working full-time. Of those in full-time work, two had completed an undergraduate degree. One participant had left school without a formal qualification and was living with her partner and expecting her second child. Three participants were enrolled in a teen parent high school and were either completing NCEA Level 2 (n=1) or NCEA Level 3 (n=2). Each of these young women had one baby under the age of one year.

Table 4. Participants' age by highest formal qualification

<i>Level of Education</i>	<i>Age (years)</i>									<i>Total</i>
	<i>16</i>	<i>17</i>	<i>18</i>	<i>19</i>	<i>20</i>	<i>21</i>	<i>22</i>	<i>23</i>	<i>24</i>	
<i>Bachelor Degree</i>	-	-	-	-	1	1	-	-	-	2
<i>Diploma</i>	-	-	-	1	-	-	-	-	-	1
<i>Certificate</i>	-	-	-	1	2	2	-	-	-	5
<i>NCEA Level 3</i>	-	-	-	-	-	-	1	1	-	2
<i>NCEA Level 2</i>	-	1	2	-	-	-	-	-	-	3
<i>No formal qualification</i>	-	2	-	1	-	-	-	-	-	3
<i>Total</i>	0	3	2	3	3	3	1	1	0	16

Interview process

Semi-structured interviews were chosen as the principal data collection approach as face-to-face interviews correspond with Kaupapa Māori practices and Māori cultural values outlined by Smith (1999). They have also been shown to be especially useful in exploring STI knowledge, attitudes and behaviours where little is known about the topic (Power, 2002). An interview schedule was developed in discussion with known health and educational workers in the area of sexual and reproductive health and from current literature. The interview schedule focussed on the participant's sexual health knowledge, how their knowledge was gained, the appropriateness of the information and the appropriateness of available sexual health services and accessibility issues (Appendix C). The use of a semi-structured interview schedule allowed the main research questions to be addressed while allowing participants to share their personal stories. Open-ended questions and probes offered participants further opportunity to expand on their experiences generating greater depth of information. Following the first few interviews, topics not specifically outlined in the interview schedule were consistently raised by participants. In consultation with my supervisors, it was decided that additional questions related to participants' sexual history should be incorporated. The interviews were more conversational with questions weaved in and worded to fit-in with developing the conversation. This approach, described as the interview guide approach (Patton, 1990), can lead to gaps in data as questions perceived to be less pertinent may be omitted, tailoring questions to each participant. The omission of some questions during interviews was discovered during the analysis phase and some participants were re-contacted for further information, a process allowed for within the ethical approval gained for the study.

Interviews generally took place in participants' homes, but also included a range of other locations such as; parks, the beach, AUT library and at a local McDonalds Restaurant. Information was gathered by taking written notes and digital recordings. The interviews ranged from between 45 minutes to nearly three hours. All participants consented to the interview being recorded. Interviews were recorded on a Panasonic digital recorder [RR-US450] and downloaded onto the researcher's laptop using the Panasonic Voice Editing software (Version 2.1 Premium Edition). Interviews were transcribed by a transcriptionist, then listened to and edited by myself to ensure

accuracy. The transcriptionist signed a confidentiality agreement prior to receiving files (Appendix D) to maintain confidentiality of participant information.

Rigour

One of the greatest strengths of qualitative inquiry is the human factor, however, this also contributes to its fundamental weakness as there is no straightforward way to test for reliability and validity (Patton, 1990). In this study a number of aspects have contributed to its rigour including; the positioning and credibility of the researcher, appropriate supervision, piloting of the interview schedule and the use of verbatim descriptions from the participants.

In the introductory chapter I set out my positioning as the researcher and my potential biases. As a novice researcher I acknowledge that this project is part of my learning to be a researcher and as such I have drawn on my previous experience of undertaking research, my professional clinical skills and life experiences as starting points for developing my knowledge of the research process and interview skills.

As a novice researcher it was important I had appropriate academic support and guidance. Two supervisors were approached drawing on the strengths of each individual, one supervisor for methodological and process advice, and a second for the topic area and tikanga Māori support. The diverse skill sets my supervisors offered proved complementary and extremely valuable.

The interview schedule used for data collection was piloted prior to use. This helped shape the leading questions, useful probes and ways to encourage participants to share their stories to ensure responses would generate information to answer the research question.

Finally, the discipline and rigour of qualitative analysis depends on the ability to present descriptive data in such a way that others can draw their own interpretations. The findings chapter describes the major themes and patterns, as well as alternative ideas captured in the interviews, while the discussion chapter explores their meaning.

Ethical considerations

Institutional regulations and professional codes of conduct are seen to direct research ethics. Ethical approval was sought from AUT Ethics Committee and the research project was given final approval on 30 May 2007 (Appendix E).

Māori understandings of research ethics is at a basic level of people, as individuals and as members of communities, of respect, control and reciprocity (Hudson, 2004). In this study these ideas have been integrated into various research processes and activities including recruiting participants, working with participant's and encouraging involvement and control of the interview arrangements, gaining informed consent, ensuring privacy and confidentiality, generosity, reciprocity and cultural safety.

The ability to strengthen relationships and build connectivity has been important in this project not only in terms of talking with the young women who participated, but in accessing communities and making contact with the young women using the 'kumara vine'. The process of establishing whānau relationships, 'whakawhānaungatanga', outlines your connectedness demonstrating an unspoken but implicit commitment to other people which assists the research process (Bishop, 1998).

In an effort to maintain privacy and confidentiality in recruiting participants, text and email were chosen as a primary means of contact. Following this a standard process to gain informed consent so each participant understood the purpose of the research was followed. Each participant was provided with an information sheet (Appendix F) outlining what would happen with the information they disclosed and their control over that information. This information was discussed at various opportunities prior to the interview taking place and a consent form was signed by each participant at the time of the interview (Appendix G). All participant information, interview recordings and transcripts have been stored safely and securely in a locked filing cabinet at AUT, Division of Healthcare Practice.

Participants were given a koha that included an information package containing condoms, pamphlets on sexuality, STIs and chlamydia, and a \$40 voucher. The voucher was generally a pre-pay mobile phone voucher, and for some a petrol or supermarket voucher.

The manager of the AUT Health Counselling and Wellbeing clinics was approached in advance to request counselling for any participants who disclosed sensitive health information that may require professional assistance. Three free sessions were offered to each of the study participants requiring support (Appendix H), however these were not taken up by any of the participants.

This research also provided the young women with an opportunity for increased access to sexual health information in discussions during the interview as well as the provision of educational material developed for young Māori on chlamydia and sexual health sourced from the Auckland Sexual Health Service. Participants interested in progressing their tertiary education were also encouraged to discuss their study options at the time of the interview.

Data analysis

Data analysis involved the inductive approach of categorical content analysis which included; coding the data, then placing coded data into categories of similarity so as to identify major categorical themes. Further analysis involved re-categorising the themes into umbrella and sub-themes (Patton, 1990). The data analysed included not only the use of transcripts of the interviews but the field notes taken following each interview which included comments and observations I had made. Analysis of initial interviews uncovered some influences that I then checked out with later participants. Some of these influences were their secondary school's curriculum, family structure, rural or urban upbringing and level of education. During analysis of the transcripts further notes or memos were made as to possible themes that were becoming apparent within the coding and categorising process. Data at the coding and categorising stage were organised using the data analysis software package NVivo, then when deriving themes, manual coding was used.

Finally, cross-case analysis was used to identify responses to answer the research objectives for each participant. Other issues central to the project aims were identified from the literature such as age, rural/urban, condom use, multiple partners, diagnosis and testing were then analysed for different perspectives.

Descriptive qualitative analysis answers specific questions but also involves interpretation when deriving themes. Hence, in Chapter Four I provide answers to the posed research questions, while in Chapter Five I offer explanations and explore

alternative theories, in an attempt to answer the ‘why’ questions and the possible significance of particular results.

Summary

The study is positioned within a Māori inquiry paradigm to produce outcomes that are useful and meaningful for Māori. It uses a qualitative descriptive methodology and Kaupapa Māori research practices that legitimate and validate Māori cultural values and beliefs as inherent to the research process. Participants were drawn from a range of sources including Māori health and Māori student networks. Interviews were undertaken as the main source of data collection, and followed the ethical considerations set out by AUTEK. Although data is presented within the following chapters under specific categories and themes, the descriptive format used also enables readers to draw their own conclusions.

Chapter Four: Findings

We all hold the knowledge we need within us. (Awatere, 1995, p. 38)

Introduction

This chapter presents a snapshot of the reported knowledge, attitudes and behaviours of the young women interviewed in relation to sexual health and in particular chlamydia, the most commonly diagnosed STI among young Māori women. The chapter starts by presenting a profile of the participants' iwi affiliations and cultural connectedness, followed by information concerning their reported sexual behaviour, sources of sexual health and STI knowledge, and attitudes concerning accessibility and appropriateness of sexual health services. A list of specialised sexual health terms can be found in the glossary (Appendix A).

Cultural connectedness

The majority of participants (n=14) were able to identify their iwi and/or hapū affiliation(s). All participants were from North Island iwi/hapū, extending from Ngāti Kuri in the north to Te Ati Awa in the south. Three had attended kura kaupapa Māori or bilingual units in secondary school, with one opting to rejoin mainstream education after one year. Three reported being actively involved in kapa haka.

Just over half of the participants were born and raised in Auckland (n=9) and seven had moved to Auckland from smaller towns or cities for education and/or work opportunities. Half of the participants (n=8) gave the impression that they did not connect strongly with their ancestral roots and had not maintained strong connections with te ao Māori and were less familiar with their whakapapa and/or Māori cultural practices. They appeared to be participants where one parent claimed Māori descent reporting that their iwi identity belonged more to that parent. Of those who appeared to have a weaker cultural connection, all except one, reported to have been raised in the Auckland region and had had a baby at, or before, the age of 19 years.

Reported sexual behaviour

The majority of participants talked freely and frankly about their sexual history, experiences, attitudes and opinions. One of the younger participants (17 years) appeared hesitant and cautious discussing sexual matters candidly despite repeated assurances that any information supplied would remain confidential.

First sexual intercourse experience

Nearly all of the participants (n=15) reported ever being sexually active. Figure 7 presents the age at which participants reported first having sexual intercourse (sex), and ranged from 13 to 19 years. The median age of sexual debut was 15 years. One participant, aged 19 years, had firm religious beliefs that sex was something shared between a husband and wife and she planned to wait until she was married before having sex.

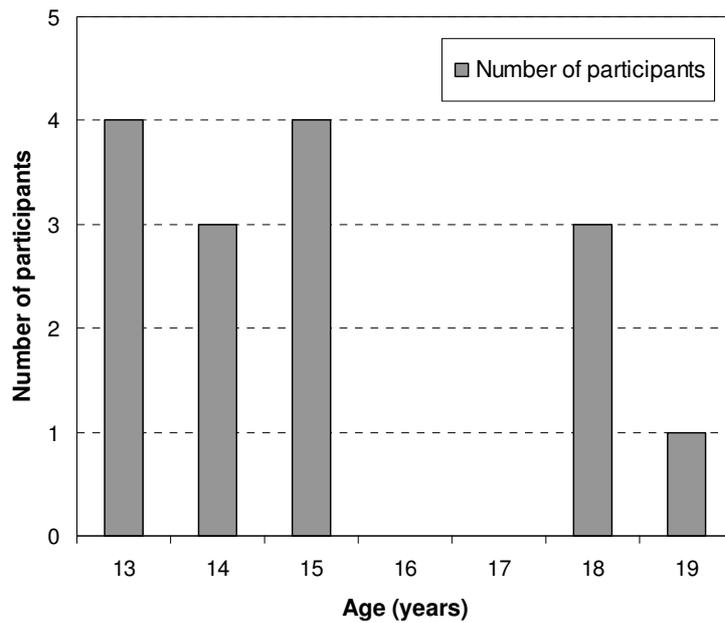


Figure 7. Age at first sex

Half of the young women reported that they felt pressure to have sex to fit in with friends, to be cool and be part of the peer group. One participant recalled very clearly friends' expectations and the associated peer pressure reporting that it was significant in her decision to have sexual intercourse for the first time at age 14 years. She recalled thinking, *"Other people are doing it therefore it's cool to be doing it, like [pause] they made it out to be something that it obviously wasn't at the time! You know like sort of [pause] follow the crowd"* [MM].

Two young women were particularly reticent about saying that they had sex at the age of 13 years and now regretted being so young. These participants alluded to individual characteristics such as self-esteem and valuing yourself as important qualities to have had to reduce their likelihood of early sexual debut. One had found herself in a powerless and vulnerable situation, coerced into having sex with an older male,

DE: *He said he was 19 but he looked older than that.*

Interviewer: *Did he force you?*

DE: *Uuumm [paused and looked down appearing not to have considered the situation in this light before]. Nup. Or I didn't say no [in a questioning tone as if to ask does this mean forced?].*

Interviewer: *But you weren't saying yes.*

DE: *Yeah. I didn't want to [have sex], but I didn't want to say anything.*

Interviewer: *Pretty tough at 13? To stand up and say nup.*

DE: *Mmmmm [in agreement]. To a big coconut, YES! [laughing tentatively]*

The other participant unwilling to share her first experience of sexual intercourse said her older brother had since helped her accept that you did not need to have sex with boys for them to like you. Her current view was that, *"It's all about valuing yourself as a person as opposed to needing to do what everybody else wants you to do"* [TL].

Strategies used to delay having sexual intercourse by participants who had their first sexual debut in their late teens were twofold, some chose to wait because of strong religious beliefs while others had made a promise to themselves that they'd wait until they reached a certain age and/or until they'd found the right person. One appeared quite apprehensive about physical intimacy but this may have been more related to a fear of emotional intimacy and of being hurt or abandoned,

I didn't really know what sex was about, or what it was, and so I didn't want to put myself in a position or... I don't know what the hell it would be like, and just through hearing what they've been through [friends/peers], or done, I was like, 'oh shit' I couldn't imagine doing that, couldn't see myself just jumping into something like that. ... Things like that just buzz me out. I think that's mainly why, and seeing my parents split and that. Different perception on what love and that is. [CC]

Another participant who had found it hard to withstand peer pressure to have sex had lied to her friends and told them she was having sex to fit in and be seen as cool. An 18 year old participant who had had sex for the first time within the last 12 months felt there must have been something wrong with her because she had not had sex, “*You hear about all these other people and think ‘oh shame, I haven’t yet’, you know... you feel like dumb, or stupid for not doing it yet*” [NG].

Pregnancy and induced abortions

Eight participants reported having been pregnant in the past, three young women had had a termination and five chose to continue the pregnancy through to term. Of these young mothers, two were pregnant for a second time at the time of interview. One reported having had a termination of pregnancy in the past and chose to continue the current pregnancy as she did not want to undergo a termination a second time because of the emotional trauma experienced previously.

A common remark made by the young mothers when musing over becoming pregnant was their lack of, or inconsistent use of contraceptives.

I used condoms for the like first couple of times and then I was like... and then I didn’t use condoms, and then I was like... didn’t [pause] like nothing happened, and I was like... sweet I’m not going to get pregnant, like kind of thing... but then I did. [AM]

If you miss one, you have to take it every day and I’m really good at forgetting and so therefore it was pointless taking it in the end so I eventually came off it. [MC]

Eight participants who had used the oral contraceptive said they had had difficulty remembering to take it regularly and five had switched to using Depo-Provera an injectable contraceptive, referred to by participants as ‘the jab’.

Variable contraceptive use was also combined with a notion that getting pregnant was something that only happened to other people. This was raised in a number of discussions with one particular participant put on oral contraceptives by her school nurse saying,

SN: *I'm not good at taking pills... I always forgot them.*

Interviewer: *Do you reckon that's how you got pregnant?*

SN: *Yeah, probably, and I just thought 'it will never happen to me'.*

In contrast to the young women who chose to keep their babies, one participant surprised at the number of girls from different backgrounds that had had terminations and summarised conversations she had had with acquaintances at school,

Like one girl told me that she just got pregnant and was like, oh nah I can't do it, didn't have enough support, she knew that her mum would just flip and be like 'get out' sort of thing. So she had an abortion. One girl, her family were like really like strict Catholics and her mum, her parents made her have an abortion and like, don't ever speak of this ever again. [ET]

Number of sexual partners

The total number of sexual partners since becoming sexually active reported by participants varied. Figure 8 shows the reported number of different sexual partners, ranging from zero to more than ten partners. Most participants (n=8) reported having between one and five sexual partners, and a few (n=3) reported having more than ten.

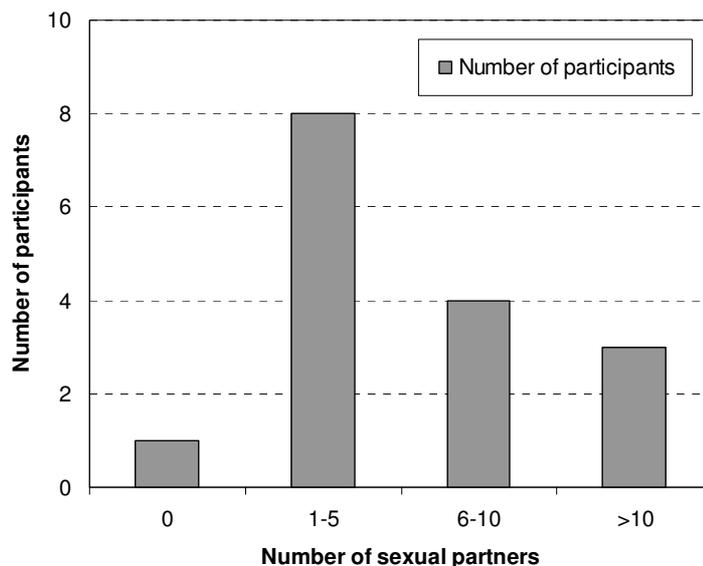


Figure 8. Number of sexual partners

Participants, who started having sexual intercourse before the age of 16 years, generally reported a larger number of sexual partners. The median age of sexual debut for those who reported six or more sexual partners was 14 years, compared to 18 years for those who had had five or fewer partners. This appeared related to an acceptance of casual sex as a normal behaviour in early adolescence, frequently associated with partying and drinking alcohol. Yet it appears that some participants became more reflective about earlier casual sexual encounters in their late teenage years,

I usually get on with, and see people like 12 years older than me - but that's alright! So yeah that's probably where the whole maturity thing comes in whereas you know. It's also cause I've been there done that at high school and once you get older you sort of look back and realise it's not as cool as what I thought. [MM]

Age-mixing in sexual relationships mentioned by this participant was in contrast to most other participants.

One participant who had recently moved to Auckland for work opportunities thought that the fast-paced life of the city and associated night-life and clubbing scene encouraged more sexual activity and the potential for having multiple partners with a bigger pool of people. It allowed greater anonymity than the smaller towns she had lived in. Two others who had rural upbringings felt that moving away from parents and the whānau environment had allowed them too much freedom and that there was no longer anyone to enforce behavioural boundaries.

Chlamydia

Overall, most participants had heard of chlamydia prior to participating in the project. Of the 15 sexually active participants interviewed, the majority (n=11) reported that they had been tested for STIs and/or chlamydia in the past and seven reported to have had a positive diagnosis for chlamydia.

Of those who were asked if they were worried about contracting chlamydia or another STI (n=11), the majority said that they were not worried at all (n=7), or it was not something they had thought much about in their early teens, *“I mean in regards to STIs I don't think it's so much a big deal. Like it's not something that's looked upon as a major concern to young people at that age”* [MM]. Yet again there was the general

opinion that 'it would never happen to me', and something that only happened to promiscuous girls, "*I just think, or I thought people who sleep around hard out get STIs, but that's not the case*" [MA].

The participants who were concerned about contracting an STI were not actively taking steps to protect themselves. One such participant responded, "*I am... like I don't know? It's weird [pause] like I am concerned, but I am being careless at the same time*" [JJ].

When asked what participants thought about someone who had chlamydia or another STI, participants were split. Some thought it was the individuals fault and deserved it, those who had not been diagnosed in the past generally said they would feel sorry for that person, and others just thought it was disgusting. One participant replied, "*Ooooooh paru! But then in saying that I'd be the biggest hypocrite... yeah cos it happened [pause] its just one of those things that happens*" [MM]. She went on to explain what she sensed as a societal view held by adults that young people contended with, that going to the doctor because you are sick is acceptable but if you go for an STI test you're seen as sexually active and implies that you are promiscuous. Another who had been diagnosed with chlamydia in the past implied people who became infected were irresponsible, "*I'd actually say good job. They all know about condoms and stuff. They know that's what happens if you sleep around*" [DE].

All participants were able to recall variable amounts of information about symptoms and sequelae, testing and diagnosis, treatment and management. Two participants had extensive knowledge stemming from their tertiary studies as well as knowing someone, or had worked alongside someone, who specialised in the area of sexual health. Those who had been diagnosed with chlamydia generally shared accounts of their personal experience, while the other seven participants tended to automatically default to a position of ignorance stating that they felt that they had a lack of knowledge about STIs and thought they should know more. However with prompting, these seven participants were generally able to recall basic preventative information.

I know stuff all, I mean I know the STI's are out there but I know stuff all about like individual specific... I guess I've never really sat and thought about STIs and stuff [pause] its just [pause] you know they're out there, and you hear them talked about all the time but you just think [pause] well, you don't think about it really. [TL]

Prevention and condom use

The term ‘safe sex’ was used by seven participants when talking about prevention predominantly in reference to condoms as a protective device. One participant, who had strong religious beliefs, mentioned abstinence stating, “*Wear a condom to protect yourself or just don’t do it*” [TP]. All participants recognised that ensuring their partner used a condom would help them prevent catching chlamydia or other STIs. However, many acknowledged that this was not something they did consistently. Only two participants mentioned asking their partner about their sexual history,

I’m not afraid to ask, you know, even just being able to word it like “I’m not going to go home with any new presents today am I?” So you know [pause] things like that. So being able to ask the right questions, being able to trust the person you’re sleeping with. [CT]

Issues raised related to negotiating condom use included; use of other contraception methods, trust and loyalty issues, boys’ attitudes toward condoms, availability of condoms and the idea that ‘it will never happen to me’. One young mother who had been told to use condoms in the past had never really known how to use them,

I never put them on... because I don’t like doing that and I didn’t know how either, I kind of had an idea and I only properly learnt from Family Planning people came to our school this year, and had those stick things and they showed us how to do it and that’s the first time I ever learned properly how to do it. [SN]

Condom use was more commonly raised in discussion in reference to being a contraceptive choice to prevent pregnancy, rather than as an additional protective mechanism against contracting chlamydia and other STIs. A common sentiment expressed by the majority of the young women using other contraceptive methods was,

If I’m on the pill I don’t use condoms. It’s bad. I don’t think we’ve really had the hard ground evidence, had the concrete stuff to make us realise, no wait you need this to protect yourself. I don’t know how ... it’s the same with a lot of girls. They just don’t use them! [JJ]

I went on the jab and then like [pause] with my other boyfriend I didn't use condoms just cause like [pause] I'm on the jab - its ok. [AM]

Trust and loyalty issues were raised by some participants who believed that not using condoms relayed a message to their partner of trust and commitment in the relationship. There also seemed to be a pattern that condom use was more likely to occur in casual sexual encounters with a new partner. As a relationship became more established with greater trust formed, condom usage would be replaced by alternative contraceptive methods most frequently 'the pill' or 'the jab'. Despite the unspoken gesture of trust most participants were able to recount a story of infidelity that had resulted in they, or their friend contracting chlamydia while in an established relationship with a boyfriend or partner.

Negotiating condom use with boys was raised by a few participants. Some participants felt boys were less interested in using condoms and in the heat of the moment participants were less likely push the use of condoms citing a number of reasons such as; condoms were a hassle, they couldn't be bothered, it killed the mood, it reduced sexual pleasure for the boy, they did not know how to put them on, or condoms were not readily on hand. One young woman said in a careful manner that she did not want to make her partner angry by pushing him to wear a condom, "*when boys get angry, they get really angry*" [DE]. In contrast, a minority of participants (n=3) said their partners willingly agreed, or would suggest that they should use condoms.

There was also a perception that boys do not care about catching STIs or getting girls pregnant. In a discussion with two young women, they were convinced that boys had few concerns about the consequences of sexual activity,

NG: *I reckon it's the boys fault we don't wear condoms cause their attitude towards it is 'no I don't need one' you know, they don't care. Where girls are more cautious, but if you're in the moment and the guy says that [pause] and like 'ok' [resignedly].*

AM: *I reckon as well its cause like... like the dudes aren't the ones that are getting pregnant. Like if you get pregnant they can just go, act like they don't know and then they've got nothing attached and then it's all on you so that's probably why they don't care.*

Overall, it appeared that most of the young women would go along with the boy's decision suggesting that females allow males to dominate decision-making concerning condom use in early sexual encounters playing out gender norms of male power and control and feminine traits of submission, compliance in wanting to please. However, a 21 year old participant felt she was now more comfortable and skilled at negotiating and talking about safe sex behaviours with potential partners,

I'm just coming through a stage where I really understand it, or I understand STIs more than ever. Younger people don't necessarily have that background, younger people are less likely to know a great deal. I guess it comes with maturity [pause] the ability to talk about sex, and safe sex. [MM]

One participant agreed that prevention was important, and added that there was a need to stress that young women undertake regular STI checks,

I know it should be all about prevention [pause] but if you're going to have unsafe sex is to make sure they're checked out, so they're not passing it onto someone else, whose passing it onto someone else. [CT]

Most participants got condom supplies from school. Participants who perceived their school clinic to be less accessible reported that it was more difficult to access condoms and other contraception. A few participants raised concerns that their parents might find out that they had condoms in their possession, their room, bag, or clothes pockets making them feel uneasy about keeping them readily available as they may get caught and found out.

Symptoms

Six participants reported knowing that chlamydial infection may not exhibit symptoms in females. Other symptoms known by participants included a burning sensation when passing urine (n=3), vaginal discharge (n=2) and abdominal pain (n=3). For many, their knowledge was focussed on how to protect themselves against contracting STIs and chlamydia rather than describing signs and symptoms, or treatment and management, *"I suppose it's not really a knowledge of how, or what the symptoms are, but more the knowledge how you can get it and how to prevent it and stuff like that"* [MM].

Transmission

Many participants described how the infection could be spread by having unprotected sex with an infected partner, and one participant recalled that chlamydia could be transmitted via oral sex. One participant passed chlamydia on to her baby during the birth process, as a result her baby contracted conjunctivitis.

A few participants had held common misconceptions of how chlamydia could be transmitted, but these had been dispelled in school sexual health education classes. Some had thought you could catch chlamydia off a toilet seat or from using the same towel for showering as an infected person. One participant said,

Cause I always thought a lot of STIs were [pause] you know, if you had the same toilet seat and that [pause] kind of [pause] infection, and then I learnt 'no its not' they die, the bacteria die or whatever and they can't live outside the body. [MA]

A number of participants concurred that guys blamed young women for catching chlamydia,

In my experience with guys, even just talking about STIs, and quite a lot of them think it's the girls problem, the girls fault... they're [the boys] the victims... cause you've got it you should know you've got it. [QC]

One participant put it onto young men needing to take more responsibility for getting tested and treated.

Few participants mentioned the increased risk of contracting chlamydia or another STI by having sex with multiple partners. However five young women reported regularly attending a health service for STI checks.

Diagnosis and testing

Participant knowledge of chlamydia diagnosis and testing strongly reflected recollections from personal experience. Just over two thirds of participants (n=11) had been tested for chlamydia in the past, and recalled providing a urine sample or having swabs taken. One participant cringed while recalling having a speculum inserted to have swabs taken saying “*Yeah, it was pretty gross*” [MA], while another considered

girls more fortunate than boys as, “*Chlamydia is ok for girls to check because its just [pause] you only have to mimi in a cup*” [JJ]. Five participants who had not previously been tested were not sure what diagnosis and testing involved.

Long-term consequences

Long-term consequences of untreated chlamydia infection were not something many participants knew about. This may reflect the perception that participants held that it would never happen to them, or their inability to consider future consequences in real terms, “*When you’re younger you can’t think long-term anyway, it doesn’t matter cause you’re in the moment...you don’t really think about long-term*” [CT].

Participants who could recall the long-term consequences of chlamydial infection all reported that an infected woman could become infertile (n=4). These four young women were perturbed by this as they acknowledged that at some stage they would like to have children, “*That scares the shit out of me. Yeah cause when I’m ready I really want to have kids man*” [JJ]. The majority of other participants had similar concerns when told that infertility was one of the consequences of chlamydia infection.

Partner notification

A small number of participants who had been positively diagnosed with chlamydia in the past recalled being told by health professionals to notify their partners. Some did not feel comfortable and were less likely to tell a partner from a casual sexual encounter,

I found it really hard to say, “Oh by the way I had chlamydia - go get tested.” It’s not like I knew him really well so I had no idea what he was going to do or what he was going to say. [MC]

In another interview two young women admitted they would feel embarrassed to notify a sexual partner even though they knew it would contribute to the spread of infection.

AM: *That’s what heaps of people do, that’s how it gets round cause they know they’ve got it and then they have sex with someone else and don’t tell then them that they have it.*

Interviewer: *Why do you reckon people don’t tell their partner?*

NG: *Embarrassed and stuff, I mean I’d be embarrassed.*

AM: *I'd be embarrassed and I wouldn't want to tell.*

Partner notification seemed more likely to occur for those in a longer term relationship and used it as a way of confronting their partner's infidelity. *"I just assumed that he had been sleeping around... when I asked he said 'no'... he didn't seem really shocked, and he didn't start accusing me"* [MA].

Sources of information

Four main sources were identified by participants about where they got information on sexual health and STIs. These included whānau, peers, school and health professionals. A source not often mentioned by the participants was information gained from television and other media.

Overall, there was a general feeling among participants that they should know more about STIs and chlamydia and felt that information was 'out there', but they were unlikely to actively seek it out. *"I guess there's not enough information at the right... I guess its just not getting to us I suppose"* [ET]. Many of the young women appeared constrained by how they would be perceived by others if found actively seeking sexual health information and felt that they, and their friends, felt shy asking for information as it might make them look dumb, feel guilty or embarrassed. This internal self-dialogue acted as one of the barriers to accessing information.

Whānau

Most participants said that there had been some discussions about sexuality but generally perceived their whānau, referring mainly to their parents, were reluctant to openly discuss sex, sexuality and sexual health with them. Within the whānau, older siblings and cousins were mentioned by participants as sources of information as well as support. These participants thought a more open approach by parents and whānau would have been helpful. In addition one participant thought parents may not necessarily have the knowledge or skills to approach the topic and felt society as a whole should be more open,

I mean they say it's the parents responsibility but the parents don't necessarily know how to approach it or how to deal with it, and kids don't want to hear it so if they can have an environment where it's talked about, where its open and out there kids could be alright. [MC]

Despite the perceived lack of dialogue with parents about sexual health issues, nearly half recalled having ‘the puberty talk’ with their mum (n=6) or dad (n=1). Later messages conveyed by parents were two-fold; ‘don’t have sex’, and ‘don’t get pregnant’, for example “*Dad was just about ‘don’t have sex’ pretty much, and mum was just ‘be careful’ kind of thing*” [JJ].

Four participants, described their parents (usually their mum) as openly discussing sexuality and sex in the family environment, however STI prevention was seldom part of the discussions with their parents,

We’ve never been guarded from all that sort of talk. If that talk comes up and you don’t know what they’re talking about you say “What?” and they’ll explain it. It’s never been something to be embarrassed about in our house. [TL]

I think my parents were quite clued up on you know [pause] what to talk about and so, we did talk about sex and we talked about relationships and things like that. But it wasn’t [pause] we didn’t talk about STIs because, one, they didn’t have the knowledge, and two, it wasn’t kind of out there socially yet. [CT]

A 19 year old participant said her mother had reinforced that older children are seen as role models to their younger siblings,

I think she’s done a real good job with me, really resilient, she does talk about safe sex, and she talks about [pause] don’t do this and don’t do that because your brothers and sisters are watching you grow, so what you’re doing they’ll be watching. [JJ]

One participant reported how her friend’s mum was more open and approached issues differently from her own parents,

When I started being her friend, like [pause] her and her mum were like real open. Like [pause] her mum would say ‘have you had sex with your boyfriend yet?’ and she’d be like ‘no mum’ like it’s an ordinary subject. Not like most mums and daughters who don’t talk about that subject. [AM]

Peers

Peers were not specifically indicated as a source of information by the majority of participants but throughout the interviews each young woman described events or occasions where they had been talking about sex with peers, or had accompanied a friend to get a test, or made decisions and taken action based on their friend's advice. One participant actively encouraged her friends to go for STI tests and would accompany them to see the school nurse, *"They didn't like going to get checks, when my friends would tell me they were having sex, and started it, I'd tell them to go and have a check"* [SN].

One participant had attended a secondary school that ran a Peer Sexuality Support Programme. She had mixed views of the programme,

If you need something, you just rock up to them. But again if you rock up to them there's something wrong with you... yeah, not that I think [long pause]. It wasn't a very good system at my school... yeah, bit of a shamo thing I suppose. [JM]

She felt embarrassed and uncomfortable to approach the peer support person despite describing him as a friend. This participant also felt that only a certain type of person was picked to do the training and they were not necessarily people all groups of students were comfortable talking to and in her opinion there was not much the peer educators could do anyway.

School

Most participants had recollections of learning about puberty in intermediate school and reproduction in secondary school. They had mixed responses to what had been included in the curriculum and the way it had been taught. One participant thought health class was a waste of time, *"You sit there [pause] playing games and talking and yelling [pause] doing stuff you're not supposed to be doing behind his back"* [TL].

The diversity of knowledge retained may reflect a number of factors including individual schools commitment to sexual health education, use of external providers by schools, and participants' ages as compulsory sexuality education was only introduced into the curriculum seven years ago. Prior to this, sexual health education was not a

compulsory part of the school curriculum. Participants over the age of twenty were not likely to have had the opportunity to participate in this new curriculum.

Three young women who had truanted often, or had exited school early, did not report sexual health classes as a major source of information. For one young mother engaging in school had been difficult,

I went to a few different primary schools, 'cause I shifted around heaps when I was younger. My parents split... I went to intermediate for my first year and a half, I think... Then I just stopped going. Then I started high school and I just really played up there, lasted a term. Then I got kicked out of school. [CC]

However, one participant developed a trusting relationship with the school nurse who had provided her with information and support during her time at school. The nurse was someone that took the time to discuss issues concerning STIs and contraception, as well as encouraging and convincing her to go for six monthly STI checks. School nurses had also played a pivotal role in providing sexual health information for three further young women interviewed.

In general, participants felt that sexuality education in school had focussed predominantly on biological processes and reproductive aspects of sex. Classes were generally taught by a teacher, or an external provider such as the Family Planning Association. Participants who had attended sexuality education classes recalled being given pamphlets on STIs, shown pictures of reproductive anatomy, and a few recalled being handed condoms and shown how to put them on. Other participants were more animated in their responses about sexuality education where the delivery mode had been less didactic. In one example, a teacher had a box in the class for students to anonymously ask questions with the teacher providing the answer to the whole class,

Some people asked questions like "how do you put a condom on?", "can I get pregnant from...?" but not much about STI's. I think they talked a lot about how you feel mentally and socially and that sort of stuff. That [the method of instruction] was alright I suppose. [KP]

Another participant described taking part in a school project where students had to promote the use of a SHC to other students, and to pass the assignment they had to get more people to attend the clinic. Participants were interested in knowing more, one participant expanded on what this ‘more’ might include saying she would have liked to know about, “*What does it feel like etcetera [pause] all the gory stuff rather than information*” [KP].

Health professionals

Participants who had been tested for an STI (n=11) were more likely to report having received sexual health information from health professionals. The young women who had been tested for chlamydia accessed STI information from school nurses, practice nurses, FPCs and GPs. They generally described being handed reading material in the form of pamphlets and brochures. One suggestion made was that all adolescents attending doctors clinics should receive a discreet ‘take home pack’ of STI information to remove the embarrassment of taking pamphlets off the shelf, the bag would conceal the information from onlookers as they walked out and they would be able to read the information in their own time. Another would have liked more time to have the information explained by the doctor and felt some consultations were rushed,

‘Cause at this clinic when you go in there you pretty much have to see any doctor ‘cause its really busy. But I always tend to get, not being a racist or anything, but I tend to get Indian doctors and they try and push you out the door so fast. Where this doctor takes his time, he lets you say what you have to say and he like, he [pause] how do you put it? He listens to what you have to say and he tries to give you confirmation on what you think and stuff like that. But with the other doctors I went in there and they’re with you for five minutes and they kick you out the door basically. They just want to get you in and out, and they don’t check you over properly and stuff. [NG]

Television and other media

The impact of television, music and the internet were less frequently described by participants as a source of information. Magazines targeted at young women such as Cleo were suggested as a medium that could be used more to reach young women but not mentioned by any as a source they had actually used.

Television was only mentioned in the context of the ‘No Rubba, No Hubba Hubba’ campaign promoted by the Ministry of Health in 2002. One quarter of participants recalled the advertising campaign on television with most saying that it was pretty cool, *“It just flowed with young people, cause you gotta get into our culture [youth culture]”* [QC].

Lyrics from a rap song by Eminem were recited by one participant as they featured a lot of slang terminology about catching STIs from ‘sleeping around’,

“I aint got no time for these games and stupid tricks. All these bitches on my dick. That’s how dudes be gettin sick. That’s how dudes be gettin drips” - and its all about STIs and one of his boys had sex with some girl and she gaps it in the morning and he’s like “fuck she’s gone, and we had unprotected sex, and now I’ve got to go down to the clinic and see what’s going on.” [QC]

Only two people reported using the internet to access information on sexual health, one used it to get the phone number for Family Planning and the other had searched for information on the natural contraceptive method.

Access to sexual health services

More than three quarters (n=11) of the sexually active participants had accessed health care services across various settings for STI testing. These participants accessed their GP (n=5), school-based service (n=5), FPC (n=5), SYHC (n=2) or a SHC (n=1) for STI testing. Five participants attended more than one setting for testing. The four sexually active participants who had not been tested in the past had seen a health professional for contraceptive advice. Two participants reported an occasion where their mothers took them into a clinic for an STI check and contraceptive advice. One participant who was 14 years at the time said that her mum found out that she had had sex and dragged her down to the FPC for contraceptive advice and an STI check, *“I was crying and I hated her. She [mum] knew that was the only option. I had to have it”* [EM].

Health care settings

Figure 9 presents the health settings identified by participants as their main provider of sexual health care. Of the young women raised in Auckland, four had a distinct preference for continued care with their family GP, while four preferred to access sexual health care at Family Planning Association (FPA) clinics and one at a SHC.

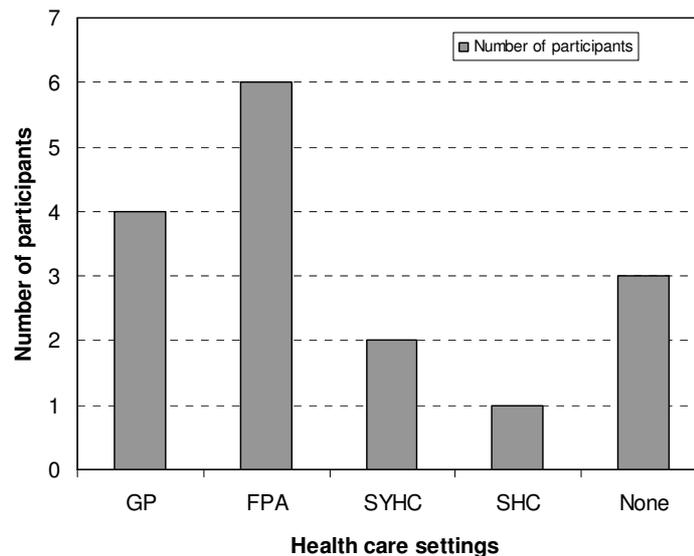


Figure 9. Main settings of sexual health care services accessed by participants

Those who did not report a distinct health care setting for sexual health issues (n=3) stated that they had moved to Auckland within the last 12 months and were not yet linked in with a regular healthcare provider. One admitted, “*Now I’m here [Auckland] I don’t know where to go, I still want to get my check but I don’t know where to go, if it will cost money ‘cos money is a huge thing*” [JJ]. Of the other four, two had attended FPCs and two were enrolled at the SYHC but only attended for ill-health. Of the ten young women who had attended, or were current students at a tertiary institution, only four participants in total had ever accessed a SYHC in the past.

Over half of participants mentioned school-based services including Wellness Centres, but not all of them had accessed school-based clinics while in secondary school. There were mixed opinions about responsiveness of school nurses,

We had this really cool nurse that if you were having sex you could go visit her and she would give you free condoms. And she actually was the one who took me for my first jab. She’d actually take you to the

health clinic, and like she'd take you for pregnancy tests, jabs, STI checks, everything. [NG]

Our nurse was only on like 2 days a week, they weren't, she wasn't there every day and even if, on the days she was there you had to go make an appointment, you couldn't just turn up. [AM]

There was a general impression given by participants that school-based services lacked anonymity and confidentiality. This appeared mainly through waiting areas that were exposed to high student traffic, or because other students using the service would see another student seeking treatment and tell others. For other students it was the difficulty of talking to an adult about their sexual experiences, “*I used to take a lot of people to the school nurse because they'd be too scared to go and talk about stuff*” [SN].

Accessibility

In accessing services three common obstacles emerged for participants; firstly, their own self-worth and feelings of guilt about seeking sexual health care, secondly, exposing their bodies to an unfamiliar person, and lastly, dealing with the perception of others including peers, parents and health professionals. Following this, other issues concerning accessibility of sexual health services reported by participants related mainly to affordability, appropriateness, prioritisation of time, transport and a lack of knowledge of services available.

Affordability

Affordability of services was reported as a significant barrier by more than two thirds (n=11) of participants. The cost of attending sexual health services related to a number of incurred costs including transportation, the appointment itself and the cost of prescriptions. Participants clearly preferred free services as most had no regular source of income, or were not earning very much, “*It's like going to the doctor [pause] is it gonna cost me? Because I can't afford it. I can't afford it!*” [JJ].

A small number of participants had come across clinics that offered free services. Some had been told about these clinics by their friends. However, others had not known the service would be free until after they had arrived for the appointment. One participant reported that her GP offered three free sexual health check-ups per year, and another

attended a primary care practice that also offered free sexual health testing. Both reported that knowing that the service was free would have been good to know prior to making an appointment.

Appropriateness

An issue that emerged for the majority of participants regarding accessing sexual health services related to racism, including both perceived internalised and inter-personal racism. *“It’s that whole [pause] we learnt about it last year [long pause] internal racism. You doubt yourself because others doubt you”* [JJ]. The majority of participants reported feeling uncomfortable seeking sexual health care as they did not feel welcome and believed staff were judgemental and prejudiced against young Māori people.

I don’t want to this to come across racist, but most of the people in the clinics that I have been to with friends... they are Pākehā women, and I always think they’re looking down on me, thinking that “there’s that dirty Māori girl, doing what Māori people do i.e. getting themselves into trouble, she’s just another statistic” and I feel uncomfortable.
[QC]

First impressions from reception staff were highlighted as an important aspect in making young people feel welcome and at ease, *“Your first meeting, first encounter with someone [pause] in an instant you know you don’t like this place, that’s your first impression”* [TP]. One young woman who was reluctant to attend the SYHC at the university said, *“I think it’s seriously Pākehā-fied. Well I haven’t been in there but that’s the impression I get, its how you perceive things really”* [KP]. Another young woman recounted her experience of being treated by a Pākehā doctor,

She was like “sit down here” and she sits by the computer and puts her gloves on, and it was, not that you want to go somewhere dirty but it was clean and very sterile and grey and she was smiley but... when I’m with Māori people I know how to act around Māori people, I know how to act around Pākehā people, you know, you just feel more comfortable their your own people and you can relate to them better.
[QC]

Participants had a strong preference for Māori-centred services, *“I’m Māori and I want to feel valued here and I feel like I’m under a Pākehā system, when there could well be a Māori space where its normal for you”* [KP]. A clear message given by the majority of participants (n=12), was that they would prefer a Māori health professional providing their sexual health care, and preferably a Māori woman,

You know [pause] somewhere where a health service or Māori health service like in your community and you have those hauora’s, or something like that... where its focused generally on Māori health whereas you know you go to the family planning clinic or just your normal GP, its not really focused around Māori, and culture, and stuff like that. [MA]

Prioritisation

Prioritising health care needs from other responsibilities was highlighted as an important factor for most of the young women interviewed. One young mother talking about her own healthcare needs said, *“It’s just booking the appointment and going in, if I don’t have a ride, I have to get the bus [pause] there’s more important things to worry about”* [DE]. Each of the young mothers was emphatic that the health care needs of their babies came first, and their needs were always secondary. Priorities for those without children tended to put their studies first, and health care needs second.

A few participants mentioned that preventative healthcare rated even lower than ill-health and going to the doctor for a test ‘just in case’ was too much of a hassle as there were competing priorities for time and money.

Transportation

Transportation for younger participants compounded the difficulties of accessing services. Only two of the women interviewed had their own car, most said they would rely on friends for a ride while younger participants used public transport, *“To get there (FPC) I’d have to catch two buses, I think its two, it might be three, two, or three buses. It’s not close or anything.”* [ET]. The cost and hassle of taking a bus to make an appointment made it difficult and discouraged participants from attending.

Lack of knowledge of service provision

Appointment availability and limited awareness of service provision and cost was identified as a barrier. A few who had been tested for chlamydia in the past reported that it had been difficult to make an appointment at a convenient time as clinic opening hours were not always suitable. Two participants were not aware that they could see their family doctor for sexual health issues,

I thought you go there 'cause you were sick. I never heard of anyone going to the doctor and saying can I have some [pause] be put on contraception or anything [pause] until after I had baby [pause] and I was just like, why didn't someone say something earlier? [ET]

Informing young people about the range of healthcare services that can be provided was suggested as a solution to some of these difficulties,

'Cause sometimes you don't need to see doctor – know what people can do [pause] what [pause] so you might not have to wait three weeks to see a doctor, cause like to get an STI check you can see a nurse that afternoon, knowing what services are available and who does them. [JJ]

Having sufficient time to talk with health professionals was raised as something that could be improved for young people. One young woman said that although she had been given pamphlets she would have preferred more time with the doctor to have the information explained to her.

Summary

The findings from this study were generated from interviews with 16 young Māori women, a mix of urban and rural upbringing and primarily tertiary educated. Most participants had been tested for an STI and nearly half had been diagnosed with chlamydia in the past. Knowledge of chlamydia symptoms, treatment and management varied reflecting the lived experiences of participants, with the majority aware of preventive strategies. However, there was a consistent trend that suggests safe sex knowledge is not being translated into practice. Participants were also less aware that

an infected person may be asymptomatic and that infertility was a potential consequence of infection.

The main sources of STI knowledge came from health classes in school and health professionals, families were more likely to discuss puberty, discourage their daughters from having sex and tell them not to get pregnant. Peers were also a source of information concerning sexuality in general, and in some cases a source of support and encouragement for one another to access sexual health services. Some participants were not familiar with how to access health services in general.

Most participants had used school based clinics or their GP for sexual health services. Although the majority of participants were currently, or had been tertiary students, very few chose to use SHYCs on campus. The young women had a strong preference to be treated by Māori health professionals, and in particular, by women. Sexual health services (and health services in general) need to be more welcoming, with non-judgemental staff who are able to relate to young people who identify as Māori. The women identified a need for free services with more convenient opening hours.

Chapter Five: Discussion and Conclusion

Ka pū te ruha, ka hao te rangatahi.

When the net lies in a heap, a new net goes fishing.

Introduction

The research question in this study asked what the knowledge, attitudes and reported behaviours of young Māori women were in regards to sexual health, and in particular chlamydia. It was evident from the stories shared by the young women interviewed that their level of knowledge varied reflecting their lived experience. The main sources of sexual health information accessed by these women were whānau, peers, school, and contact with health professionals. Participants also indicated a clear preference for sexual health services to be delivered by Māori in an environment that was welcoming and friendly with non-judgemental staff and health professionals who could empathise with, and understand, young people.

In this chapter the research questions are addressed bringing to light general themes including; the need to broaden sexual health education, the need to ensure there is equitable access to sexual health information and services for Māori and the importance of a growing up with a positive Māori identity. Factors pertaining to resilience and protective factors that emerged as salient are presented, and limitations of the study and future research needs discussed. The chapter concludes by outlining the implications of the study and provides eight recommendations.

Broadening sexual health education

Overall, participants were not particularly concerned about contracting chlamydia, sharing a common view that ‘it will never happen to me’. This is consistent with Elkind’s (1967) adolescent egocentrism commonly described across the youth health literature and is said to contribute to young people’s decision-making to participate in high risk behaviours and activities (Tylee, Haller, Graham, Churchill, & Sanci, 2007). This faith in their ability to transcend risk may have contributed to the variability in participant’s level of knowledge as they may have considered STI information irrelevant and unimportant because of the belief that it would not affect them. However, there appeared to be a gradual shift in participant level of knowledge with increased age, sexual experience and level of education. A few of the older participants described

this difference as increased maturity and coincides with later cognitive development that contributed to prescience as well as greater mastery of socio-cultural influences.

The other significant difference in knowledge acquisition was in those participants who had previously been diagnosed with chlamydia. Those who had had a previous diagnosis of chlamydia demonstrated greater awareness and understanding of chlamydia symptoms, treatment and management. Wright, Gabb and Ryan's (1991) findings were similar to this study whereby health professionals were rated highly as a source of information once an infection was present and treatment was sought. This suggests that many young women get sexual health information too late or it is not seen to be personally relevant. Sexual health information needs to be consistent, relevant and engage young people to encourage responsible sexual behaviour. It also highlights the knowledge retained by adolescents when the opportunity afforded to the health provider for sexual health promotion during medical consultations occurs. This raises the question of opportunistic testing and whether primary care health providers should be screening this high risk group at every consultation. Primary care providers need to be open and responsive to the needs of all young people even it diverges from their own values and beliefs about how young people should behave.

It is important to note that among the young women interviewed there was relatively low awareness among the participants that chlamydia is largely asymptomatic and that infertility was one of the long-term effects of untreated chlamydial infection. These gaps in their reproductive health knowledge is similar to those found in an Australian study by Wright, Gabb and Ryan (1991) confirming that young people need greater access to sexual health knowledge. Interestingly, participant concern about the risk of infertility was far greater than their anxiety of contracting chlamydia, similar to findings in a Norwegian study conducted by Andersson-Ellstrom and Milsom (2002). The prospect of infertility being of greater consequence than contracting an infection and may reflect an inherent value placed on whānau and the continuation of whakapapa lineage. Participants suggested that a key message sexual health education programmes should emphasise was infertility as a potential consequence of unprotected sex.

This study has shown that the main sources of knowledge regarding sexuality and sexual health for young Māori women come predominantly from whānau, peers, school and contact with health professionals, similar to a previous New Zealand study conducted by Lungley and Paulin (1993). However, STI information was generally sourced from schools and health professionals. Some participants did wonder if their parents and whānau had sufficient knowledge about STIs to be able to pass on this knowledge as it was not generally something talked about when they were growing up. Fisher's (1986) study supports participant views as they found parents whose knowledge of sexuality was not as up to date and would hesitate to discuss sexual health and reproduction with their child as they may know more than the parent. This would warrant further investigation among Māori whānau as ready access to appropriate sexual health information may facilitate discussions. Youth development research has shown that interventions that focus on the individual are less effective. Whānau-focussed solutions would build capacity within the immediate family and potentially have an intergenerational impact (Te Pūawai Tapu, 2007).

The addition of health professionals as a major source of information is a distinct finding and reflected the number of participants that presented, or accompanied a friend, for STI testing. It may also signal improved access to health services by secondary school students as a result of the introduction of more comprehensive school based services over the past decade. Participants reported that they were unlikely to request information during a consultation but were appreciative of all the advice, information and pamphlets provided during the visit. Wright, Gabb and Ryan's (1991) findings were similar to this study whereby health professionals were rated highly as a source of information once an infection was present and treatment was sought, but were rarely consulted for preventative advice. This raises the question of opportunistic testing, and whether primary care health providers should be screening this high risk group at every consultation and being proactive in taking the opportunity to provide preventative health advice. If health professionals are rated highly as a source of information then a preventative approach through opportunistic testing and STI information dissemination would be sensible and is consistent with the World Health Organization's (2007) recommendation of screening asymptomatic patients where feasible. This is supported by a pilot study undertaken at FPCs in Wellington that found opportunistic testing was acceptable to young people (Sparrow et al., 2007).

Although knowledge is advantageous for safer sexual behaviour it does not in itself ensure adequate protective behaviour, highlighted in participants' responses. Each participant understood that unprotected sex with an infected partner would increase the risk of contracting chlamydia and knew that condom usage was an effective measure for STI prevention, yet many still relied on a regular monogamous relationship as a safe-sex strategy without knowing the sexual history of their partner as well as reporting a lack of, or inconsistent use of, condoms. This inaction despite awareness supports findings from other studies that knowledge does not necessarily translate into safer sexual behaviour (Andersson-Ellstrom & Milsom, 2002; Shield, Fairbrother, & Obmann, 2005).

Allen (2001) suggests the knowledge practice gap arises as the current sexual health curriculum lacked a discourse centred on erotics that would correspond more closely to their lived sexual experiences. It is evident that the information that is being taught to our young people is dominated by Western views of sexuality borne out of traditional conservative Christian values and beliefs. These views continue to dominate New Zealand society in homes, schools, the media, and public policy narrowing the focus for sexual health knowledge to a medicalised discourse of biological processes of reproduction and disease. Not surprisingly, the majority of participants described sexual health classes as uninteresting and irrelevant. Sexual health education generally reflects what adults think adolescents should know rather than incorporating what adolescents are interested in knowing.

The ERO's (2007) recommendation of adapting programmes to meet the needs of students and the inclusion of cultural perspectives is critical and has the potential to contribute to improved sexual knowledge and health outcomes for Māori. Through the inclusion of the broader concepts of culture, gender, emotional and spiritual well-being into adolescent sexual health education and health promotion programmes will engender an environment of inclusion by recognising and respecting Māori cultural values and beliefs as legitimate and valid, rather than continued marginalisation of Māori worldview. For young Māori it is critical that education include Māori cultural perspectives including concepts of Māori sexuality.

To ensure the revision of sexual health programmes has the maximum benefit for Māori, Māori input and control is essential. Existing Māori organisations from both the youth health and sexual health sector should be drawn in to weave a mix of youth and Māori cultural understandings through programmes for maximum interest of young Māori students. Involvement at all levels is necessary, young Māori students, whānau, community, PHOs and DHBs to develop local programmes.

Equitable access to appropriate health services

Access to sexual health services is a recognised issue for adolescents with a number of barriers reported in the literature (Mathias, 2002; World Health Organization, 2002). Participants in this study reported similar concerns and issues in accessing services such as; cost, transport, concerns of confidentiality, inadequate time with healthcare provider, inconvenient times, not youth-friendly, a lack of knowledge of the available services and cultural appropriateness.

Overall, there was a clear preference for sexual health services to be delivered by Māori in an environment that was welcoming with staff who were friendly and non-judgemental and health professionals who could empathise with, and understand, young people. A compelling perception expressed by a number of the young women interviewed that may help to explain their preference for Māori health professionals, was that their ethnicity was seen by others as a marker for negative health statistics and by presenting for sexual health services they conceded to this notion. Further to this, a few participants reluctantly divulged that they perceived health providers and reception staff as racist who showed signs of racially-mediated attitudes of disapproval and dismay toward them making them feel unwelcome and uncomfortable. Participant concerns regarding waiting rooms were particularly common as well. Some participants, who reported they felt embarrassed about the need to seek treatment, said they would feel even more uncomfortable on arrival having to explain to reception staff the reason for their visit in an open waiting room within ear shot of other patients. A few participants commented on healthcare process level barriers, that they felt consultations were rushed and that doctors did not spend adequate time to answer questions or clearly explain the processes. A lack of time with primary healthcare practitioners was highlighted in a recent study that found less time was spent with Māori patients than Europeans (Crampton, Jatrana, Lay-Yee, & Davis, 2007).

Preventative healthcare was not a top priority for some of the young women in this study as they had competing priorities for their time and energy. Considering young people are generally the healthiest age group, this approach may seem reasonable, however young people have relatively high morbidity and mortality through largely preventable incidents involving alcohol, drugs, sexual activity and violence (Tylee, Haller, Graham, Churchill, & Sancu, 2007). Young people have distinct healthcare needs and should receive greater support as habits developed in adolescence are important for later in life.

The study also revealed a potential risk area for young Māori as many participants did not access health services through a lack of knowledge about how to link into the healthcare system. Accessing health services can be a daunting task for adolescents, let alone when you have limited resources, are embarrassed to go, or too unwell to get on the bus. Making health services easier to access for adolescents will help reduce some of the barriers adolescents experience. It is an issue that could be addressed in a number of ways and including support from whānau, schools, tertiary institutes and work places to assist young people in gaining ready access to health services. School based programmes and services should include information and resources on the health care system, tertiary institutes could include information and visits to SYHCs at enrolment and during orientation, and work places could include it as a health and safety question for new employees. It is important that adolescents have freedom and independence afforded to them by the communities they live in but ensuring there is appropriate guidance and assistance that is easily available to ensure their health, safety and well-being.

What is not so evident in the literature is a description of how healthy adolescents make the transition from parental guidance for their healthcare needs to participation and management of their own healthcare needs. There are accounts of transitioning care between paediatric and adult healthcare for young people with disabilities, but little is written on healthy young people navigating the healthcare system. The issue of how young people who have recently moved to the city for work or tertiary studies link in with the healthcare system seemed particularly relevant for participants from rural areas.

In order to achieve increased access to sexual health services, healthcare providers must be receptive to the needs of young people, as well as responsive to the needs of Māori. This requires a strategy to build both the capacity and capability of the primary care and sexual health workforce. Firstly, supporting the development of the Māori health workforce will have an overall effect of changing the profile of the health workforce to better reflect the population served while mechanisms to attract young Māori health professionals into the specialist area of sexual health will need to be explored. Secondly, the provision of education, training and resources to develop a culturally competent health workforce in the primary care sector will contribute to this, as well as including and/or updating health professionals working in primary care on adolescent health issues and how to work and communicate effectively with young people.

Determining Māori identity

Pihama et al (2006) describe how as Māori our sexuality is directly linked with how we see ourselves, our identity and our place in society. The young Māori women in this study have shared different aspects of the early part of their journey in discovering their sexual selves revealing insights of how they construct their view of themselves as young Māori women. Their stories reflect the diversity of young urban Māori, some connected to their cultural roots while others are not. Nearly half of the participants remarked that their parents, generally those in mixed marriages with one parent claiming Māori descent, had not maintained strong connections with the Māori world and were less familiar with their whakapapa and/or Māori cultural practices. This closely reflects Durie's (2003) suggestion that more than half of Māori children and adolescents have inadequate access to the Māori world, and without access young people can be left with no sense of belonging and struggling with their own identity formation. Their parents' disconnection or failure to integrate the Māori world within their children's world appeared to impact on participants' sense of belonging and how they fit in as Māori. Their knowledge and links to their whakapapa and taha Māori were diminished and not perceived as particularly important. However, this did not appear to influence the likelihood of chlamydia diagnosis, but was more common among participants who had had sex before the age of 16 years and those who had had a baby.

In general, participants who had more recently moved to the city appeared to have stronger connections to whānau and hapū activity but were struggling to maintain a balance between an urban existence and their Māoritanga. This supports Te Rito's (2007) view that the suburban lifestyle can erode connections to whānau, hapū and whakapapa links with traditional papakāinga. Young Māori that settle in the city may have to contend with reduced whānau support and minimal resources while asserting their place in the city. With many of the participants enrolled as tertiary students, it highlights the importance of the role Māori student networks have in supporting young Māori to maintain their connection and cultural identity with te ao Māori.

In traditional Māori society, tapu and noa were used to guide and protect behaviour of whānau and hapū members pervading all contexts of life, including sexuality. In contemporary society, risks and threats to the health and safety of young women still exist, albeit in different forms. In the stories shared by the young women interviewed, there was a perception that some parents appear less inclined to take a proactive role in openly discussing and teaching adolescents about this aspect of their development. Childrearing was also a role taken on by grandparents (Buck, 1952), however the nuclear family set-up often distances grandparents from playing an active role in family life and hinders inter-generational instruction. Participants whose parents created opportunities to discuss sexual health and sexuality with their teenagers and provided a supportive environment with reasonable boundaries reported feeling embarrassed at the time but considered the discussions were valuable in retrospect. Why some parents and whānau avoid conversations about sexuality and sexual health is unknown, however it may be linked to their own uncertainty about sexual health and reproductive knowledge as reported by Fisher (1986).

The main message participants received from parents was to avoid teenage pregnancy. Parents seldom discussed sexuality, and were even less likely to discuss STI prevention. Initiating conversations about sexuality and sexual health issues by parents and whānau in everyday contexts is critical for young Māori women to confidently assert their own values and beliefs, awareness and understandings, as well as communication skills, to enable them to generate and engage in conversations about sex and sexuality. By avoiding and suppressing conversations about sexuality and sexual health parents may be inadvertently teaching their children to suppress that part of them limiting full self-expression and enjoyment in their sexual lives. Young women appear

to be taking on the familiar, more accepted stereotypical female gender role of being submissive, passive and meek in their early sexual relationships.

Vigilance by parents and whānau to protect and prepare young women to safely negotiate their environment as strong, confident sexual beings appears to have waned. Further investigation into the effectiveness of providing parents and whānau with programmes and resources containing a broad range of information on Māori sexuality and sexual health issues is warranted.

Resilience and protective factors

Identifying resilience factors with such a small sample can only be speculative and can not be generalised to all young Māori women. A number of factors that may afford some protection for the young women interviewed from contracting chlamydia have been identified and include; delayed sexual debut, fewer sexual partners and parents who viewed sexuality and sex as a normal part of adolescent development. Further to this, having a positive Māori cultural identity with an ability to identify and understand bicultural differences appeared to assist participants to access healthcare services. A connection with a significant other be that strong friendships with peers, a supportive family member, or an adult who cares and is connected (Blum, 1998; Clark, 2002) did not appear to be related to a reduced likelihood of contracting chlamydia, but was more associated with greater knowledge of how to access sexual health services.

Participants whose parents viewed sexuality and sex as a normal part of adolescent development appeared to have more self-assertion and more confidence regarding sexual decision-making with partners. This may also be related to reduced sexual risk-taking behaviours through strengthening youth-parent relationships and having a caring adult described by Clark et al (2006).

There was also a pattern linking participants who had positively distinguished their differences in being Māori and how their cultural beliefs and values may be inconsistent with societal norms that surround them and that may be placed upon them. Recognition and subsequent mastery of an urban bicultural reality appeared to help some young women navigate difficult environments. Growing up with a positive Māori identity, being different and living in “contrasting worlds”, is made possible when strongly reinforced by both sides in a family with mixed heritage (Grace, 1998, p. 57). In addition, it is important to educate young people Māori perspectives of New Zealand

history, colonisation, the continued impact and influence on contemporary New Zealand society.

Participants who had had a negative test result for chlamydia, reported to have fewer partners and were on average older than others at sexual debut. Later sexual debut seemed related to apprehension about what sex would be like, wanting to find the right partner and strong religious beliefs. This is consistent with the Dunedin longitudinal study where Paul and colleagues (2000) identified religiosity as an important factor in decisions to delay sexual intercourse. American high school students who made a personal pledge to delay sexual activity were shown to be more likely to achieve their goal than those who declare a formal virginity pledge (Bersamin, Walker, Waiters, Fisher, & Grube, 2005). Encouraging young people to delay, rather than abstain from sexual intercourse may be a more useful message for teens.

Limitations of the study

The scope of the study was restricted by the contextual influences such as time and resource constraints inherent at this level of graduate research. The findings therefore, are limited in terms of its depth, breadth and saturation. The study involved around 20 hours of formal interviews and during the data analysis and write up phase I became aware that there were gaps in the data and aspects that could have been explored further. This is one of the limitations of using a semi-structured interview schedule but also draws attention to my inexperience. Further development of my interviewing skills and techniques will be valuable to ensure coverage of all the main areas and points of interest are expanded on during interviews and suggests that saturation may not have been achieved in this study. Interviewing adolescents is also an area that requires special expertise to ensure a safe space was created to encourage each interviewee to open up and then keep them engaged.

The sampling cannot be said to be representative of all young urban Māori women and the reader should be cautious in generalising the findings to all young Māori women. Generally, participants had a solid educational background with the many having completed secondary school and enrolled, or planning to enrol in tertiary studies. Another limitation was the assumption I had made that all participants were heterosexual and I had not thought to clarify this during interviews, potentially isolating those who identified otherwise, and potentially effecting the interpretation of some

data. The reader will have to determine the applicability of these findings based on these contextual influences.

Two final limitations of the study is the fact that I am an emerging researcher, a novice in Kaupapa Māori research principles and qualitative design, undertaking research in a topic area outside of my expertise. These factors compounded intensity of the write-up phase and impacted on the project completion time. Toward the end of my learning journey I also had the opportunity to meet more people working in the area of youth health who drew to my attention various unpublished New Zealand reports that I had not accessed earlier which would have helped me better contextualise local issues.

Future research needs of adolescents

The young Māori women in this study have provided a snapshot of the realities in which young Māori women live their lives, view their sexual selves and articulate their sexual health needs. However, this study was limited in its scope and has only captured a small part of the context in which these young women live. To have a broader understanding of the socio-cultural influences it would be interesting to conduct interviews with key people in their community including whānau, peers, boyfriends, partners, teachers, sexual health educators and other health professionals in the clinical setting. This would build a more comprehensive description of the influences that impact on the sexual knowledge, attitudes and behaviours of young Māori women and access to sexual health services for young people.

Information technology and new media has created further opportunities to engage with young people and provide public health messages in a youth-focussed and culturally acceptable way. In this study, text messaging was a successful mode of communication used with participants and should be explored further to investigate its application for delivering sexual health information and related messages such as partner notification. A sexual health text messaging service in San Francisco, SEXINFO, has shown promising results as an information and referral tool for STI and reproductive health issues for youth (Levine, McCright, Dobkin, Woodruff, & Klausner, 2008). Text messaging was trialled in a New Zealand smoking cessation programme and shown to be a relatively inexpensive, able to be personalised and an age appropriate method to help young smokers quit (Rodgers et al., 2005). Mobile phone use is steadily increasing with over 90 percent (90.6%) of young people aged 15 to 24 years reported as having

had personal use of a mobile phone (Statistics New Zealand, 2007a). Text messaging should be explored further as a mode of communication with young people for sexual health promotion in New Zealand.

There appear to be distinct differences between those brought up in rural environments and those who have grown up in the city. It would be beneficial to look more closely at urban/rural differences as strategies to address the needs of young Māori women in rural environments will require a different approach as there are fewer options available to young people accessing sexual health services in smaller communities.

The Youth2000 survey has provided comprehensive information on the lives of young people in New Zealand, with findings from the follow-up survey Youth2007 eagerly awaited. National surveys such as this that have a representative sample of Māori and separate analysis of Māori issues undertaken by Māori researchers are valuable and an important resource that should be continued.

Implications of the study

The rate of chlamydia infection of young Māori women in Auckland and other regions, is a public health priority and requires collaborative action. Chlamydia infection is largely preventable and efforts to reduce related morbidity associated with chlamydia have the potential to have significant long-term benefits for whānau, hapū and iwi as well as economic benefits for the health sector. Public health strategies aimed at reducing the prevalence and incidence of chlamydia infection in young people must incorporate developmentally and culturally appropriate strategies.

There has been a gradual shift in health policy from focussing on prevention of isolated issues toward a strengths-based approach. Youth development approaches support young people to develop the capacity of other young people to navigate their environment across a wide range of domains including individual, social, community, educational and health aspects are an important component of a comprehensive approach to sexuality education. However, educational programmes in isolation appear to be falling short of the mark, and need to be more strongly linked to youth-specific health service provision.

The whakatauki at the beginning of this chapter is often related to the next generation of young people coming through who find new approaches to ongoing issues. The net described in the whakatauki can represent the partnership between Māori and the Crown and the situation young Māori women face in terms of sexual health and chlamydia infection. In this case the net, representing Maori sexual health has been cast aside in disrepair receiving little attention and is in need of urgent repair. To repair the net and improve sexual health outcomes for young Māori people both Treaty partners need to work together. The threads need to be tied tightly and pulled evenly with input from both Māori and the Crown recognising that with shared knowledge there is more to gain. Whānau need to reconnect and strengthen their connection with te ao Māori so all young Māori build a greater sense of cultural identity. A coordinated range of interventions across the health, youth development and education sectors are also required to address sexual health issues for young Māori. As each hole and knot at the bicultural interface is repaired, strength and resilience of young Māori people in New Zealand is increased and sexual health improved.

Recommendations

This study has implications for a wide range of people including young people, whānau, schools, teachers, communities, health providers, health professionals, health promoters and policy makers. The following recommendations are intended to strengthen educational approaches and sexual health service delivery to better meet the needs of young urban Māori women.

Inclusion of concepts of Māori sexuality

It is clearly evident that sexual health education programmes in secondary schools require revision to better meet the needs of young people, with a particular focus to ensure they are culturally relevant for Māori. Essential to this is the inclusion of concepts of Māori sexuality, the impact colonisation and Christianity has had on Māori identity and how this relates to the way young people define their own sexual identity in contemporary society. The development and delivery of comprehensive sexual health programmes, which include Māori cultural perspectives, should be a fundamental component of the New Zealand sexual health curriculum requiring consultation with Māori.

Affordable sexual health services

Young Māori are more likely to come from a lower socio-economic background and minimising barriers such as affordability through the provision of free sexual health consultations in all primary care settings would be a judicious allocation of scarce primary health care resources and address existing inequalities. Considering the high rates of chlamydia infection among young Māori women within the Auckland region and the low awareness of asymptomatic transmission, routine screening of young Māori women aged 15 to 24 years should be seriously considered as a prevention strategy.

Transitioning between health care services

Geographic mobility of young people gives rise to an increased risk of discontinuous health care provision for this population group. Given that an increasing number of young Māori are migrating to urban environments for educational and work opportunities, it is critical that whānau and/or rural health providers link them with health care providers in their new setting.

Strengthening whānau Māori

Revitalising and strengthening whānau Māori across social, economic, political, and cultural domains will contribute to improved Māori advancement in health. The whānau are a vital element to achieving positive health gains for young people, and strategies are required that can address collective identities and support young people within the context of their whānau. Providing ready access to appropriate resources for whānau to facilitate sexual health discussions is overdue. Interventions that target women in the whānau to champion sexual health education for young Māori women, such as mothers, aunts and grandmothers, should be prioritised. Additionally, with an increasing number of young Māori being born and raised in the city, geographically distanced from their tribal areas, there is pressing need to support whānau to reconnect and/or strengthen connections with whānau, hapū and iwi. It also highlights the importance and value of urban whānau structures made available to young Māori such as the Māori student networks that exist in tertiary institutions.

Bicultural reality

It is important that young Māori are educated about the shared colonised history of New Zealand and the impact political decision-making had, and still has, on the position Māori have been relegated to in New Zealand society. The New Zealand education curriculum should present a more balanced view of New Zealand history so that young Māori have greater awareness and understanding of this shared history, the impact of Māori society and how a negative stereotype of Māori is perpetuated in our society. Young Māori should be taught skills to negotiate environments where institutional and personally-mediated racism is evident, such as the healthcare settings.

Youth participation

Central to the success of the development, implementation and evaluation of adolescent sexual health programmes and services is the need for Māori youth participation,

Young people are an important part of the community and need to be recognised as one... decisions made affect young people the most as they will have to live and grow up with the results of those decisions [Group of secondary school students, Auckland] (Ministry of Youth Affairs, 2002, p. 8).

The voices of young people are too often overlooked and discounted at decision-making and policy level. However, if educators and policy makers are to provide appropriate programmes and services their input is essential.

Workforce development

Health workforce development in terms of capacity is a critical component to improving access to sexual health services for young Māori women as this study has shown young Māori women have a clear preference to be treated by Māori health professionals. Increasing comparative numbers of Māori health professionals and attracting them into the sexual health arena requires remuneration that reflects the clinical and cultural expertise they bring.

Ongoing professional development in the area of adolescent health and cultural competence is needed for health professionals in the primary health care environment and it is critical for them to be able to effectively engage with this diverse demographic group. It is clearly evident that health professionals working in this specialty need to be

highly skilled and culturally competent in order to provide an environment in which young people feel welcomed, valued and respected. Additionally, opportunities need to be made available to non-clinical staff to education and training opportunities to develop and maintain their skills to work effectively with young people.

Data collection

There is a recognised issue with the accuracy and completeness of sexual health data. To accurately reflect the incidence and prevalence of chlamydia and other STIs among Māori it is imperative that all statistics are collected from all health care services that provide sexual health services, including ethnicity data. This is particularly important for GPs as a large number of the young women interviewed preferred to present to their GP for sexual healthcare as an alternative to specialist sexual health services where mandatory data collection already takes place. Funding decisions are frequently based on evidence such as statistical data therefore capturing this information accurately is important so that appropriate funding can be directed to services and population groups that have the greatest need.

Conclusion

The main finding of this study was that current sexual health information received and primary care services providing sexual health care are not meeting the needs of young Māori women. Participants' level of knowledge varied reflecting their lived experience with many unaware that chlamydia is asymptomatic and that delayed diagnosis can lead to fertility problems. The main sources of sexual health information accessed were whānau, peers, school and contact with health professionals. A number of barriers to access healthcare were identified including perceived racism. However, those who engaged with healthcare services found health professionals to be a useful source of sexual health information. The young women signalled a clear preference for sexual health services to be delivered by Māori in an environment that was welcoming with staff who were friendly and non-judgemental and health professionals who could empathise with and understand young people.

Factors that may help protect young women from contracting chlamydia characteristic of this group were having a strong connection with a caring adult or friend and parents who viewed sexuality, sexual experimentation and sexual intercourse as a normal part of adolescent development. Perhaps of greatest significance was that it appeared that

having a positive Māori cultural identity with an ability to understand bicultural differences was strongly associated with participants accessing sexual healthcare services despite identified barriers.

Sexual health education needs to be more relevant and interesting for young Māori and include concepts of Māori sexuality. Reorientation of primary healthcare providers delivering sexual health services needs to occur so they are youth-friendly and responsive to Māori. Furthermore, all staff working in these environments need access to, and application of, cultural competence training and further education in adolescent health issues to ensure providers are more responsive to young Māori. Most importantly, for interventions to be successful it is essential that Māori communities including young people are an integral part of creating positive solutions.

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Appendices

Appendix A: Glossary

Māori Terms

Aotearoa	New Zealand
hapū	sub-tribe
hauora	health
Hineahuone	female element that comes from the earth
Hinetitama	daughter of Hineahuone and Tane
hui	gathering
iwi	tribe
kapa haka	the practice and performance of Māori songs and dances
kaupapa Māori	Māori focussed
koha	gift, donation
kuia	elder women
kura kaupapa Māori	Māori school
mana	authority
manaakitanga	caring
Maui	Maui-Tikitiki-a-Taranga, son of Taranga
mimi	urinate
noa	free from restriction
Pākehā	non-Māori New Zealander's, usually of European descent
papakāinga	village, homestead
Papatūānuku	the earth, earth-mother
paru	dirty, filthy
rangatahi	young person, youth
Ranginui	great sky, sky-father
tangihanga	funeral
tapu	prohibition, restriction,

te ao Māori	protection Māori world
te reo	the language
te taha hinengaro	thoughts and feelings
te taha tinana	physical
te taha wairua	spiritual
te taha whānau	family and community
Te Whare Tapa Whā	four walls of a house
Te Wheke	octopus
whakamā	shy, embarrass
whakanoa	to free from tapu
whakapapa	genealogy
whakatauki	proverb, saying
whānau	family
whānaungatanga	kinship relationship
whare tangata	the womb
wharenuī	house
whenua	land

Sexual Health Terms

abortion	termination of a pregnancy not more than 20 weeks gestation
abstinence	voluntarily avoiding, or refraining from performance of an act such as sexual intercourse
asymptomatic	without symptoms
azithromycin	a prescription-only oral antibiotic effective against gram-negative bacteria prescribed as a single dose for chlamydia
cervix	the part of the uterus that protrudes into the cavity of the vagina
chlamydia	a micro-organism of the genus ' <i>chlamydia</i> ', one of the most commonest sexually transmitted infections
condom	a soft, flexible sheath made of plastic or rubber, that covers the penis used to prevent the exchange of body fluids during sexual activity
conjunctivitis	inflammation of the conjunctiva (the mucous membrane lining the inner surfaces of the eyelids and anterior part of the sclera)
contraception	a process of technique for preventing pregnancy by means of a medication, device or method that blocks or alters one or more of the processes of reproduction in such a way that sexual union can occur without impregnation
Depo-Provera	medroxyprogesterone, a prescription only long-acting contraceptive delivered as an intramuscular injection
doxycyclin	a prescription only broad-spectrum tetracycline antibiotic, 100mg b.i.d for at least 7 days for chlamydia infection
erotics	sexual love or desire
epithelial cells	cells arranged in one or more layers that form part of a covering or lining of a body surface
fertility	the ability to reproduce

fertility rate	the number of live births divided by the number of females aged 15-44 years of age
gender	the classification of the sex of a person into male, female, or ambivalent
gender identity	the inner sense of maleness or femaleness
gender role	the expression of a person's gender identity, the image that a person presents to both him- or herself and others, demonstrating maleness or femaleness
genitals	the sex, or reproductive organs visible on the outside of the body. In the female they include the vulva, mons veneris, labia majora, labia minoria, clitoris and vaginal vestibule
genital tract	(see reproductive system)
gonorrhoea	a common sexually transmitted infection that affects the genitourinary tract resulting from the organism ' <i>Neisseria gonorrhoeae</i> '
HIV	(human immunodeficiency virus), a retro-virus that causes acquired immunodeficiency syndrome (AIDS)
incidence	the number of new cases in a particular period
infertility	the condition of being unable to produce offspring
menarche	the first occurrence of menstruation in a woman
monogamous	practice or condition of having a single sexual partner during a period of time
neonate	an infant from birth to 28 days of age
notifiable infection	diseases that must, by law, be reported to a governmental agency
One-Stop-Shop	location that offers a multitude of services to a client or a customer i.e. services for young people including sexual health services
oral contraceptive	oral hormonal medication for contraception
oral sex	sexual activity involving oral stimulation of one's partner's sex organs
partner notification	the act of informing the sexual partners of an infected patient that they have been exposed to a sexually transmitted infection

pelvic inflammatory disease	an inflammatory condition of the female pelvic organs, especially one caused by bacterial infection
pneumonitis	inflammation of the lung
pregnancy	the gestational process, comprising the growth and development within a woman of a new individual from conception through the embryonic and foetal periods to birth
prevalence	the number of all new cases and old cases of a disease or occurrences of an event during a particular period
Reiters syndrome	an arthritic disorder predominantly of adult males
reproductive system	the male and female gonads, associated ducts and glands, and external genitalia that function in the procreation of offspring (also called genital tract)
safe sex	intimate sexual practices between partners who use condoms or other means to prevent the exchange of body fluids that transmit diseases
screening	a preliminary procedure, such as test or examination, to detect the most characteristic sign or signs of a disorder that may require further investigation
sequelae	any condition that follows and is the result of a disease, treatment, or injury
sexual abuse	the sexual mistreatment of another person by fondling, rape, or forced participation in sexual acts
sexual coercion	the use of force or intimidation to obtain compliance with sexual acts
sexual debut	the first experience of sexual intercourse
sexual history	the part of a patient's personal history concerned with sexual function and dysfunction
sexual intercourse	the insertion of the penis into the vagina followed by orgasm
sexually transmitted infection	a contagious disease usually acquired by sexual intercourse or genital contact
speculum	a retractor used to separate the walls of a cavity to make examination possible, such as a vaginal speculum

swab	stick or clamp holding absorbent gauze or cotton. Used for collecting a specimen for laboratory examination
termination of pregnancy	an induced miscarriage of pregnancy
vaginal bleeding	an abnormal condition in which blood is passed from the vagina, other than during the menses
vaginal discharge	any discharge from the vagina
venereal	pertaining to or caused by sexual intercourse or genital contact
virginity	the state of being a virgin (a person who has never had sexual intercourse)

Appendix B. Notice to enlist participants



**Are you...
Maori
female
aged 16 - 24 years?**

**Are you keen to volunteer to be interviewed for
a sexual health research project?
Then phone, email or text me...
and I will ring you back with more info.**

**Or pick up an info sheet from the...
Māori Liaison Services, or the
AUT Health Counselling and Wellbeing Centre**

**Contact: Cathrine Waetford
cath_w@vodafone.net.nz
Mobile 021 966 292**

*You're time and contribution is valuable and
if you participate in an interview you will be given a koha.*

Cathrine Waetford Research project cath_w@vodafone.net.nz MOB: 021966292				
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Appendix C. Interview Schedule

1. Tell me what you know about sexually transmitted infections? Tell me what you know about chlamydia?
2. Where has the knowledge that you have about STIs and chlamydia come from? Are there other sources of information you know about but may not use?
3. How would you describe the health information about STIs such as chlamydia available to you in terms of being appropriate for you?
4. How would you describe the health information about STIs such as chlamydia available to you in terms of being accessible for you?
5. How concerned, or worried, are you about getting an STI, or chlamydia?
6. How would you feel if you had an STI such as chlamydia? What about someone you knew?
7. What do you think about using condoms to prevent STIs such as chlamydia? What do you think boys' attitudes are toward using condoms to prevent STIs such as chlamydia?
8. Who would you seek help from if you thought you had an STI such as chlamydia?
9. How would you feel about going to seeing a health professional about a sexual health problem?
10. How appropriate are sexual health services to you?
11. How accessible are sexual health services to you?
12. If you were to design a sexual health service for young Māori women, what would it need to be like for you to feel at ease to go there?
13. What other things do you think would be useful for you to know, be able to do, or talk about to help you protect yourself against STIs such as chlamydia?
14. Is there anything else that you can think of that would make a difference in reducing the infection rate of chlamydia in young Māori women?

Appendix D. Transcriptionist Confidentiality Agreement



Confidentiality Agreement

Project title: The knowledge, attitudes and behaviour of young Māori women in relation to sexual health.

Project Supervisor: Associate Professor Lynne Giddings & Dr Clive Aspin

Researcher: Cathrine Waetford

- I understand that all the material I will be asked to transcribe is confidential.
- I understand that the contents of the tapes or recordings can only be discussed with the researcher.
- I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriptionist’s signature:

Transcriptionist’s name:

Transcriptionist’s Contact Details (if appropriate):

.....
.....
.....
.....

Date:

Project Supervisor’s Contact Details (if appropriate):

Assoc Professor Lynne Giddings, lynne.giddings@aut.ac.nz, PH 921 9999 extn 7013

Dr Clive Aspin, c.aspin@auckland.ac.nz, PH 373 7599, extn 86109

Note: The Transcriptionist should retain a copy of this form.

Appendix E. Ethical Approval



MEMORANDUM

Auckland University of Technology Ethics Committee (AUTEC)

To: Lynne Giddings
From: Madeline Banda Executive Secretary, AUTEC
Date: 25 June 2007
Subject: Ethics Application Number 07/45 The knowledge, attitudes and behaviour of young Māori women in relation to sexual health: a descriptive qualitative study.

Dear Lynne

Thank you for providing written evidence as requested. I am pleased to advise that it satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC) at their meeting on 16 April 2007 and that on 30 May 2007, the Chair of AUTEC approved your ethics application. This delegated approval is made in accordance with section 5.3.2.3 of AUTEC's Applying for Ethics Approval: Guidelines and Procedures and is subject to endorsement at AUTEC's meeting on 9 July 2007.

Your ethics application is approved for a period of three years until 30 May 2010.

I advise that as part of the ethics approval process, you are required to submit to AUTEC the following:

A brief annual progress report indicating compliance with the ethical approval given using form EA2, which is available online through <http://www.aut.ac.nz/about/ethics>, including when necessary a request for extension of the approval one month prior to its expiry on 30 May 2010;

- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/about/ethics>. This report is to be submitted either when the approval expires on 30 May 2010 or on completion of the project, whichever comes sooner;

It is also a condition of approval that AUTEC is notified of any adverse events or if the research does not commence and that AUTEC approval is sought for any alteration to the research, including any alteration of or addition to the participant documents involved.

You are reminded that, as applicant, you are responsible for ensuring that any research undertaken under this approval is carried out within the parameters approved for your application. Any change to the research outside the parameters of this approval must be submitted to AUTEC for approval before that change is implemented.

Please note that AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to make the arrangements necessary to obtain this.

To enable us to provide you with efficient service, we ask that you use the application number and study title in all written and verbal correspondence with us. Should you have any further enquiries regarding this matter, you are welcome to contact Charles Grinter, Ethics Coordinator, by email at charles.grinter@aut.ac.nz or by telephone on 921 9999 at extension 8860.

On behalf of the Committee and myself, I wish you success with your research and look forward to reading about it in your reports.

Yours sincerely

Madeline Banda
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Catherine Waetford cath_w@vodafone.net.nz

Participant Information Sheet



Date Information Sheet Produced:

8 May 2007

Project Title

The knowledge, attitudes and behaviour of young Māori women in relation to sexual health: A descriptive qualitative study.

Tena koe

Ko Ngāti Wai raua ko Ngāti Hine oku iwi, kei raro i te maru o Ngapuhi nui tonu. Ko Cathrine Waetford toku ingoa. Tena koe e awhi nei i tenei kaupapa. He mahi tenei hei whakatutuki i taku tohu, ara, he Master of Health Science.

I would like to invite you to participate in this project that will look at issues to do with your knowledge, attitudes and behaviours in relation to sexual health. At the completion of this project I will be submitting the final report for consideration for my Masters thesis to complete my studies toward a Master of Health Science. Your participation is entirely voluntary and you may withdraw from the project at any time without any penalty.

What is the purpose of this research?

Recent research tells us that young Māori women have really high rates of sexually transmitted infections (STIs) like chlamydia. However, not much is known about the knowledge, experiences and opinions of young Māori women in relation to sexual health and STIs. This research study aims to find out what young Māori women think about sexual health and STIs - like chlamydia - to reduce the STI rates for young adults like yourself to see that health clinics and the health information provided by health professionals is appropriate and easily accessible for young women like you.

How was I chosen for this invitation?

I have talked with a wide range of people, including various whānau groups, teachers, kaiako, Māori Liaison staff, health professionals and other contacts in the Māori community about this study to have them help me invite young Māori women like you to participate. There are also posters up around AUT which you may have seen.

What will happen in this research?

I will ask you to take part in an interview that will take about an hour. Basically, that means we will sit down and have a chat discussing your views, what you think, and your opinions on issues related to sexual health. There are no right or wrong answers; I'm interested in your honest opinions



The interview will be recorded so that I can listen to it again later and type it out. Only my Project Supervisors and I will listen to the recorded interview and have access to the typed version of it (the transcript).

What are the discomforts and risks?

As we chat during the interview, some of the information that you may share with me may be personal and of a sensitive nature. There is the possibility that you may become upset, or feel sad during the interview because of this. Remember - anything you tell me will remain totally confidential.

How will these discomforts and risks be alleviated?

If you feel sad or upset during the interview you are welcome to take a break from the interview, or stop the interview altogether. If you find the interview raises issues of a personal nature that you would like to discuss further with a health professional, I can support you and help arrange counselling through the AUT Health and Well-being Clinics free of charge, or someone else should the need arise.

What are the benefits?

The information you share with me will go directly toward recommendations that may lead to improvements in sexual health services, and educational material, for young Māori women. This in turn will contribute to reducing STI rates and ultimately improve Māori health. You will also get a koha for your participation.

How will my privacy be protected?

All information that may personally identify you, like your name, address, phone number etc will remain confidential and private at all times. Only my Project Supervisors and I will have access to identifying data. Identifying data will not be included in any research reports or presentations, and you will not be named. No one else will know you have participated in the study unless you choose to tell them. Your personal information will only be used for the purposes of this study.

What are the costs of participating in this research?

The only cost is your time; the interview will take up to an hour of your personal time.

What opportunity do I have to consider this invitation?

If you are interested in participating, I will contact you and I can tell you more about the study and you can ask me any questions you may have. If you agree, we will schedule a time for an interview for sometime that week, or the following week. You are welcome to change your mind and withdraw from the study at any time without penalty – just contact me (phone, email or text) to let me know.

How do I agree to participate in this research?

You can let me know – Cathrine Waetford - that you would like to participate in the study by phone, text, or email (see below for details). You will also need to sign and complete a consent form. I'll bring this for you to sign at the time of the interview.

Will I receive feedback on the results of this research?

On the consent form you can tick if you would like a copy of the report. If you tick 'yes', then I will send you a copy of the report at the end of the project, probably early next year.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisors, Associate Professor Lynne Giddings, lynne.giddings@aut.ac.nz, 921 9999 extn 7013, or Dr Clive Aspin, c.aspin@auckland.ac.nz, 373 7599, extn 86109

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEK, Madeline Banda, madeline.banda@aut.ac.nz, 921 9999 ext 8044.

Whom do I contact for further information about this research?

Contact Details for Researcher:

Cathrine Waetford, cath_w@vodafone.net.nz, Mob 021 966 292.

Contact Details for Project Supervisors:

Associate Professor Lynne Giddings, lynne.giddings@aut.ac.nz, PH 921 9999 extn 7013.

Dr Clive Aspin, c.aspin@auckland.ac.nz, PH 373 7599, extn 86109

Approved by the Auckland University of Technology Ethics Committee on 30 May 2007, AUTEK Reference number 07/45.

Appendix H. AUT Health and Counselling Memo



MEMORANDUM

To Cathrine Waetford
CC
FROM Stella McFarlane
SUBJECT Counselling of Research participants in your sexual health research
DATE 5.3.07

Dear Cathrine

As manager of AUT Health Counselling and Wellbeing, I would like to confirm that we are able to offer confidential counselling support for the participants in your AUT research project on **Māori women's perceptions around sexual health**. The free counselling will be provided by our professional counsellors for a maximum of three sessions and must be in relation to issues arising from participating in your research project.

Please inform your participants:

They will need to drop into our centres at WB219 or AS104 or phone 921 992 City Campus or 921 9998 North Shore campus to make an appointment

They will need to let the receptionist know that they are a research participant

They will need to provide your contact details to confirm this

They can find out more information about our counsellors and the option of online counselling on our website

http://www.aut.ac.nz/students/student_services/health_counselling_and_wellbeing

Yours sincerely

Stella McFarlane
Manager
Health, Counselling and Wellbeing