

Indigenous women's perceptions on community based family planning in rural Morobe of Papua New Guinea

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Attestation of Authorship

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

Sign:

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Abbreviations

AusAID	Australian Aid Grants
BDPfA	Beijing Declaration Platform for Action
CEDAW	Convention on Elimination of all forms Discrimination Against Women
FP	Family Planning
ICDP	International Convention on Development and Population
ILO	International Labour Organisation
IPPF	International Planned Parenthood Federation
LLG	Local Level Government
MMR	Maternal Mortality Rate
NGO	Non-government Organisation
NZ	New Zealand
NZAID	New Zealand Aid grants
OCP	Oral Contraceptive Pills
PNG	Papua New Guinea
SRH	Sexual Reproductive Health
TFR	Total Fertility Rate
UNDRIP	United Nations Declaration of the Rights of Indigenous People
UNFPA	United Nations Family Planning Association
UNICEF	United Nations International Children's Emergency Fund
US\$	United States of America Dollars

Abstract

Introduction: According to WHO and World Bank reports Papua New Guinea had high maternal mortality and fertility rate in the last ten years. PNG has more than 800 languages, ethnic groups and cultures that health policy developers need to be aware of when developing maternal health policies. Culture and traditions may be obstacles to poor accessibility to modern family planning services. In order to address these issues of increased maternal mortality and fertility rate family planning programme need to be culturally sensitive. Not all cultural practices are detrimental to women's reproductive health. Indigenous women have cultural practices that enable women survived through child birth experiences and family planning in order to regenerate human race. Having these significant cultural roles women's health in reproduction and child rearing is important. However, women's perceptions on how family planning will promote women's health were not considered when introducing family planning services in PNG.

Aim of research: To explore women's perceptions in regard to current community based family planning and roles of volunteers in promoting reproductive health of indigenous women in rural PNG.

Methodology: An indigenous feminist approach has been employed in this research utilising in-depth interviews and focus group discussions to collect data from ten indigenous women who live in one of the small village community in Morobe Province of PNG.

Findings and discussions: Women's interpretation and understanding of the benefits of family planning and their attitudes towards modern family planning matters were largely informed by their local and practical knowledge, that are shared by women in their communities for many generations. The result of this study suggested that the introduction of modern contraception and family planning had weakened and challenged existing traditions, cultural practices and norms in relation to the context of indigenous childbirth culture. Modern family planning has somehow changed the equilibrium of the social and gender relations that somehow have been disadvantageous to women. For example, since the introduction of modern family planning, the community has stopped supporting and building hauskarim or a birthing house for women. This resulted in women's feeling ashamed, uncomfortable and exposed when they have to give birth in their own homes. Traditionally, giving birth has been seen as a sacred experience and

women felt that rituals of giving birth in hasukarim should be honoured, respected and kept within their tradition.

Chapter 1: Introduction

This thesis presents a research carried out with indigenous women of Muin village (pseudonym) of the Morobe Province of Papua New Guinea (PNG). The research examined the indigenous women's perceptions and views with respect to community based family planning (FP) and the roles of FP volunteers in a rural community and the benefits the women experienced with the program. This chapter begins by presenting a current FP programme and challenges in PNG, followed by the study rationale and a discussion of the research methodology. The last two sections of this chapter include definitions of key terms and an outline of the structure of the thesis.

1.1 Research background

A vast body of literature confirms that FP contraception has contributed to the reduction of the global maternal mortality and morbidity through the reduction of fertility rates. Family planning is a program that enables individuals or couples to plan for an acceptable family size to manage. For many families having too many children to support would lock them into a never ending cycle of poverty (Bongaarts, Mauldin, & Philip, 1990; Cleland, Conde-Agudelo, Peterson, Ross, & Tsui, 2012; Hayes, 2010; International Conference on Population and Development, 1994).

The modern family planning or contraceptive methods were first introduced to PNG in 1948 by the Australian Air Force Medical Team. It was not until 1975 or after the PNG's independence that the modern FP contraception was adapted into the country's national health policy. Initially at that time the purpose of the FP program was for spacing the children and it was only available to be offered to married couples (Gunther, 2008). Only after the 1994 International Conference on Population and Development (ICDP) linkage was identified between maternal mortality and economic development that United Nations member nations were called on to control population and improve maternal reproductive health with the goal to promote economic development (International Conference on Population and Development, 1994; Jacobstein, Curtis, Spieler, & Radloff, 2013; The Guardian, 2012). It was at that time then that the PNG government adopted the policy and made a commitment to control population and opened opportunities for others, apart from couples, to utilise modern contraception to prevent unplanned pregnancies. According to the 1994 ICPD, FP services were required to be integrated with other sexual reproductive health programmes aiming to control fertility, promote maternal and child health, and reduce maternal and infant morbidities and

mortalities (Bongaarts et al., 1990; Cleland et al., 2006; Cleland et al., 2012; UNICEF, 2012).

Every year, nearly 400 000 women die as a result of pregnancy and childbirth globally; most of them live in poor countries. Not having a say whether and when to have children places women into a life and death situation. Family planning is a low-cost yet effective way to prevent maternal deaths and morbidities whereby risky pregnancies are avoided. Around 25 to 40 per cent of maternal deaths could be prevented if unplanned and risky pregnancies are prevented (Cleland et al., 2006; World Health Organization, 2010). The contraceptive prevalence rate for modern family planning methods in PNG has increased slowly but steadily from 6 per cent in 1978 to 24 per cent in 2006 and 32.4 per cent in 2011 (World Health Organization, 2014a). The average annual growth of family planning prevalence is very slow at 2.4 per cent annually. Whilst the contraceptive prevalence rate (CPR) of a country is low, the total fertility rate (TFR) – average number of children per woman during her life time – is likely to be high. With this very slow pace, it would take more 25 years for PNG to mark its CPR to 50 per cent. Unmet need of family planning modern methods in PNG stands at about 30 per cent (World Health Organization, 2014a). The high disparity of family planning rates between rural and urban women remains at 22 per cent and 37 per cent, respectively. With a current maternal mortality rate at 250 per 100,000 live births, family planning is an important key agenda for improving maternal health outcomes in PNG (Government of Papua New Guinea, 2010). With its current MMR, PNG just met half of the projected 2015 MDG % target (World Bank, 2011).

PNG's slow progress in family planning might partly be due to policies or programmes that are far from relevant to the political, social, economic or cultural contexts of diverse PNG communities (Cleland et al., 2006; Shrestha, 2002; Ullah & Humble, 2006). Others suggest that the current FP programme in PNG has overlooked the needs and voices of rural indigenous communities (Hinton & Earnest, 2011). Also research to formulate health policies and programmes has been largely based on communities living in main cities or nearby main government stations (Ashwell & Barclay, 2009; Sanga, de Costa, & Mola, 2010; Vail, 2002); or has been largely dominated by the Western paradigm and not indigenous epistemology (see also chapter three on indigenous knowledge). Most times health models introduced in PNG have been adopted from other developing countries, like Tanzania and Indonesia (Alam, Tasneem, & Oliveras, 2012; Simba, Schuemer, Forrester, & Merriment, 2011) that have far different social contexts from PNG. For

example, the rural communities might poorly utilise modern family planning services due to a lack of understanding related to the value of those services while the policy developers might fail to match their services with the needs of the communities. This research aims to fill in this gap by examining indigenous women's experiences of modern family planning and their aspirations and strategies on how to improve those services.

1.2 Research objectives

This research has been based with three objectives in mind. The first objective was to examine women's perception and understanding of current family planning programme and its benefits. The second one was to investigate women's perception on the roles of FP volunteers to improve FP services and women's reproductive health outcomes. The third objective was to capture women's collective ideas on how to improve the existing community based FP program. In order to meet these objectives the following research questions were used to guide the individual in-depth interviews and focus group discussions.

- What did women know about the current community based FP programme and the roles of the FP volunteers in their community?
- What benefits did women experience with the community based FP program?
- What benefits did women experience with modern contraception?
- What ideas did women have to improve current family planning program and roles of volunteers?

It is hoped that the results of this study will contribute to the current understanding of the community based family planning programmes and volunteers in indigenous communities PNG and will help to inform its future development. The indigenous feminist research framework was used to guide the choice of research methodology, data collection and analysis and interpretation (see details in chapter three). This research recognizes the resourcefulness and capabilities of indigenous people in finding solutions to their own problems (Chilisa, 2012; Denzin, Lincoln, & Smith, 2005; L. T. Smith, 2006). The participation and recommendation made by indigenous women in this study might share light into programmes and policy developers to understand the life context of indigenous people, recognise their potential and resourcefulness and to involve them to participate fully in the decision making process in family planning programme. Next follows description of PNG indigenous population.

PNG is located north of Queensland, Australia, to the east of Indonesia and to the west of Solomon Island in which the country shares border with (Figure 1.1). The red circle outlined on map marks the Muin research village of northern Morobe province of PNG. Morobe is the largest of twenty two provinces in PNG with a population of 672, 756 people (Apeng et al., 2010). Morobe includes nine districts with a total of 33 Local Level Government (LLG).



Figure 1.1: Map of Papua New Guinea Showing Morobe Province

The population of PNG is approximately 7.2 million and more than 80 per cent of the citizens live in rural villages identified as indigenous people. PNG comprises of over 800 ethnic groups, indigenous tribes, clans and local dialects (Ahai, 2004; Gibson & Rozelle, 2003; Hinton & Earnest, 2011; Treva, 2012). The Tok-Pisin for examples is one of three PNG national languages used in daily conversation involving different ethnic groups since the 1800s (Ahai, 2004). However, it might be considered by Muin community as their second or third language after local dialects (Papua New Guinea National Research

Institute, n.d.; World Trade Press, 2010). Tok-Pisin was used by the researcher to communicate with the research community.

The Muin village was located in rural Nawaeb District of the Morobe province. It had no more than 100 people and was one of ten villages in one Local Level Government (LLG). The Muin residents considered themselves to be the people originated from the land; they inherited their customary land from their ancestors and had lived there most of their life. The LLG where Muin village is located had two primary schools and a health centre which is two to three hours walk away from the village. Muin community relied on family gardens or farms for their daily needs. Occasionally, the villagers would go to a nearby local market near the highway road to sell their cattle, pigs, or food crops. The market for cattle however has been inconsistent, depending only on out-of-village customers or word of mouth.

The majority of rural villages are marked by hilly terrain regions with scattered households and poor infrastructure, making them difficult to access by motor vehicles. The village people might need to walk for two to three hours to the closest facilities to access government services such as health services (Apeng et al., 2010; Campos-Outcalt, Kewa, & Thomason, 1995; Sanga et al., 2010; Vail, 2002). Muin for example, was about ten kilometres from the nearest public transport station. It took people from Muin two to three hours walk to get to the nearest government station or to catch a public transport. Otherwise, it would be very difficult for a motor vehicle to get into Muin as it would have to cross multiple streams of rivers that often flood during the rainy season.

With only two primary schools in Muin, children were sent to secondary school at the district. This means that while family garden and farms were sufficient for the daily living of families in Muin, they were also under pressure to get some cash income to pay school fees, uniforms or transportation or boarding (Gibson & Rozelle, 2003).

1.3 Study contribution to Public Health Literature on Family Planning with Indigenous Communities

Rural and indigenous women in PNG have less access to modern contraception and maternal health services than their counterparts living in urban dwellings. These disparities are likely to be caused by the difficult topographical location of the rural villages, and poor infrastructure highlighted earlier (Apeng et al., 2010; Ashwell & Barclay, 2009; Hayes, 2010).

The lives of indigenous people in PNG have been very much attached to their land and traditional practices and knowledge. Like many other indigenous communities worldwide, indigenous medicine and healing methods have been widely used parallel to modern medicine (Bremner, Bilsborrow, Feldacker, & Holt, 2009; Khalaf, Abu-Moghli, Callister, & Rasheed, 2008). Due to living in isolated places with language barriers, indigenous people are often disadvantaged in accessing basic education and health services (Stephens, Nettleton, Porter, Willis, & Clark, 2005).

To increase family planning participation in rural communities, the International Planned Parenthood Federation (IPPF) introduced and funded the first community based family planning through PNG Family Health Association in 1997. Initially this programme was implemented in three provinces: Morobe, East Sepik and East New Britain with a plan to expand it to the other 19 provinces. At the time of this research however the family planning service centre at the East New Britain Branch was closed down in 2012 due to a lack of funding and the programme has never been expanded to the other provinces. The community based FP programme trained local community members to distribute modern contraception such as condoms and pills to the communities. A similar community based FP programme was introduced also in some countries in Africa and Asia and it has been successful in reducing the country's maternal deaths and fertility rate (Alam et al., 2012; Glenton et al., 2010; Maes, Kohrt, & Closser, 2010; Ullah & Humble, 2006).

Generally, the government run family planning clinics are available at districts levels; however such facilities are often poorly staffed and equipped. Based on the researcher's observation as an indigenous woman who previously worked as a clinical nurse-midwife for over 15 years in Morobe province, poor utilization of family planning services at district level by indigenous community might be caused by various reasons. Some of these reasons might relate to a poor and expensive transport system from rural village to the district or that indigenous women were not aware of modern contraceptives, afraid of its side effect as will be discussed in chapter two. This research therefore envisaged to contribute to efforts to develop a FP programme and policy that are culturally appropriate to indigenous community.

1.4 Definition of terminologies

This section includes some of the terms that are frequently used throughout this thesis. The term **family planning** (FP) generally refers to pre-conception counselling and

treatment, contraception and post abortion care (Everett, 2005; van Look, Heggenhougen, & Quah, 2011). In this thesis however, the term family planning refers to contraception or the provision of modern methods of contraception which may include condoms, oral contraceptives, Intra Uterine Device (IUD) or implants. **Community based family planning** refers to the family planning service provided by village volunteers at the village level in PNG. The community **volunteers** are usually members of a local community who are trained to distribute modern contraception in their community. The community volunteers are not medically trained to provide injections, IUD or implant. These volunteers are usually chosen among the respected community members (Alam et al., 2012; Shrestha, 2002; Ullah & Humble, 2006). In this thesis, they are referred to as the village volunteers, the community volunteers or family planning volunteers. The term **Indigenous** according to the International Labour Organisation, has no single definition (International Labour Organisation, 2009). In this thesis, the indigenous population refers to population or community of people who have inherited their customary land from their ancestors and have lived at that land for most of their lives. The settlement on the indigenous land may be through inheritance or marriage. Lastly, the term **indigenous knowledge** constitutes local traditions and knowledge indigenous people possess, unique from the main stream knowledge. This knowledge is developed from the cultural and spiritual beliefs that indigenous people hold. It is passed on from generation to generation through oral histories and storytelling (Chilisa, 2012; Denzin et al., 2005; Moris, 2010; L. T. Smith, 2006). Indigenous knowledge is characterised as local, sacred, shared, practical and empirical, based on social cultural relationship, equality and respect for elders (Moris, 2010).

1.5 Thesis structure

This thesis consists of five chapters. The first chapter introduces the research background, briefly describes the research questions and the study community. The second chapter presents the literature review on family planning policies and programmes in PNG, sexual and reproductive health rights of indigenous women and barriers to accessing family planning services in rural communities. The third chapter discusses the use of the indigenous feminist research methodology to guide the research methods, data collection, analysis and interpretation. The fourth chapter presents and discusses the research findings. The final chapter presents the summary and discussion of the research findings and the implications of this study to current FP programmes and policies for rural indigenous communities in PNG.

1.6 Chapter summary

This chapter includes a brief description of the study background, research objectives and research communities. This research was conducted to fill in the gaps in current understanding of indigenous women's experiences and perceptions of the community based FP in rural PNG which was first introduced in 1997. It also aimed to capture women's collective aspirations and strategies to improve current services and the roles of FP volunteers. The small research community was indigenous people of PNG, living in Muin village, located about 50kms from the nearby district. The researcher was concerned with the existing community based FP programme in rural PNG, to what extent it met the reproductive needs of the community and to what extent its implementation was culturally or socially relevant to the lived experience and knowledge of indigenous communities.

Chapter 2: Sexual and Reproductive Health Rights of Indigenous Women and Family Planning in Rural Papua New Guinea

Due to the socio-cultural conditions and geographical locations, indigenous women worldwide are typically marginalised or overlooked in programmes and policies affecting their lives (International Labour Organisation, 2009). This chapter highlights issues surrounding indigenous women's sexual reproductive health (SRH) and their experience in accessing modern family planning (FP) services in Papua New Guinea (PNG). This chapter includes five sections: 2.1 the sexual and reproductive health of indigenous women in PNG; 2.2 modern family planning services in PNG; 2.3 The sexual and reproductive rights of indigenous women in PNG; 2.4 family planning from indigenous to modern practices and 2.5 barriers to indigenous women accessing modern family planning.

Indigenous people cannot be strictly defined but this term consists of several characteristics. The ILO convention number 169 article one described Indigenous people as;

- 1) tribal peoples in independent countries whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations
- 2) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions.

(International Labour Organisation, 2009)

Thus, in this thesis, an indigenous woman is defined as a woman, who was born or migrated through marriage to a particular community or village and has lived most of her life there. The woman either has ancestral ties through heritage or marriage, prior to colonisation, to a particular place, land or region of a country or territory. There are

approximately 400 million indigenous people worldwide, living in 70 countries, some of which include the indigenous Maori of New Zealand and the Aborigines of Australia (Behrendt, 2012). PNG communities are composed of numerous tribes that are represented through diverse cultures and eight hundred different languages. The PNG indigenous tribes and clans vary in its culture, traditions and dialects (Yamo, 2011). More than 80 percent of the PNG indigenous communities live in rural areas and between 90 and 97 percent of the land are customarily owned by indigenous people. These people are well connected to their birth land, and local and traditional cultures. The official language spoken amongst ethnic groups in PNG is Tok-Pisin and second to that is the Standard English language learnt at schools. Both Tok-Pisin and English are officially used in everyday business and trading (Ahai, 2004; Gibson, 2001; Yamo, 2011).

2.1 The sexual and reproductive health of indigenous women in Papua New Guinea

The policies, programmes and research on the sexual reproductive health of indigenous women needs to take into account the social and cultural context of the life of indigenous women. The way indigenous women define their sexual identities or attitudes and beliefs around sexuality reproductive health is closely connected to their natural environment, families and communities (Kies, 1987; Stephens et al., 2005). In addition, indigenous women often find it uneasy, confusing and unsettling when they are asked or it is suggested that they become involved in practices that are foreign to them. Learning new knowledge that remotely relates to their original heritage and environment and struggling to adapt to foreign practices other than their traditional ones may easily make them feel incompetent. Thus they are likely to underperform without adequate training. This may cause them to be further marginalised and alienated in many development programmes (Dodgson & Struthers, 2005; Ishida, Stupp, Turcios-Ruiz, William, & Espinoza, 2012).

It should be understood that it can be very challenging for indigenous women to learn and adapt to new health systems and family planning in English and Tok-Pisin. For these indigenous women, both English and Tok-Pisin are completely foreign languages as they use local dialects in daily lives. Learning Tok-Pisin and English may become an added burden to the indigenous women due to poor literacy level as well as other factors such as the required extra time and energy, which the women or the health worker may not have. For example, as only one health worker serves in a rural health facility, this person may find it challenging to find interpreters to interpret information and education for women. Indigenous women in particular, who are unable to adjust to these modern health

care systems and therefore may miss out on essential health services (Agadjanian, 1999; Hayes, 2010; Kies, 1987; Vail, 2002). Furthermore, remote geographical locations, languages, complex healthcare system also create barriers that prevent indigenous women to participate in health policies and programs development that may have a direct impact on their lives and wellbeing (Dodgson & Struthers, 2005; Ishida et al., 2012).

Failure to acknowledge the importance of the traditions or the world views of indigenous women in relation to family planning and the values the women hold may lead to women and community refusing to use health services. In indigenous communities, discussions related to sexual reproductive health are generally private and sensitive. It is deemed to be inappropriate to discuss reproductive and sexual health openly or with someone outside their community (Kies, 1987; Wane, 2001). Taking this into consideration, women, therefore, tend to maintain confidentiality to the point of hiding their ill-health conditions and in many, if not most, situations will only seek outside medical help at times if health complications arise. For example, the case studies of Sanga and colleagues (2010) at Goroka based hospital in PNG showed rural women arriving late at the hospital for admission dying of postpartum haemorrhage and post abortion infections. These complications experienced might be due to the cultural norm that it was taboo to discuss sexual health and pregnancy with outsiders including the nurses (Howell, 2000; Santelli & Beilenson, 1992; Watson-Jones et al., 2002).

Many indigenous cultures honour women's ability to reproduce as an essential and sacred aspect important to the survival of their traditions and community. Traditional ways of life, practices, wisdom and family's knowledge are transferred from the older to the younger generations through customs or rituals (Oliver, 1989; Slatter, 2010). Likewise a young girl also learns how to be a respectable community member, wife and mother from her female older relatives, for example, her grandmother, mother and aunties (Behrendt, 2012; Clarke, 2003; Jenkin, 2013; Oliver, 1989; Weiner, 1987).

Fertility control is hardly a new subject for indigenous women, as they have practiced abstinence, anal sex, interrupted coitus, aseptic or induced abortions to prevent pregnancies in the past and even today, although this has been poorly documented (Agadjanian, 1999; Agyei, 1989; Howell, 2000; Kies, 1987; Sanga et al., 2010). Despite the introduction of modern contraceptive methods, these traditional ones are still practiced by indigenous women (Agadjanian, 1999; Khalaf et al., 2008). Further

discussion on indigenous family planning practices in PNG is included in section 2.4. The next section discusses family planning policies and programmes in PNG.

2.2 Modern family planning services in Papua New Guinea

Modern family planning program is often provided under the umbrella of maternal and child health program (Bongaarts et al., 1990; Cleland et al., 2012; Government of Papua New Guinea, 2010; Rosenberg, 2012). In PNG family planning services include counselling on types of contraceptive methods, education on sexual reproductive health issues, and prevention of sexually transmitted infections (Edouard, 2005; Everett, 2005; Government of Papua New Guinea, 2010; van Look et al., 2011). The inclusion of sexually transmitted infections (STIs) prevention programme is important for example to prevent infertility caused by chlamydia or gonorrhoea (Edwards, Jackie, & Zenilman, 2007; van Look et al., 2011).

The modern contraceptive methods were introduced to PNG in 1948 by the Australian Air Force Medical Team (Gunther, 2008). It was after the PNG's independence in 1975 that the modern family planning was adapted into the country's national health policy. Initially the family planning program was as only available to married couples (Gunther, 2008).

It was only after the 1994 International Conference on Population and Development when the linkage was identified between maternal mortality and economic development that United Nations member nations were called on to control population and improve maternal reproductive health with the goal to promote the states' economic development (International Conference on Population and Development, 1994; Jacobstein et al., 2013; The Guardian, 2012). According to the ICPD (1994), family planning services need to be integrated with other sexual reproductive health programmes aiming to control fertility, promote maternal and child health, and reduce maternal and infant mortalities (Bongaarts et al., 1990; Cleland et al., 2012). In doing so, countries subsequently will enhance their economic and social development (Cleland et al., 2012). It was at that time that the PNG government made a commitment to control population and opened opportunities for others, apart from couples, to access family planning services.

Currently, the world population is growing at the rate of 1.2% per year. By the year 2024, the world population is estimated to be eight billion (Baranowski & Ellison, 2011). Since the ICPD 1994 in Cairo, developed countries have successfully curbed their fertility rate

from 4.7 to 2.6 births per woman of reproductive age between 1990 and 2000 (Jacobstein et al., 2013). Yet population control progress in developing countries remains slow (Cleland et al., 2006; World Bank, 2011). While some developing countries in the Asia-Pacific region, such as Indonesia, India and Fiji have shown marked reduction of their total fertility rate (TFR) and maternal mortality rates (MMR), PNG continues to have a TFR at four births per woman during her lifetime (World Bank, 2011).

The government of PNG has limited resources to independently finance its family planning and other healthcare services (Apeng et al., 2010; Ashwell & Barclay, 2009; Government of Papua New Guinea, 2010; Kenyon & Power, 2003). The UNICEF(2012) report and Population Reference Bureau (2011) show the family planning contraception prevalence rate is at 36 percent that is much less than the expected rate of 40 per cent by 2015 (Government of Papua New Guinea, 2010).

In PNG, family planning services are offered at government hospitals, clinics in both urban and rural areas; privately-funded hospitals and clinics or in non-profit nongovernment stand-alone clinics like the Marie Stopes of PNG. There are also mobile maternal child health care programmes that provide FP to women in rural villages. There is also the community based family planning services that trained local health volunteers to distribute mostly oral contraceptives or condoms to the community. A similar programme has also been adopted in other developing countries like Nepal, Bangladesh and African countries (Alam et al., 2012; Apeng et al., 2010; Glenton et al., 2010; Maes et al., 2010; Ullah & Humble, 2006). However, the cost of a same service at private clinics can be three to four times higher than those at public clinics. The non-profit NGO clinics have also set costs for modern contraception services at reasonable prices however, the prices are higher for methods that are not available at the public health services such as Implants (Hayes, 2010; Kenyon & Power, 2003; Vail, 2002).

International donor agencies such as the World Bank, Asian development Bank, AusAID, NZAID and a few others, recognised the shortfall of the PNG government, and introduced public private partnership programmes; whereby international and national nongovernment organisation stepped in and assisted with training, logistics, community education programme, and service delivery of FP in PNG. For example, the community based family planning volunteer program was first introduced by the International Planned Parenthood Federation (IPPF) in 1997 in PNG. Other family planning mobile services for rural communities were then introduced by other international NGOs

including the Marie Stopes PNG and the Pathfinder International that specifically serving the communities of Madang province of PNG.

The community based family planning volunteers are local community members trained as volunteers to distribute oral contraceptive pills and condoms in their communities. (Alam et al., 2012; Apeng et al., 2010; Shrestha, 2002; Ullah & Humble, 2006). This community based FP programme is suitable for the rural indigenous communities as the program used local community members who share same language and culture with the community they serve. This model has been widely adopted on other developing countries like Nepal, Bangladesh and Tanzania. With the opportunities to delay pregnancies, rural women are able to create time for their own personal development like furthering their education or involving in small business activities (Alam et al., 2012; Shrestha, 2002; Simba et al., 2011).

Even though the community based FP programs in those countries has been quite successful in improving women's participation in health and other social development, challenges within the programs still exist. For instance, Nepal has been successful in meeting the unmet contraceptive needs of women, a challenge in the sustainability of the program in local communities still exists (Shrestha, 2002). In Bangladesh, its FP program has been challenged by women's disapproval of the oral contraceptive pills due to the side effects (Ullah & Humble, 2006). The community based FP programmes have been implemented in PNG since 1997 however, evaluation of its progress is yet to be available.

The mobile FP services have been able to reach communities that have relatively easy road access, yet they have not been able to reach remote communities that are more difficult to travel to. It means that some communities will suffer as they continue to miss out on very much needed family planning services. The difficulties and challenges to access health care services, faced by indigenous women living remotely in PNG are similar to their peers living in the Amazon region, Ecuador, Guatemala or African or Asian countries (Alam et al., 2012; Apeng et al., 2010; Bremner et al., 2009; Ishida et al., 2012).

2.3 The sexual and reproductive rights of Indigenous Women in PNG

The 1994 International Conference on Population and Development in Cairo (International Conference on Population and Development, 1994) and the 1995 Beijing Women's conference, are the two most prominent global efforts that placed the women's

rights to sexual and reproductive health (SRH) as a key element in family planning policies. Further, the 1995 Beijing Declaration Platform for Action (BDfPA) strongly argued for the protection, promotion and fulfilment of women's SRH rights to ensure that sexual and reproductive health policies and programmes are to be without coercion, violence or any form of discrimination (Amnesty International, 2010). This BDPfA of 1995 Beijing conference has since been included in the PNG's 2011-2015 Medium Term Development Goal and 2011-2020 National Health Plan (Government of Papua New Guinea, 2010).

Further, the rights of indigenous women to quality health services are implied in the United Nations Declaration on the Rights of Indigenous People [UNDRIP] 2007. The UNDRIP Articles 22.1, 22.2 and 24.1 have particularly set a platform for the protection and fulfilment of women's rights to sexual and reproductive health without violence or discrimination:

Article 22.1 states 'Particular attention should be paid to the rights and special needs of indigenous elders, women, youth, children and persons with disabilities in implementation of this declaration'

Article 22.2 further requires that 'States shall take measures, in conjunction with indigenous peoples, to ensure that indigenous women and children enjoy the full protection and guarantees against all forms of violence and discrimination'

Article 24.2 states: Indigenous individuals have an equal right to the enjoyment of the highest attainable standard of physical and mental health. States shall take any necessary steps with a view to achieving progressively the full realisation of this right.

Furthermore, the UNDRIP article 3.1 also calls for the states to be respectful to the rights of indigenous people to maintain, control, protect and develop their cultural heritage, traditional knowledge and resources need to improve their lives and wellbeing. To elaborate further on the rights of indigenous women to health; the UNDRIP emphasizes on the roles of health agencies, policy makers and programme developers to protect and incorporate relevant indigenous knowledge and ways of life along with their health programs to enable indigenous women's full and confidence participation in health programmes disregard of the traditional cultures women hold dear UNDRIP article 41 (United Nations, 2008).

Since the signing and approval of the agreement at the 1995 Beijing and 1994 ICDP conferences, the policies set forth at these conferences have been incorporated into various public and private sector policies to promote women's development and rights in PNG. Specific to the National Family Planning programme, policies are now in place to promote modern contraceptives in all health facilities; to expand programs to rural areas; promote sexual reproductive health (SRH) education in young adolescents and strengthen community-based volunteer networks in rural communities to promote SRH and family planning (Government of Papua New Guinea, 2010). The PNG National Health Plan was particularly supportive of the family planning policies and programs. Health programs were usually developed at the national level and forwarded to the provincial, district and local level government for implementation (Campos-Outcalt et al., 1995; Liisa & Aitken, 2006). The current family planning strategies in PNG's National Health Plan (2010) also included the provisions of family planning services in every healthcare facility advocating for communities to have fewer numbers of children; extend the out-reach of the family planning programme through a community-based distribution system; increase sexual and reproductive health knowledge for adolescents by increasing cross-sector collaboration with schools to include youth SRH curriculums (Government of Papua New Guinea, 2010; G. Smith, Kippax, & Aggleton, 2000). The next section discusses some of the common traditional practices of fertility control among indigenous communities and discusses how modern contraception have been adopted by indigenous women.

2.4 Family planning from indigenous to modern practice

Fertility control is not new to indigenous communities as various methods of birth control have been practiced in much earlier times throughout history. Today, these traditional fertility control methods are still practiced alongside modern contraceptive methods (Agadjanian, 1999; Agyei, 1989; Tsey, 2000). Men and women in PNG have been practising sexual abstinence, anal sex, interrupted coitus or aseptic or illegal abortions similar to those practices by others globally (Howell, 2000; Kies, 1987; Sanga et al., 2010). The knowledge on traditional contraceptive methods is sacred, practical and shared through oral traditions or storytelling (Behrendt, 2012; Moris, 2010). This information is passed on from older to younger generations, for example through cultural initiations and rituals. For instance, a man of Eastern highlands provinces in PNG have been following a diet restriction on certain types of foods to control his fertility (Meigs, 1976; Wilde, 2007).

Practices of fertility control have also been reported during the ancient times. For example the ancient Greeks cow's skins were used as sheets over the penis to prevent semen entering woman during sexual intercourse. Interrupted coitus was mentioned in the old testament of the Hebrew Bible (Book of Genesis) as a means to prevent pregnancy, as well as the use of herbs and charms (Kies, 1987). The next paragraphs will discuss some of the traditional contraceptive methods used by indigenous communities to space out childbirths and promote the wellbeing of mothers and children.

Before the introduction of modern contraception in rural villages of PNG, abstinence was commonly practiced by women especially during the last stage of pregnancy. During this period the husband would depart the family home and lodge at the hausman or man's-only houses for some period of time to allow his wife the space and time to focus on the childbirth preparation. The length of this husband-wife separation could be between three and five years which was enough to enable the newborn to get enough care from his or her mother. The father's departure from his family house did not signify total abandonment of his family. He would visit his family during the day time to help with household chores, provide food and firewood. In the evening he would return to the hausman. The temporary separation of man and his wife comprised practices to protect the wellbeing of the child and the mother.

Engaging in sexual intercourse during pregnancy and whilst a woman was breastfeeding was believed to contaminate the breast milk which could make the baby sick (Agyei, 1989). Even these days, it is still believed that a woman is 'dirty' or 'unclean' during early postpartum as she is still losing blood after childbirth. Some indigenous cultures believe that a man's strength as a warrior or hunter would get weakened if he engages in sexual intercourse with his wife during the containment period (Meigs, 1976; World Trade Press, 2010). These cultural beliefs and practices are not written, they can only be attained from the elders in the community. Reasons for these traditional practices seem to be similar to those of modern family planning that are to control fertility and look after the women and newborns.

Abortion has been practiced widely for centuries, in some countries that rich in religion and culture however, it is considered to be illegal, unethical or morally wrong (Donovan, 2000; Jackson, 1998). For example, according to beliefs held by Christians, Catholics and Judaism, abortion is dishonourable, sinful, and immoral; therefore it is forbidden (Auga, von Braun, Bruns, & Husmann, 2013). In indigenous practice, a woman might use

traditional herbs or seek traditional healers for an abortion. She might do this secretly without the knowledge of her husband or family. Women seek abortion for various reasons. A teenage girl might seek an abortion due to feeling ashamed of bringing bad reputation to her family and clan for having a baby out of wedlock (Sanga et al., 2010; Vail, 2002). Another woman who might have had sex outside of marriage and have fallen pregnant would consider an unsafe abortion to avoid marriage problems that could lead to a more serious tribal dispute or fight (Wardlow, 2006). However, other indigenous communities like the Trobriand islanders of PNG support pregnancies out of wedlock as the community believes the baby is sent by their ancestors (Weiner, 1987).

Traditional contraceptive practices that are harmful for women's health such as some mentioned above can be improved with first knowing, understanding and respecting the cultural beliefs around the practices. With knowledge, understanding and respect for indigenous culture healthcare workers can work with indigenous women and alter or change the harmful practices through health education and information. Modern health systems should not totally disregard all traditional practices without examining the benefits such as the use of hausman for abstinence (Chile & Simpson, 2004; Ullah & Humble, 2006). For example, a community structure like the hausman may be utilised for sharing and transferring health information to younger man or boys on sexual and reproductive health.

Modern contraceptive methods

Modern contraceptive methods used around the world are scientifically tested and medically approved but they can be too costly to afford for rural women. Traditional methods are generally cheap however, are yet to be tested (van Look et al., 2011). Some modern contraceptive methods include oral contraceptive pills, depo provera injection, intra-uterine devices (IUD), condoms, implants or permanent sterility (Hayes, 2010; Vail, 2002). Most of these methods are provided in urban clinics or hospitals where trained nurses or doctors are. The community volunteers only provide condoms and pills. These volunteers are not trained health personnel to provide injectable methods or intra-uterine devices (IUDs) (Hayes, 2010; Treva, 2012; Ullah & Humble, 2006; Wendt, 2004).

2.5 Barriers to indigenous women accessing modern family planning contraception

As modernization advances and progresses into the life of rural indigenous communities, most traditional practices including traditional methods of fertility control practiced in

pre-colonial days are slowly diminishing. Communities' traditional structures and systems which have been fundamental to the social organization of the community were likely to be the first being demolished as the modern government system was introduced in the early 1950s (Elapa, 2011). The chiefly and community leaderships within villages were indirectly abolished through replacement with modern system of democracy. This was done through voting of leaders to represent wider communities with less attention to existing leadership system in indigenous rural villages that govern smaller communities (Clarke, 2003; Wardlow, 2006; Weiner, 1987). Modernisation, changes of the local structures may challenge on rural indigenous population to cope with the new systems of doing things. The following sections discuss on the challenges indigenous rural women and population are facing at the moment which results in poor utilisation of modern FP services.

2.5.1 Complex modern health systems and services

The introduction of modern health services are marked by the building of modern hospital, health centres and the provision of advanced health technologies. The Australian and other western countries like Germany and Great Britain have built modern schools, hospitals and health centres throughout PNG during the colonial era (1950-1975). Back then all government documents or activities were written in English and then translated into Tok-Pisin. Remote communities who were not exposed to Tok-Pisin or English languages had to have such information translated into local dialects by interpreters in order to access education and health services. With rural women having a relatively low literacy rate of 46 per cent compared to their urban peers at 83 per cent the language used in health information has further complicated rural women's ability to comprehend health information (Agadjanian, 1999; Ullah & Humble, 2006; Undie & Izugbara, 2011; Yamo, 2011). Rural women particularly might find it difficult and uncomfortable to communicate their health needs in English or Tok-Pisin to health workers. As noted earlier, both English and Tok-Pisin languages are regarded as foreign languages by indigenous women just as their language is a foreign language to the English or Tok-Pisin speaking health workers.

Rural indigenous women may not be comfortable with the modern health structures and procedures that are sometimes complex and complicated to follow. The queue at the clinic also discourages the women to access the services (Ashwell & Barclay, 2009; Ullah & Humble, 2006; Vail, 2002). When modern health services are provided at the village level, at most times they are inconsistent due to shortages of health workers or medical

supplies which may discouraged women from continuing the treatment and therefore resolve to the use of traditional methods (Apeng et al., 2010; Ashwell & Barclay, 2009; Vail, 2002). The modern health centres and hospitals are usually located in main towns or government stations which require extra effort and funds for women in rural areas to access them.

Modern contraceptive methods such as injections or implants or intra-uterine devices (IUD) represent another challenge that women will have to cope with the unfamiliar procedures. Such procedures may be seen as intrusive and an invasive in women's personal privacy (Smith-Oka, 2009). Studies suggest that women's refusal in using modern contraception are likely to be caused by lack of knowledge and unfamiliarity with modern methods (Sanga et al., 2010; Ullah & Humble, 2006; Vail, 2002). For example, in Bangladesh and India, women discontinued contraceptive pills due to side effects experienced and misconception of pills causing infertility (Ullah & Humble, 2006). In addition women might not feel comfortable with the modern environmental structures of health facilities and the services and procedures used (Ullah & Humble, 2006; Vail, 2002).

2.5.2 Use of English and Tok-Pisin in provision of health information and services

The Standard Universal English Language was also into the education system aiming to enhance people capacity to participate in formal global education system and development (Gibson, 2001). With that all modern health systems and services are then provided using English languages where in most cases the health information have to be translated from English to Tok-Pisin. Still rural and indigenous women may not be able to effectively communicate their health problems in English or Tok-Pisin (Agadjanian, 1999; Ullah & Humble, 2006). Low language literacy in English and Tok-Pisin is one of the reasons women are unable to access vital health information about sexual reproductive health and family planning. Indigenous women in remote communities do not speak or understand English and Tok-Pisin very well, if at all, as the women use local dialects in daily conversation. Therefore it is necessary for any FP education or information to be translated to the local dialects before the delivery. This is so the women can understand the information and make informed decision on family planning methods which meet their needs (Ashwell & Barclay, 2009; Wickstrom & Jacobstein, 2011).

2.5.3 Cost of modern family planning services

The cost of transportation and FP services fees represent other major challenges that rural indigenous women face in accessing the services at the nearest health facility. The family planning services offered at private and government health facilities are often far too expensive for the low economic community. Some of these costs may include transport fares, consultation, treatment fees or food and shelter if a woman travels away from home. Finding hard to cope with such expenses women may prefer to use traditional herbs and charms that are cheap and well-practiced in their communities (Agadjanian, 1999; Agyei, 1989).

Some rural communities may have health aid posts (of sub-village clinics). Each health aid post is usually attended by a trained nurse. In most times if this nurse is unavailable or sick, the health post will be closed. Due to its remoteness and difficult geographical location, supplies of medicines and contraceptive methods at health posts are often not meeting the needs of the community (Apeng et al., 2010; Ashwell & Barclay, 2009). Indigenous communities are often the furthest away from main cities. Often there is no road access and as people seldom sell their crops or farm products for cash income. It is therefore very difficult for women to earn money to cover the cost of transportation and health services in main cities (Sanga et al., 2010; Ullah & Humble, 2006; Vail, 2002).

The consultation fees usually exclude the cost of the contraceptive method. The consultation at a city hospital costs about fifty toea (US\$0.20) and the injectable method costs about three kina (US\$1.20). The cost of the prescribed contraceptive methods at city hospitals however can be two to three times more expensive than those prescribed at rural health centres. In remote places the service fees are quite attainable due to government subsidies but the inconsistent supply of FP stocks, delays of re-stocking delays women to continue with FP and thus default treatment and return to traditional methods again.

The least costly family planning services are those provided by community based family planning distributors. The choices of contraception provided by community volunteers are limited to only condoms and pills. Cost effective family planning services with consistent supplies of contraceptive methods are necessary for the sustainability of the community based FP programme (Wickstrom & Jacobstein, 2011).

2.5.4 Difficult geographical locations

Geographical locations of rural and remote villages are common barriers to rural indigenous women accessing health services. With the difficult terrains of PNG, indigenous people or women are easily being left out by health care services. Road and bridges are difficult to build or when built they are often destroyed by flood or landslides due to the high amount of rainfalls experienced in the country throughout the year. These geographical factors and unpredictable natural disasters deprive the indigenous communities from most government activities and privileges that could be enjoyed within those activities. With no road built, women have to walk distances for hours to the nearest health clinics. Often, women must walk long distances to get to the nearest roadside to catch transport to reach the closest health clinic. All of these discourage rural women from accessing basic health services (Apeng et al., 2010; Gibson & Rozelle, 2003; Hayes, 2010; Sanga et al., 2010; World Trade Press, 2010).

The infrastructure development has been one of the top priorities in addressing poor health service delivery to rural communities; yet its implementation has been very slow (Foster et al., 2009). Some rural districts receive government fund to build roads and infrastructure however the slow progress in building those infrastructures are usually due to natural disasters or the lengthy negotiation process for land compensation with the landowners (Gibson & Rozelle, 2003). Ninety per cent of the land in PNG is customarily and collectively owned by groups of families or clans and they will demand compensation on land used for building roads or bridges (Slatter, 2010).

2.5.5 Poor implementation of policies and programs

For the protection and fulfilment of women's rights to sexual and reproductive health, the ICDP 1994, the Convention of Elimination of all forms of Discrimination Against Women (CEDAW) reinforced by the 1995 Beijing Conference have been incorporated into PNG's National Health Plan 2011-2020 (Jivan & Forster, 2007; Papua New Guinea National Council of Women, 2010). As noted earlier, to address the unmet needs for family planning amongst rural women in PNG, community based family planning was introduced in 1997. This service relied on the village volunteers to distribute condoms and pills to rural women. This programme has been seen to be appropriate for rural women as the program reduced the burden of costs of services and enabled easy access at the community level. The program too is culturally appropriate as local members of the community who know the local cultures are trained to remain in the village and serve the community with FP (Shrestha, 2002; Ullah & Humble, 2006). However, the choices

of contraception offered by community volunteers are limited to only condoms or contraceptive pills. The other contraceptive methods are still to be accessed at health centre or hospital in main towns (Vail, 2002).

The provision of health activities at the local level government (LLG) in rural communities is very poor due to the fact that LLG managers are non-health personals who need directions to coordinate, manage, monitor and evaluate health activities at community level. Further the national health plan developed at the national level has been forwarded to the district and LLG with inadequate support and guidance on how the programs could be implemented (Campos-Outcalt et al., 1995; Gani, 1999). Further there is a need to strengthen the governance of the health systems at the local government level. At the time of this study, the majority of health services are only coordinated at the district level which places the rural health centres in villages unassisted by the LLG systems. Furthermore, the health policies developed at the national level lacks the input of health service beneficiaries through participation and partnership with local government and communities (Gani, 1999; B. C. Smith, 1997).

2.6 Summary

Fertility control is not new to the indigenous communities in PNG. The concept of modern family planning was introduced in PNG by Australia and it was adopted into the national health programme in 1975. Currently, the family planning services in PNG have been funded by the government and International NGOs and implemented in both public and private health sectors. To address the needs of indigenous community, the community based family planning programme was introduced in 1997 with funding from international NGOs in a partnership with the local NGO. This programme utilised community members as volunteers or family planning distributors. However services were limited to only oral contraceptives and condoms.

The government of PNG had previously made a commitment to implement the 1994 ICDP and 1995 Beijing Women's conference policies in promoting women and couples' sexual reproductive rights. The policies had been adopted into the PNG National Health Plan 2010 – 2015 for implementation. However, these sexual reproductive health rights are not fully incorporated into the laws and constitutions to support women's rights in PNG.

The reformed government system was introduced to improve the implementation of health and other development programmes in the 1990s. However the family planning and other health policies are still developed at the top level and forwarded for implementation at the province, district and local level government neglecting the needs of rural indigenous communities. Family planning services are yet to meet the needs of rural indigenous women. Only five per cent of women and one per cent of men are current FP acceptors. The nation figure of family planning prevalence is well below 50 per cent.

For indigenous women, barriers to access family planning include complex modern health systems and services, little access to health education and appropriate information to make informed decision on modern contraceptives, language barriers, cost of health services, difficult geographical location and poor implementation of policies and programmes. The voices and concerns of indigenous women have been overlooked in the development of family planning policies and programs for rural communities. This research aimed to examine indigenous women's perceptions about the current community based family planning program in the rural villages and to capture women's aspiration in what manner women believed the program could be improved to effectively address their reproductive health needs. The next chapter will present the research methodology used in conducting the research.

Chapter 3: Research Methodology

The indigenous feminist research framework has been used in this research to inform the choice of the research methods, data collection and analysis to examine indigenous women's perceptions of community based family planning programs currently operating within the rural communities in Papua New Guinea (PNG) through local community health volunteers; to what extent their knowledge and experiences reflect indigenous knowledge and social system. The qualitative research methods include in-depth interviews and focus group discussions. The purpose convenience sampling method and snowballing technique were employed to recruit and invite women to participate in this research.

This chapter has eight sections. The first section 3.1 provides an introduction to this chapter. Section 3.2 discusses the reason the indigenous feminist research approach was used. Section 3.3 presents the reason the qualitative research methodology was used and presents the research aims and questions. Next, section 3.4 describes the research methods used which included in-depth interviews and focus group discussions and justifies the reason for use of these for the data collection. Section 3.5 describes in detail the field research. The last three sections provide discussion about the research ethics, data analysis method, and a chapter summary.

3.1 Indigenous Feminist Research approach

Indigenous theory is based on claiming and reclaiming indigenous cultural heritage such as language, cultural practices, knowledge, social relationships and connections that were disrupted by colonial impacts on indigenous communities (Denzin et al., 2005). Most indigenous knowledge and cultures had been lost through the process of colonisation and that indigenous researchers are working individually and collectively to restore these indigenous heritage and communities' identities. Hence, Indigenous research seeks to decolonize, emancipate and empower people to take ownership of indigenous intellectual properties for instance knowledge on traditional medicines (Cook, 2001). Indigenous scholars developed strategies whereby they utilised indigenous knowledge and creativity to solve problems affecting indigenous communities (Chilisa, 2012; L. T. Smith, 2006). Indigenous research can be political and the researchers need to verify the purpose and state how the research may benefit the indigenous communities. Otherwise, indigenous research is flexible and can be translated into different research methodologies as

ethnography, phenomenology and feminist research methodology (Cochran et al., 2008; Denzin et al., 2005; A. Smith, 1997).

Indigenous worldviews and the interpretations of daily living are expressed through cultural beliefs and practices based on the system of culture and spirituality; concept of reciprocity in social harmony and order by egalitarianism (equal rights for all) (Behrendt, 2012; Moris, 2010). Egalitarianism asserts equality for all community members to exercise their rights to resources and privileges in their community. For example each member of a village is entitled to an equal share and use of water supply, a plot of land for farming and other services offered in their community (Chile, 2007; Gegeo & Watson-Gegeo, 2002).

Indigenous knowledge may be defined by the following seven characteristics; local, shared, empirical, practical, informal, unwritten or unrecorded moral principles and changeable. Indigenous knowledge is contextual, localised and unique to each community. For example, in PNG, there are cultural beliefs systems exclusively unique and specific to each tribe, clan or village within a district or province. This knowledge is passed down by elders to younger community members. These knowledge and customs influence how community members perceive problems, find solutions or make decisions about programmes that should benefit all (Behrendt, 2012; G. Clark, Chapman, & Francis, 2011; Clarke, 2003; Marcos, 2010; Oliver, 1989). Such knowledge being embedded in culture, spirituality and identity of the community (Chile & Simpson, 2004; Cook, 2001; Restoule, Archibald, Lester-Smith, Parent, & Smillie, 2010) cannot be shared easily with someone from outside the community; unless this person has obtained some kind of connection through marriage or friendship over a reasonable period of time with local community members.

Indigenous knowledge is not based on specific proof or theories and principles; rather it is based on experiment, observation and practical experiences. Indigenous knowledge is largely based upon cultural and spiritual beliefs of individual or groups' past and present experiences, observations and what they learn from each other. These historical knowledge is usually connected to the nature or spiritual world where often physical evidence may not be eminent (Chilisa, 2012; Hinton & Earnest, 2011).

Indigenous people believe in the practicality of an agenda. For example, for a community to use modern contraception, evidence of the contraceptive method used, such as preventing pregnancies, must be shown through practical experiences. Unless physical

evidences are seen, men or women may not be convinced to modern FP services (Norsworthy & Ferguson, 2009; Reid, 1984; Vail, 2002).

Although indigenous knowledge may be deeply rooted in strong tradition and cultural beliefs, it is fluid. It can change when social, physical and environment structures change. Certain aspects of a cultural knowledge or practice can be altered for the benefit of the community members. With caution and proper judgement, the leaders may make adjustments on local indigenous knowledge and practices on the grounds that all members of community will benefit equally. For example, leaders can negotiate with clan members who are hereditary owners of land and water to build modern water structure for all members to use. A vital principle to the sustainability of such a project is involving the leaders of the community in the initial planning stage of the project. Allowing leaders to lead in the implementation and completion of activities enhance the community's sense of ownership (Gegeo & Watson-Gegeo, 2002; Kuokkanen, 2011; Wass, 2000).

3.1.1 Feminist theories

Feminist theories evolved from the theory of Marxism which was to liberate the oppressed from socio-economic situations in early 1900s. Women were not at most times in control of their sexuality and gender roles whereby social and cultural factors often caused oppression and subordination of women (Butler, 2011; MacKinnon, 1982). The first two feminist theories that evolved from Marxism theory were the radical feminist and the socialist feminist theories (Jackson, 1998). The radical theory resists patriarchy by opposing standard gender roles and oppression of women. It calls for a radical reordering of society (Donovan, 2000). The socialist feminist theory endeavours to promote social justice and gender equalities through liberating women from subordination to enjoy equal rights to education and other social, economic and political development. Different to the radical feminist theory, social feminist theorists acknowledge men as equal development partners to women and therefore they seek to formulate and develop an equal partnership so men and women may benefit equally in development (Jackson, 1998). There were other feminist theories that came about in the second wave of feminists' movement in 1980 such as academic, lesbianism, black and cultural feminism. These groups' advocacies were basically on women's unheard voices for things their rights have been denied on (Donovan, 2000; Jackson, 1998).

This research is influenced by cultural feminist theories which advocate for equality to gender roles through a search of cultural norms practised by indigenous women in

Morobe Province of PNG. Unlike cultural feminist theories' arguments on women's roles being defined by men, indigenous women in Morobe define their own gender roles. This is through traditional practices wherein cultural norms in relation to women's roles are passed down from older women to younger female adolescents during menarche initiation ceremonies, to maintain not only their identity as women but the uniqueness of women's social status in the community (Chilisa & Ntseane, 2010; Fredericks, 2010; Linklater, 2010) which are distinct from men's roles and status. For example, the roles of women in providing care to another woman in childbirth which cannot be replaced by men. There are also certain food crops that are sacred and can only be planted and harvested by men or women separately (Chile & Simpson, 2004; Marcos, 2010). For instance, in Muin village, only men plant and harvest yams (Behrendt, 2012).

Cultural feminist researchers use methodologies that empower or emancipate disadvantaged women to take charge of their situations. Cultural feminist scholars often use documented life experiences to expose gender-based stereotype and biases of the social impact on marginalised people or women's lives either from personal or social pressures. In doing so women's hidden agendas and challenges are exposed and then advocated for changes and improvement in policies so previously oppressed women may experience equal rights to social justice with other community members (Guimaraes, 2007; Hesse-Biber & Leavy, 2007; Undurraga, 2012). The above detailed descriptions of indigenous and cultural feminist research theories were combined to develop an indigenous feminist research approach for use in this study

3.1.2 Combining indigenous and cultural feminist research approaches

Cultural feminist and indigenous research approaches share common goals of participation, emancipation and empowerment. The difference noted between the two is in the research methodologies; cultural feminist researches mostly use western paradigms and qualitative methods while indigenous research utilises an indigenous paradigm and mixed methods (Restoule et al., 2010; L. T. Smith, 2006; Stanworth & Hladki, 2002). Indigenous research reclaims cultural heritage by decolonising research methodologies to indigenous methodologies. Cultural feminist research utilises a western paradigm in qualitative research methodologies to study women's culture in contemporary modern societies (Denzin et al., 2005; Undurraga, 2012). More on the differences, between the two research methodologies: the cultural feminist research advocates for freedom of cultural knowledge use in modern society by women as contemporary cultures whilst indigenous research seeks to decolonise colonial ways of research to reclaim its cultural

knowledge and intellectual properties for the benefit of indigenous community (Alexander, 1999; Chilisa & Ntseane, 2010; Fredericks, 2010; Kovach, 2009; Kuokkanen, 2011).

This research combined those two complementary approaches to empower, emancipate and decolonise dependant attitudes instilled by colonisation in indigenous women of PNG. Although Indigenous women in Morobe of PNG had experienced some inequalities in gender roles these roles were defined by the women themselves, not by men as cultural feminists had argued. These women's roles were identified by older women themselves through intergenerational transmission of cultural knowledge to the younger generations.

Due to the impact of past colonialism and current globalisation, male gender roles and responsibilities in local indigenous communities have changed. This was through the establishment of economic activities such as paid jobs in the cities and local level government positions in local communities. Men tend to be employed in those jobs as specialised trade employees or village councillors. They work outside of their homes for long periods of time so that the men have very little time to work in their gardens. The employment of mostly men then leaves the women with all the household chores to manage alone; whereas before, gardening, farming or childcare were shared equally by men and women (Clarke, 2003; Weiner, 1987).

Traditionally in earlier times, the gender roles defined by indigenous women in Morobe did not necessarily place men as superior in value or status and women as subordinate but signified women's distinct identity, roles and responsibilities as different and important from men's roles and responsibilities. The defined women's roles were both domestic and social, such as assisting with childbirth, performing traditional dances, providing counselling and mentoring younger women. Such roles were performed in respect of indigenous culture and spiritualism (Behrendt, 2012; Chilisa, 2012; L. T. Smith, 2006).

To thrive, each member of the community has his or her own defined role to perform so that the entire community will function harmoniously (Behrendt, 2012; Jenkin, 2013). For example, men and women perform garden work together but each gender has a different role to play. For instance, men cut down trees and clear the field whilst women burn the bushes before they start planting the new crops (Clarke, 2003). The aim of this research has been to explore the indigenous women's perceptions on the community based family planning (FP) programme how such programme could have been improved

to enhance women's reproductive health status. Next the qualitative research methodology will be discussed.

3.2 Qualitative Research Methodology

The qualitative research methodology has been widely used in research with indigenous communities. This method allows the researcher to examine the values or make-meaning process of people's real life experiences (Patton, 2002; Yin, 2011). Qualitative research methodology is also complex and fluid; it allows the researcher to adopt and use more than one theory and method whichever one relevant to the research aim and participants (Liamputtong & Douglas, 2005; Patton, 2002; Yin, 2011). This research gave the indigenous women living in Muin village the opportunities and space to share their knowledge, experiences and perceptions on community based family planning services and the roles of FP volunteers in improving women's reproductive health. The main research question was, 'what did women understand about current community based FP programme and the roles of FP volunteers to improve women's reproductive health?' Four specific research questions included:

- What did women know about the current community based family planning programme and the roles of the FP volunteers in their community?
- What benefits did women experience with the community based FP program?
- What benefits did experience with the use of chosen contraceptive method?
- What did women think about the programme and the roles of FP volunteers and what ideas or strategies women had to improve them?

The qualitative research methods were employed in this research.

3.3 Research methods

In-depth interview and focus group discussions (FGD) provide avenues in which women freely expressed opinions in their own words about their experiences with FP services unlike the structured or semi-structured interviews (Liamputtong & Douglas, 2005; Olson, 2011; Yin, 2011). Whitakers and colleagues documented relevant and appropriate use of both methods in studying community's perspective on major health programs in PNG (Whitlaker, Piwas, Agale, & Yaipupu, 2009).

3.3.1 In-depth Interviews

The in-depth interview allowed women to have informal social dialogues with the researcher on the subject of family planning. Unlike structured and semi-structured

interviews, the in-depth interview utilises open ended questions and does not use a fixed format. This method allowed the researcher to relate to women's reactions and conversations or change around the order of the questions. Paraphrasing research questions in the relevant local language or Tok-Pisin (Ahai, 2004; Devette-Chee, 2013) was done to better facilitate and draw respondent's responses to the research questions asked. The researcher was born and raised in PNG. She is fluent in Tok-Pisin. The researcher found that the use of Tok-Pisin in in-depth interviews helped the women to better understand the questions so they could comfortably respond in the best possible way (Denzin et al., 2005; Liamputtong & Douglas, 2005; Olson, 2011; Yin, 2011).

Ten women were interviewed. Each of the interviews lasted between 20 and 40 minutes. One may say that twenty minutes is too short for an in-depth interview; the researcher speculated on three things that might have limited in-depth interviewing. First, the researcher noticed that during the interviews women were cautious and selective with their answers. This may reflect the sacredness of some of knowledge on sexual and reproductive health and that only selective information can be shared with outsiders, like the researcher. Second, although Tok-Pisin is one of the three official languages in PNG it could be the second or third language learnt by women after their local dialects. (Ahai, 2004; Devette-Chee, 2013). This could influence women's ability to articulate only straight short answers, because of their low literacy in Tok-Pisin. The final reason could be that it was the first time these women participated in a research or being approached by someone outside their closed community network and asked questions that were perceived to be sensitive.

3.3.2 Focus Group Discussions

The focus group discussion (FGD) was used to collect women's collective ideas and recommendation on how family planning service and roles of the community volunteers could be improved to enhance women's reproductive health in Muin. All ten women who participated in in-depth interviews were invited to join the FGD. However, only six women arrived on the agreed date. Then the researcher decided to conduct a second FGD to facilitate the other four women who did not come to the first FGD. Unfortunately, only two of the women were able to come to the second FGD. It was extremely difficult to reach the other two women, due to poor communication technology and lack of transportation to their village. Both FGDs were conducted at a hauswin or a house veranda located near the main residential house. It is usually used for relaxation or entertaining

visitors. All FGD meetings were organised by the women collectively at a time that was convenient to them which was at about noon time.

During the FGD, responses gained in the in-depth interviews on how each woman thought family planning services and roles of volunteers were to be improved were summarised and presented back to the groups for confirmation. The women's groups were then asked to prioritise their strategies and explained the ways they thought those strategies could be implemented.

This was how the women participated in FGD. First, the woman's group discussed quietly amongst themselves for about 30 minutes on each research question. The discussion was audible and the women spoke in mixed local dialects that were not understood by the researcher¹. After a collective agreement was achieved, a group representative shared aloud their ideas in Tok-Pisin with the researcher. The researcher took note of those ideas on butcher paper. The dynamics of this FGD demonstrated how indigenous knowledge is shared. First the knowledge was discussed in a group and the group then decided on which information can be shared with an outsider. Each FGD took two to three hours to complete.

3.4 Field research

The field trip to the Muin village was sponsored by the NZAID scholarship. The Morobe provincial health authority provided local transport and photocopying facilities. With assistance from the district, the researcher was introduced to two FP volunteers who were husband and wife working in Muin and its neighbouring villages. The husband – Mr Basa- (pseudonym) was a community based FP distributor; Mrs Basa was a trained traditional birth attendant. She also received an additional training as a FP volunteer to support her husband. This Basa couple have been working in Muin and its nine neighbouring villages for 16 years. They were around 50 years of age and originally from Muin. They have lived in Muin for most of their lives and were well respected by the community. Having the couple working together seemed culturally appropriate provide services to men and

¹The researcher is also an indigenous woman of PNG but from Kabwum District of Morobe Province. She lived in Lae city which is a two hour drive from the Muin village. The researcher, however spoke a different local dialect to the Muin community.

women, to reduce suspicious thoughts that may arise within the community which may cause disagreement between husbands and wives.

To get to the community, notices were given a week in advance to both local FP organisation and volunteers to inform their women clients about this study. This was done to allow for the volunteers and the women to organise their time, activities and a place to cater for this research. On the other hand, entering a community was as entering into someone's space, time and social relationship. It was essential for the researcher to have prior awareness and knowledge of the life context of the research participants to minimise possible interference with the women's daily activities (Yin, 2011). Since the researcher was new to the community, the researcher decided to learn about local customs and social etiquettes of the community from Mr and Mrs Basa, as they were respected members of the Muin community.

3.4.1 Unwritten community ethics

Although an official approval was obtained from the government authorities, the researcher also needed pay a courtesy visit to the village counsellor and the elders to introduce herself and explain the purpose of her visit in Muin. The researcher was also aware of her physical presentation, body language that might influence the way the community members respond to her. For example, the researcher decided to dress modestly, chew and share betel nuts (common nut chewed in PNG during meetings or casual chatting) during conversations with women and other community members to establish rapport and build trust. The researcher communicated in Tok-Pisin, actively listened, observed and politely asked questions when she needed to clarify some information or matters being observed. Other traditional norms the researcher followed included using stream for shower and sitting at only the allocated women's space in the host's house. This practice is similar to the practice of Huli indigenous community living in PNG highlands (Wardlow, 2006).

3.4.2 Background of research community

The women involved in the research were indigenous or native women from Muin village. Muin is hour and half drive from Lae, the capital city of Morobe Province. Lae city is the second largest industrialised city in PNG. In this thesis, indigenous women referred to, the women were either originally from the village or were married to men from that village and had lived in this village for most of their lives (see also chapter two). As stated in chapter one, Muin village was one of the ten villages in one Local Level Government

(LLG) area of Morobe Province. The people living in Muin were originally from that particular area; they were born, raised and lived in this village for most of their lives. The people traditionally own the land by inheritance from their ancestors. The Muin population was less than 100 people. The village head was a councillor who was politically appointed through a formal democratic voting system; unlike before when the village chiefs were passed on from fathers to sons or communally appointed by villagers.

The community earned income through the sale of livestock such as pig, cattle or food crops from domestic farming. The sales for livestock depended on buyers coming into the community. As there is no community cooperative system to actively market the farm products to the outside community the cash flow from selling livestock was irregular. This may leave the community with abundant resources but poor market approach to increase trade for cash income. Food crops like coconuts, bananas and greens were other forms of potential income source yet sales were occasionally done. Otherwise, Muin villagers lived mostly on subsistence farming and whatever the land and forest can provide for daily needs.

3.4.3 Participant recruitment

Purposive convenience sampling was used to recruit of the research participants. The selection of the field research and recruitment of research participants were guided by local health authority, local FP organisation and FP volunteers. The researcher argued for the appropriate utilization of this method when researching an exclusive small indigenous community. Being an outsider of this community, the researcher trusted the local government authority and community to inform the process of inviting and recruiting research participants.

Table 3.1: Demographic profile of women respondents, the number of children and ages of youngest child

Names(pseudonyms)	Age (years)	Education level (years)	Number of children	Age of youngest child (years)	Years of using modern contraceptive
Jeribiang	20	8	1	1	4
Ikuwa	22	12	1	1	4
Boeng	23	9	1	4	4
Cesu	23	9	1	4.5	5.5
Doma	28	6	2	6	6
Ame	32	8	3	3	6
Honepe	35	6	2	2	8
Fungke	36	3	2	7	7
Etiniu	38	6	4	8	15
Goreyu	39	6	5	8	15

Table 3.1 includes the demographic profile of the women participants, the number of their children and the age of their youngest child. The ten women were recruited through the assistance of Mrs Basa. They all voluntarily participated in this research. All were married and were currently using oral contraception delivered Mr and Mrs Basa. They were between 16 and 49 years of age, and were able to read and communicate in Tok-Pisin.

Prior to the interviews, each woman was asked to read the participant information sheet in Tok-Pisin. Prior to conducting the field research, the researcher had anticipated that due to the practice of patriarchal ideology in PNG, it might be necessary for women to get permission from their husbands to participate in research. The researcher therefore, developed a husband's optional consent form to be used when necessary. However, all women said that they did not need to get permission from their husbands to participate in this research.

During in-depth interviews women came in groups of two to four in the late evenings at around four to six o'clock and early in the mornings at around six to seven o'clock. The researcher coped with the women's timing and conducted interviews at a house veranda or a hauswin as suggested by women. After completing all individual interviews, the researcher asked the women to organise a time and a place for FGD. The women decided

to have the group discussion within two days after the interviews. The time and place of FGD was decided and organised by the women. Two FGDs were finally conducted to confirm and discuss women's responses in individual interviews and to invite women's ideas and aspirations as to the ways community based FP services and roles of the volunteers could be improved. The next section presents key ethical consideration relevant to the context of this study.

3.5 Research ethics

Prior to conducting the field research, formal ethical approvals were received from Auckland University of Technology Ethics Committees (AUTEC) on 24 May 2013 (Appendix 1) and Morobe Provincial Administration in PNG on 23 January 2013 (Appendix 2). Once the researcher arrived in PNG, she made an arrangement with the provincial health staff for assistance should any emergency arise in the research field. The researcher exchanged mobile numbers with local health authorities and family members in Lae city. The nearest local health centre is about two hours walk from the research community where first hand assistance can be obtained in a case of an emergency.

3.6 Thematic data analysis

The thematic data analysis method was used in analysing the data collected from the field research. This method enabled the researcher to organise and interpret data in ways, that the researcher could understand women's indigenous points of view, perceptions and expressions. This process assisted the researcher to ascertain the real experiences of women who participated in research and try to gain a deeper understanding about how and why things were done in a particular manner with regard to FP in indigenous community of PNG (Mathew, Miles, & Huberman, 1994).

The thematic data analysis process included processing field data, coding, creating themes and sub-themes. Information collected from individual and group interviews was organised into groups of commonality and differences. Themes were then retrieved from commonality and then sub-themes drawn from themes again to develop appropriate points of discussions which were organised in sequence. With the differences identified in between themes, new themes were developed and appropriate points for discussions were also organised again in sequence and presented in chapter four. The data analysis process and interpretation was influenced by the women respondents' worldviews based on indigenous knowledge framework (Boyatzis, 1996; Liamputtong, 2009; Patton, 2002). Manual coding was used for data analysis, as the sample was small and also to enhance

the researcher's skills in practicing qualitative data analysis. Apart from interview data, other data such as field notes and non-aggregated data (FP statistics) were also collected from local health authorities and FP organisation for use.

To achieve credibility of the research findings, the responses received from women during individual interviews were repeated or questions were asked in between the conversation to confirm meaning of those responses. All this was done to ensure the researcher collected women's actual opinions and not imposing one self's (Ezzy, 2002). The researcher employed a triangulation method to validate the data. Triangulation as defined by Flick (2002) involves applying and utilising more than one method in a study group, local and temporal settings and different theoretical perspectives to ascertain people's experiences. For example, the researcher utilised FGD methods with the same group of women to validate information attained during individual interviews. This was the way triangulation was accomplished in this research. Responses gained from the fourth research question asked during individual interview were analysed and common themes identified were presented to the women for confirmation in FGDs. After confirmation of the points raised on improvement strategies, the women in FGDs were then asked to discuss ways to improve the FP programme to promote rural women's reproductive health (Ezzy, 2002; Flick, 2002). Another triangulation technique used was the use of literature to confirm the meaning of what the women said in interviews and FGDs.

3.7 Summary

In sum, this research was informed by indigenous and feminist research theories. Indigenous theory is based on claiming and reclaiming indigenous cultural heritage including language, cultural practices, knowledge, social relationships and connections that were disrupted colonial impacts on indigenous communities (Denzin et al., 2005). Cultural feminist theories in this thesis advocate for equality to gender roles through a search of cultural norms practised by indigenous women in Morobe of PNG. The aim of this research was to explore the indigenous women's perceptions on the community based FP programme and how the current FP service might be improved to enhance reproductive health of rural women in PNG.

The in-depth interviews and FGD were used to enable indigenous women the freely express their opinions and share their experiences about the FP service they have been utilising in their community. The field research was conducted in one of the rural villages in Morobe of PNG. Ethics approvals were gained from the AUTECH and Morobe

Provincial Government. Data collected from the field research was analysed using the thematic analysis and triangulation methods to validate and improve credibility of findings. An Indigenous feminist standpoint was used to interpret the data which is presented in chapter four. The limitation of this research will be discussed in chapter five.

Chapter 4: Research Findings

This research aimed to explore women's understanding of the current community based family planning (FP) programme and the roles of FP Community Based Distributors (CBD) in improving women's reproductive health. Three objectives set forth following this research question include women's perception of the benefits of the FP programme; women's understanding of the roles of family planning CBD to improve reproductive health services and the health status of women in the local communities; and exploring women's collective ideas and aspirations on ways to improve the existing community based FP program. Qualitative thematic analysis was used to analyse the data collected from the field and to systematically analyse key themes that emerged from the data. This chapter consists of seven sections; 4.1 the introduction of chapter four; 4.2 the background of the indigenous women participants and their community; 4.3 women's perception of family planning; 4.4 women's perception of the cost and accessibility of the community based FP services; 4.5 women's understandings of the roles of the family volunteers; 4.6 women's perceptions of family planning services within the construction of their indigenous knowledge and collective experiences; and lastly 4.7 women's aspirations, ideas and opinions on means to improve family planning services.

4.1 Background

The research was conducted in Muin (pseudonym) village, a rural community about an hour and a half drive from Lae City in the Morobe Province of PNG. The population is scattered throughout the coastlines to the inland mainland of the province (Apeng et al., 2010). Muin has an estimated population of less than one hundred people with no more than twenty houses scattered throughout the village. New houses are usually built when there are newly married couples residing in the village. Muin village along with the other nine villages are under the same local level government (LLG) authority, where each village had a village councillor who was politically elected to oversee the people and the activities the village. Prior to the establishment of reform government in 1997 (Campos-Outcalt et al., 1995), locally appointed village chiefs might be regarded by the community as people with vast knowledge in community's resources; or those having skills as hunters or warriors or those who came from affluent families that possessed big tracts of land or substantial pigs or cattle farms (A. Clark, 2000; Weiner, 1987; Wilde, 2007).

Generally in this community there was a distinct separation of women's versus men's social or cultural matters. Thus meetings were often conducted separately for these

gendered matters. The women's church group meetings for example are known as Geamsao kibung (in Morobe's local dialects); while the men's groups were known as songan or hausman kibungs. The geamsao are well organised women's church groups that allow women to gather occasionally to share knowledge, strategies, and current affairs. These groups facilitate women's active participation in community and church activities. These women's meetings were likely to be the source of information influencing women's decision-making, including the use of family planning contraception. The geamsao kibungs (women's church meetings) also provided opportunities for women to express their concerns and to be heard by their fellow women. Serious matters can be also referred and discussed in bikpela kibungs or the main community meeting event. Women leaders usually attended the bikpela kibungs to discuss local women's issues and when necessary, with male leaders they decided on appropriate actions to address such issues. In the 1950s or during the pre-colonial and pre-independent days however, it was considered taboo for women to discuss their concerns with male leaders. All women's matters were inclusively discussed and dealt with within their own women's colony (Clarke, 2003; Meigs, 1976; Scaglione, 2003; Weiner, 1987).

Women Participants

Referring to chapter three, table 3.1, ten married women from Muin participated in this study. They were either born or raised in the village or married men from this village. All women were married with number of children ranging from one to five children. The age of the youngest child was one and the eldest was seventeen. None of the women indicated the total number of children they desired for completion of their family.

Education is a vital element in improving reproductive health outcomes of women. Education provides women with resources and the confidence to access health information to make informed decisions regarding care and how to improve their reproductive health (Breierova & Duflo, 2004). Except for one, all of the women participants in this study completed basic primary education (6 years). They were all able to communicate in Tok-Pisin also spoke some English. One woman completed grade 12 which is the highest secondary grade to enter a university. She was unable to further her study because her mark did not pass the university requirement. For financial reasons, three other women left school in between study, one at grade three and the other two at grade nine. Those three women got married in their late teens and forced themselves to

leave home as they found it difficult to remain in their village and watch their friends continuing with education.

The literacy rate of women in PNG has gradually improved to 72 percent compared to pre-independence (before 1975) when the education system was not standardised at which time the literacy rate was 47 percent (Gibson, 2001). The older respondents from the age of 28 and older tended to have a lower educational level than the younger ones. This may reflect the increase in girls attending primary school education in PNG in 2001. Unlike in the 1980s when the priority was given to the male child and the girls would hardly complete grade six at primary school or year twelve at secondary schools (Gibson & Rozelle, 2004). The study also revealed those women who were able to pass grade six had the opportunity to be educated on family planning and other sexual reproductive health issues at upper primary school levels (grade seven and eight). However the women who only completed grade six did not. This was confirmed by Etinu, age 38 in an interview on 27 June 2013 as:

..... you know for us who attended school and completed grade six in the past, we did not have lessons on family planning. Those who attended school today are learning about family planning unlike us before (Translated from Tok-pisin by author of thesis).

The current education system included sexual reproductive health and family planning in school which is now taught at the upper primary level (grade seven and eight) (G. Smith, Kippax, Aggleton, & Tyrer, 2003). Jeribiang (age 20) and Ikuwa (age 23) completed grade eight were both familiar with FP and had used contraception prior to marriage. The other seven women had only started using contraceptive pills (OCP) after they had their first child and/or in between pregnancies.

The practice of an early marriage in PNG is somewhat similar to that practice in African or some Asian countries or indigenous communities in America; whereby young girls aged 14 or 15 years of age were married already and became a mother before the age of 18 years (Umemoto, 2001; World Health Organization, 2014b). Up until now, the PNG government is yet to amend policies with regard to preventing teenage marriage because the current Marriage Law is embedded in the culture that still supports an arranged marriage tradition (Luluaki, 1997). There are some changes in family law for instance, the Family Protection Act and the law addresses issues of violence against women with no specific regard to safeguard young teenage girls from early marriage (Aisi, 2013).

The 2013 July report on Post Courier, reported the concern of the United National Population Fund (UNFPA) of high teenage pregnancy rate at 13% in PNG and the UNFPA called for an urgent national strategy and plan to address this issue (Setepano, 2013). The WHO report of PNG's country profile on Making Pregnancy Safer report (online) also confirmed the high figure of teen pregnancies in PNG (World Health Organization, 2014b). These statistics may suggest that the reproductive health needs of young girls have not been taken into consideration in PNG's current health strategies.

The total fertility rate (TFR) of PNG in 2010 was 4 children per woman. The adolescent birth rate in 2012 was 70 births per 1000 women aged 15-19 years (Hayes, 2010; UNICEF, 2012; World Bank, 2011). As noted earlier, all of the women respondents were on contraceptive pills (OCP), averaging between a four and fifteen year duration. Two women, (Etinue, age 38 and Goreyu, age 39) had used OCP the longest (15 years). Both started when the community based FP was first introduced into Muin in 1997. Jeribiang (age 20) and Ikuwa (age 22) were the youngest FP acceptors. These two women started OCP before marriage and after having their first children. The PNG government health policy allowed young girls aged sixteen or older to use oral contraceptives. However, the society may perceive that the use of contraception is acceptable for married women only (Hayes, 2010). For example, Jeribiang (age 20) and Ikuwa (age 22) who started on contraception at 17 years of age admitted that they had to take the pills secretly. An informal discussion with FP volunteers also suggested that the volunteers were willing to give contraceptives such as condoms and pills to sexually active youth in the community. The provision of contraceptive methods amongst youth tended to be done secretly. The following section discusses the themes on indigenous knowledge on family planning that emerged from the data analysis.

4.2 Indigenous knowledge on Family Planning

Indigenous knowledge is based on shared practical and collective experiences which members of specific indigenous community see and believe to be true according to their traditional beliefs (Moris, 2010). All women respondents expressed satisfaction with the use of the contraceptive pills (OCP). Most women stated the OCP helped them to feel strong, healthy and to have more freedom and time to do what they had always wanted to do for themselves and for their family, such as attending church meetings, community activities, or working in the family garden. A reflection of women applying indigenous knowledge on family planning was noted in an interview with Goreyu, age 39, on 28th June, 2013;

Family planning is like my mother who takes care of me. FP helps me well after child bearing I am able to space children and then have another one later. While I am on FP contraception, it keeps my body fit. FP helps my body stay healthier and gives me space and time to do other things such as making garden and doing sales at the market and earn some income for my family.

Since Goreyu (age 39) had the longest experience with FP contraception, she provided a metaphorical explanation that family planning was like a motherly support to her daughter to care for the children and grandchildren. In most PNG indigenous communities, families are extended, as far as mother, grandmother, great grandmothers and in-law relationships. These female relatives have so much input into a woman's life in supporting and caring for the woman's children. In Muin village, the extended family members helped with child rearing while the children parents engaged with other productive activities like gardening, hunting or fishing to sustain the family's needs.

All of the women expressed that the use of contraception was liberating them from the burden of childcare as they were able to space their pregnancies and to join community activities or church meetings. Women explained church or community activities were beneficial to their social and spiritual life and to exchange information with other women on any important matters. Working in community enables women to fulfil part of their obligations as members of a community and gives them a sense of belonging. Working in gardens was not only for food security, it was also for producing crops for sale and cash income to the family.

In the pre-colonial days (before 1950) and even today the children are seen as assets for the family, which means children are imparted traditional knowledge and skills to be able to inherit heritage from parents such as family land or farms. The older children are educated through traditional indigenous knowledge to take care of their younger siblings and old parents. This is usually based on respect, reciprocity and egalitarianism principles of indigenous knowledge wherein the younger generation are to take care of their old parents and younger siblings, so life continues harmoniously in family and community (Behrendt, 2012; Denzin et al., 2005; Slatter, 2010). Relating this indigenous concept to the current modern day situation, parents work hard to earn income to pay for their children's school fees. The hope was that if the children could gain a better education now they may be able to get better paying jobs with reasonable income to support both nuclear and extended families. For example, an older educated son or daughter would be expected to work and help his or her parents to pay for the education of his or her younger

siblings. When all children are well educated, then they are expected to continue helping each other out and finally to look after their older parents (Jenkin, 2013; Kewa, 2007; Scaglione, 2003; Wardlow, 2006). Such traditions of respect and reciprocity continue today. Therefore the educational development of a child, not only benefits the family it also benefits the entire community where the children come from, such as with the examples of the sentiments of other indigenous writers who return to their heritage and support the community through professional and academic development (Chilisa & Ntseane, 2010; Jenkin, 2013; L. T. Smith, 2006).

The same belief was explained by women in this study. They sent their children to obtain modern education with the hope that their children would one day return to support their families and communities. Unlike the practice in early 1990s, when boys were given first preference to girls' education, today all of these women respondents were committed to send and keep their children, both boys and girls, in school as long as possible. Promoting gender equity in education was explained by Goreyu's (age 39), in relation to her children.

I have five children.....My first son is in grade nine (9), the second girl is in grade seven (7), the third girl is in grade four (4), the fourth boy is in grade one and my last girl child is at home (not started school yet).... FP contraception helps my body stay healthy to do other things such as my garden and doing sales at the market and earning some income for my children's schooling.

The quotation of Goreyu (age 39) may suggest that the introduction of the modern school system may also place an extra burden on indigenous women and families as they now need to bring in cash income to pay for school fees. Women viewed the use of birth control methods as necessary to enable them to work for cash income. The next two subsections describe the reasons for and benefits of using oral contraceptives.

4.2.1 Choice of Oral Contraceptive Pills (OCP)

All women respondents had basic knowledge regarding different types of contraceptive methods (such as implants, condoms, vasectomy, contraceptive injections) however, the method most preferred was oral contraceptive or pills. Nearly all of the women stated that they had heard about other contraceptive methods from the volunteers or other women. Only one of them however had ever had the opportunity to see a variety of available contraceptive methods at a clinic and still she chose to use pills. Women chose oral contraceptive for at least three reasons. First, there was no health centre in community and pills and condoms were the only two methods provided by the volunteers. Secondly

women explained the use of pills allowed them to maintain a sense of womanhood allowing them to have regular monthly period. Thirdly, women could ask their husbands to collect supplies from the volunteers.

The nearest health facility is two hours walk or a one hour drive from Muin. Going to town for health services was inconvenient and costly; as explained by Cesu (age 23), *'Going into town to access FP services is quite difficult as we are in the village and we cannot afford bus fares.'* The Muin community went occasionally to the market to sell food crops to earn just enough money to buy what was needed at that time, such as transport fares or school fees; otherwise the community lived modestly and relied on home grown food gardens. The researcher was made aware that a relatively wealthy community member who had cattle and pig farms was not interested in raising money to build a great or modern house or to buy a new car. They seemed to be satisfied with what they had and only sold their cattle or pigs for the purpose mentioned earlier.

All the women were satisfied with the family planning volunteers and their services at the community. Despite the lack of variety of contraceptive methods provided, the service was convenient, economical. It saved them the money and time to travel to the city. The volunteers not only provide family planning services they were members of the community who spoke local dialects and were known well by the communities.

Also, women who were new to community through marriage and had less knowledge about nearest health centres benefited on this community based family planning service. Fungke (age 32) in an interview on 27 June 2013 explained: *'I only collect my pill from volunteers here and I feel okay. With the hospital/health centres, I have not travelled much and do not know about the facilities.'* Fungke was from the Highlands region of PNG and was married to a man in Muin. As she had not travelled much into Lae city nor did she know much about the locations of the hospitals and health facilities in Lae. Fungke was very grateful for the community based family planning services.

Some women were aware of the availability of the injection method however had chosen not to use it as it was not offered by the volunteers. In addition women also had heard about the side effects of injection as described by Cesu (age 23) on 26 June 2013:

I only heard from other women that depo injection can make you sick, unlike the pill. With injection you will not be experiencing monthly period where you may become very sick but with pills you will still be

having your monthly period. This was told by some women who had been on FP injection before...

Moreover, the volunteers promoting only pills and condoms confirmed that community volunteers were not medically trained to administer injections.

Interestingly, all women respondents unanimously agreed that injection was the worst method of FP as it stopped menstruation and caused bleeding problems. This knowledge was somehow not true, as other methods like implants and intrauterine devices (IUD) might also cause irregularities and amenorrhoea (Everett, 2005; van Look et al., 2011). Such shared knowledge in this community on the side effects of injection had interestingly affected women's collective decision to choose pills. This phenomenon may suggest that the formulation of past and present knowledge in indigenous Muin community on decisions regarding contraception have largely been shared for many generations.

Apart from the women's decisions being influenced by other female relatives, the choice of pills reflected women's desires to continuously have uninterrupted monthly periods. This may signify that monthly and regular menstruation protects women's sense of womanhood. Menstruation reflects fertility and any disruptions of this perceived 'normal womanhood' was explained with suspicion. For all women respondents, to have monthly periods was important as a means to get rid of blut nogut (Tok-Pisin) or bad blood and failure to discharge this bad blood would make women very ill.

There were also stories learnt by some women respondents from other women in community who stopped using injection became ill (losing more blood) as they were resuming menstruation and were referred to hospital by the volunteers. Goreyu (age 39) in her interview on 27 June 2013 said that she personally witnessed the other women having problems when using an injection:

I have seen women with problems after taking FP injection. These women were taken to hospital by ambulance after facing complications while on injections. From what I observed and heard from these women are that women will not have their menstruations for one to three months while on injection. I think that was the cause of women having problems.....

Whilst it may be assumed that there are unmet needs related to contraception in rural communities, unless FP services are provided in convenient locations that save costs and time the indigenous women may not be able to access them.

Women also explained that that they felt in control of their reproduction when using pills. Honepe (age 35), reasoned: *'it was easy to stop pills and get pregnant again' whenever one wanted a child*'. Etinue (age 38); had four children, and had been using pills for 15 years. On an interview on 27 June 2013, she confirmed:

I have been on pills since I had my first child in 1998. All my children were spaced by this method. My experience with the oral contraception is good. The method helped me very much in spacing my children and I am pleased with it. With pills, there is no problem, you can manage how many children you want to have.....

This feeling of 'to be in control' according to Zahira, (2011) was important for individuals as this feeling enabled individuals to be confident in making decisions regarding their lives. Other contraceptive methods like a contraceptive injection might therefore have been seen as undermining women's sense of control. Women believed that there was a delay in resuming menstruation when they decided to stop injections.

The other reason for choosing the pill was that its convenience factor. Women could ask their husbands to collect supplies from the volunteers. In Muin village, the men were happy to collect pills for their wives. This may reflect the value that a family unit is a central part of the community and it is associated with a good family relationship. Under any other circumstance than that marriages and home are stable, the community may not be in peace and harmony. Three women in the study preferred using pills because the husbands supported and were willing to collect pills, use condoms and sought advice from volunteers. Male's participation in family planning: collecting pills for his wives or seeking advice from volunteers might also improve men's participation; as expressed boastfully by Goreyu (age 39), a mother of five children.

Both my husband and I agreed it was fine for me to take the pills. Unlike some men who would be suspicious of women taking contraception... He helps in collecting my pills from the family planning volunteers when I run out of supply..... My husband uses condoms at times when I do not use pills and it helps with our sexual relationship.

In Goreyu's situation having her husband collecting pills for her showed a mutual agreement between couples. In some situations however, others might assume that Goreyu's husband was imposing FP methods on her; this was not the case for this couple.

4.2.2 Purposes for use of contraception

Contraception is administered to control birth and space out children so couples are able to manage family life better (Everett, 2005; van Look et al., 2011). International policies promoted contraception mostly for economic development whereas national policies in most developing countries like that of PNG utilises FP contraception to reduce the high level of maternal morbidity and mortality rates in the country (Government of Papua New Guinea, 2010) (see also chapter one). None of the women respondent in study however, stated how many children they planned to have and what the maximum number of children would be. Although there is some uncertainty as to the number of children they could want, the spacing of the children in the family was an average of four to eight years apart.

The common purpose of the women taking pills in this study was to reduce the chance of having children too close together. Spacing out children gives women the time, space and energy to participate in social activities or community gatherings, like going to geamsao kibung or women's church groups or working in their food gardens. Eight out of ten women respondents stated that school fees were getting more expensive so the children need to be spaced out to enable savings. The final reason was that there was no birthing house for women to give birth, so most young women in the village decided to go on FP pills to avoid pregnancies. These were the three main reasons all of the women gave for using contraception. The first two reasons will be discussed next.

Healthy social relationship produces harmony, an essential element in indigenous communities. People who belong to a community are somehow related to one another as families or through marriage bonds. These family bonds are embraced and enjoyed within families as well as in special social gatherings such as in initiation ceremonies of youths or traditional singing and dancing events (Meigs, 1976; Slatter, 2010; Weiner, 1987).

Demands of modern lifestyle such as receiving formal education was one of the programmes introduced in PNG by early Christian missionaries in the early 1940s aiming to contribute to the social development of the country. Education in those days consisted of educating people in their local dialect with respect to the way to live independently by using whatever resources the community had. Men and women were taught hygiene and healthy living without any pressure or requirement to learn a foreign language in order to gain a certification to qualify for a job.

It was at the time of independence in 1975 that the government introduced formal education systems. The introduction of formal education was for the rapid development of PNG where the teaching of Standard English language was established as part of the school policy. In the 1980s education user pay policies related to school fees were implemented. The result then was and now is that the community is burdened with the responsibility of having cash money to pay school fees for their children (Fox, 1999). Families were burdened because up until then people were not accustomed to trading money or currencies as they utilised a barter system to trade goods and services. Today, in order to be able to earn enough money to pay for introduced goods and services, families have to work extra hard with often limited skills and knowledge. This financial pressure was felt by Boeng, (age 22); *'School fees are getting expensive these days so spacing will give time to save for each child's education.'*

Another impact was at the time of the introduction of standardized English education into indigenous communities, traditional ways of sharing knowledge ceased and people in the villages started attending schools and working hard to learn a foreign language - English, to earn a qualification and find decent jobs to earn and sustain modern living in towns, cities and slowly now in the villages. Most traditional cultural assets such as hausman and hausmeri or hauskarim that play significant roles in providing avenues for young adolescents to live in and to be educated by older people about the life of a man and womanhood are no longer around in most indigenous communities such as Muin village. Adolescents and children now live in common family houses with parents and attend schools until they are taken away into the cities to go to high schools (grade nine to 12) at the age of 16, 17 and 18. After this level of education the young adolescents may continue onto universities or colleges, and start up modern lives after a tertiary education and begin work at the age of 22 years or older.

4.3 Access and cost of FP services

Chapter two of this thesis showed that there are number of outreach – both publicly or privately funded - community based maternal and child health services offered to rural communities. The women participants mentioned explained that there was a number of maternal health services delivered to Muin and other neighbouring villages by nongovernment organisations in partnership with government or independently. The lack of communication regarding the purpose of the program; the unrealistic costs of the services provided to men and women in community and the lack of involvement of local

community members in the program had created assumptions in the clients about the genuine purpose of the programs. As stated by Ame, (age 34):

This organisation went there only for a private purpose and that is to make money. The workers do vasectomy on males and have them pay PGK50.00 (US\$18.00) each for the service provided. The money earned in turn is used to pay the community worker who assisted in organising the clients.

Health or any services provided at local indigenous communities should consider the indigenous perspective as the worldviews of indigenous people are very different from main stream worldviews.

As noted earlier, indigenous community of Muin are influenced by their shared knowledge and experiences so at times such information related to the high cost of services is shared amongst the women and relatives, which can prevent women and other community members from accessing health services that may be vital to their health. Also if community participation and partnership are not incorporated in programs community members may draw inaccurate conclusions regarding services provided, thus misleading all the other members to misunderstand and not attend the important services provided. Just as Doma, age 28, interviewed on the house veranda on 26 June 2013 said; *'I do not come and listen to other health service providers unless I am informed well about the organisation's visit.'* Nonetheless, leaders do have an influence on members' decisions according to the principles of respect for elders and leaders. Unless people are informed about the health services by their leaders they will not be convinced to access the services. Also if any service comes in competition with what the volunteers are already providing to the women or community they may choose not to cooperate for the same reason. Services introduced need to be agreed upon by the person providing similar services so there may be complimentary or supplementary add-on services that work together in a collaborative manner to the same community.

An hour's drive from Muin village, district government's static health services are provided to the political geographical boundary Muin village is a part of. Another district health centre located at a nearby government station about two hours walk from Muin village is within another political boundary where women stated that they were often unwelcome for services. Even though both of these district health facilities have varieties of modern contraceptive methods, the distances create barrier for women to be able to access these services. In addition three women noted irregularities in the service

timetable, as the women often arrived at the health centre only to find out that the health worker was not there as told by Etinu, age 32, on 27/06/13, *'If we go out we might not receive services as we could receive here because sometimes when we arrive health workers are not there at clinic to serve us.'*

This could be one of the possible reasons the women sometimes refuse to go to the district health centres for health services and request a birthing home to be built in Muin. The women respondents in focus group also discussions expressed disappointment that, nurses from the health facility of a different electoral boundary, would hesitate to serve the women from Muin. Although this health centre was relatively close to Muin village (two hours walk one way), the political boundary now seems to present barriers to women accessing needed delivery of services. Another government health facility which is within the community's political boundary could be quite a distance away from the village for women to access by walking and transportation to this clinic would be very costly. Therefore, the women and community are only likely to access the health services when there is emergency, which only allows them to use district ambulance to the health centre.

As noted earlier, women saw the community based family planning service run by the village volunteers was the most convenient and cost effective service delivered. The next section discusses women's understanding of the roles of family planning volunteers and the benefits that women experienced in using these services.

4.4 Roles of volunteers and benefits experienced

The current FP volunteer services introduced into the PNG communities in 1997 have adopted the concept from family planning health projects in African and Asian countries including Tanzania, Bangladesh, Nepal and others (Shrestha, 2002; Simba et al., 2011; Utomo, Arsyad, & Hasmi, 2006). Trusted and respected local community volunteers were appointed by members of the community and were trained by non-governmental or government enterprise through support received from international donor aids. The FP volunteers were trained to provide local community members with simple contraceptive methods and sexual reproductive health education (Alam et al., 2012; Shrestha, 2002; Ullah & Humble, 2006; Utomo et al., 2006). The volunteers were appointed because of their family history such as that the father of the male volunteer had been a health worker previously. As mentioned earlier since the program began in 1997 approximately 200 women in Muin and its nine neighbouring villages are currently obtaining contraceptive pills from Mr and Mrs Basa (volunteered couple).

All of the women were satisfied with the service provided by the Basa couple. The FP volunteer service at the community saved women time and money as women did not need to travel to the nearest health centre or to a hospital in town to get contraceptive pills. The service did not interrupt women's daily activities. The Basa couple was local and entrusted by community to take this volunteer role. This supports similar studies as in Bangladesh and Tanzania when women were happy with community based volunteer services for the same benefits (Hayes, 2010; Simba et al., 2011; Vail, 2002). The next section discusses women's perception regarding family planning within the construct of their indigenous knowledge.

4.5 Women's perceptions of family planning services within the construct of their indigenous knowledge and collective experiences

Culture in anthropology and sociology literatures refers to a set of attitudes, practices and beliefs that are fundamental to the way in which different societies function. It is the expression of the group or the collective aspects of people's behaviour as demonstrated in their activities and beliefs system. Therefore cultural capitals refer to cultural phenomena such as cultural buildings, works of arts, cultural knowledge and skills that indigenous people share together which gives them their unique identities (Jenkin, 2013; Scaglione, 2003; Weiner, 1987). Indigenous populations often become socially marginalised, unrecognised and classified as poor and disadvantaged because of the traditional cultural beliefs they possess. Indeed, the values implicit in their cultural assets, values, practices, aspirations, social networks, family ties and sacred knowledge contain potential benefits to enhance the community health and wellbeing (Chilisa, 2012; Cook, 2001; Denzin et al., 2005; L. T. Smith, 2006). This section discussed some of these essential cultural values and assets that might have somehow been destroyed or diminished over time as colonisation entered rural communities in PNG. Examples include younger men not leaving to spend time in hausman anymore today (Clarke, 2003; Elapa, 2011; Meigs, 1976).

The following themes include some of the tangible and non-tangible cultural capitals that might have been deconstructed through the introduction of modern family planning services that somehow might have disempowered and de-motivated the indigenous community's efforts, hence instilling attitudes of dependency. The dependent attitudes were inferred through women's and community's expectations and reliance more on outside assistance, like having the government building a birthing house rather than having independent attitudes and actions and being self-sufficient as they were

previously. There were three main challenges experienced by the women respondents that may indicate some deconstruction currently happening in rural villages of PNG as modern development enters the fringes of rural communities. The following sub-themes have been identified in this study which may be different to other rural communities in PNG and they are: 4.5.1 No hauskarim or birthing house, 4.5.2 social disconnection causing disequilibrium in community social relationships and 4.5.3 creation of community dependency attitudes.

4.5.1 No Hauskarim or birthing house

In every indigenous community there are tangible and intangible cultural assets that are significant to the communities. Cultural assets are communities (their) shared resources that enable sustainable living through sharing resources and social reciprocity (Chile, 2007; Chilisa, 2012; Denzin et al., 2005). For instance, kibung haus or a house for community gathering or traditional knowledge and songs respectively are communities' assets. In the interviews, the indigenous women explained an interesting reason to be on contraceptive pills was that, there was no birthing house in the village. Even though there was a trained village birth attendant (VBA) to support women giving birth in their own homes; women were still dissatisfied, as expressed by Cesu 23 years old as; *'We need a birthing house to be built, at the moment we give birth to babies in our houses where we usually sleep and this is not good.'* Doma, age 28, supported Cesu: *'If hauskarim is built, women could give birth in a proper place where the nurse may assist.'* However without a birthing house it becomes difficult for us.' Child birthing is sacred to women where woman in labour had to go to sacred huts/houses known as 'hauskarim' that had been built away from the main village to enable women to have privacy. The explanation is that there is a certain cultural sacredness related to childbirth which indigenous women hold dear. The experience of child birthing is a private and highly sacred one to women. Such sacred practice and knowledge had been attached to women's lives for many generations and women in this study believed that those practice should be maintained and respected.

The men in the village however, did not seem to acknowledge the need to build the birthing house (hauskarim). Women were disappointed that men did not assist in building the birthing house and they felt helpless about the situation. Even so, when the researcher prompted questions on women's ability to build houses, the women began identifying skills they had in which they can put together to build a hauskarim and this was how the communication went,

Researcher: Can anyone of you build a house?

Participants: Oh yes, we can pull kunai or long grasses (for roofing)...we can dig holes for posts (of house)...we can weave blinds (for walls)...we can cut trees but we need men to assist.....

And the women continued;

Participants: We have asked men to build the hauskarim but since the men are not responding we will start building the hauskarim ourselves. We will start and then later when men see us building they will come and help us.

In July 2013, the researcher returned to Auckland to complete her thesis. Since then, she had never had any contact with the research community. In April 2014 however, the researcher received a short text message from Mr Basa, a community volunteer informing that the men and women of Muin had started working together to build the hauskarim soon after the researcher left for Auckland (see also chapter five). Below is one of the photos sent to the researcher personal facebook.com account.



Figure 4.1 Men and boys building hauskarim in Muin village, Morobe Province of PNG

After childbirth, the woman and her newborn baby would usually stay in hauskarim for about three to four weeks until she fully recovered and then she returned to her family home. Some rituals were also performed for mothers and newborn in hauskarim. This practice however had disappeared in Muin about a few years ago. Other villages that are

located further inland away from the main cities however may still have hauskarim for childbirth. One woman interviewed was delving so deeply into this matter; however as she realised she was sharing a sacred knowledge with an outsider (researcher) she stopped the conversation and changed the topic back to family planning².

The volunteer's wife told the researcher that traditionally a woman who just given birth had to abstain from sexual intercourse with her husband until she fully recovered. Although the partner might visit the wife after childbirth, he did not spend the night at his family home. This was done to avoid sexual intercourse and to give time to the woman to recover.

Likewise, men also had a separate house built called the hausman or man's only house. Elapa (2011), explained that women were not allowed in hausman, as there were certain traditions and rituals that men practiced which women did not know about. It is in this house that the husbands lodged whilst their wives were in their third trimester until the wives had given birth and then at the time the child grows up to three or five years of age, then the fathers would return to the family house to reunite with their family. The cultural norm was to give time to the mother to nurture the child until the child was mature enough to feed him/herself before the father returned to the family home (Agyei, 1989). However, with the introduction of modern family planning, women now give birth in their residential homes and resume sex soon after when it is desired. During the field research it was noted there were no hausman or hauskarim in Muin village.

Elapa (2011) argued for the hausman that had been slowly disappearing with the introduction of western civilisation in rural communities of PNG. The disappearing of the hauskarim in Muin might be largely due to the introduction of the modern contraceptive methods such as condoms and pills that might have offered a way to control fertility and space out children without needing either the husband or the wife to leave their homes.

As described in chapter two, modern contraceptive methods were introduced into PNG in 1948 by the Australian Air Force Medical team to women in Port Moresby (PNG's capital city) at the women's request. The FP program was adopted by government in 1975 and

²A similar experience was noted by Weiner, an anthropologist who conducted research in Trobriand Island with women on the subject of childbirth. Disregard of her close connection with women in the village, Warner was not allowed to be present during labour and delivery; she was called into the birthing house only after the childbirth process was completed (Weiner, 1988).

spread into all centres of PNG including rural when the FP policies were combined in the 1990s (Gunther, 2008). The impact the introduction of modern FP contraceptive methods had on the social structures of indigenous communities however had been overlooked. Most studies on family planning in PNG had been based on epidemiological studies to inform national health policy development and fulfil international and national goals (Hayes, 2010; Hinton & Earnest, 2011).

The previous note that women made about taking contraception because of no birthing house or hauskarim may be interpreted differently by outsiders. One may argue that Muin women's decision to use pills to prevent unwanted pregnancy was mostly related to the cost of giving birth outside of the community. This argument however is not completely true. For indigenous women, childbirth is a sacred experience and women need a private place to go through the process of labour with only chosen women relatives providing help and assistance. Such rituals and traditions are important to a woman's cultural identity. These rituals or traditions are sacred to only women and women are not comfortable to share them with outsiders or even with their husbands.

The introduction of modern education and health systems had drawn women and men away from ways of transferring traditional knowledge to younger generations including the customs of oral traditions and teachings in hausman and hausmeri/hauskarim. Because children leave their homes to study in nearby cities, the practice of transferring traditional knowledge had gradually faded leaving communities without their hausman and hausmeri. This could be part of the reason communities stopped building new houses that are specific for men and women to continue tradition (Scaglione, 2003; Wardlow, 2006; Weiner, 1987).

The loss of these gender specific houses might have deconstructed the longevity of indigenous knowledge and practices. Boeng (age 22), mother of one child, who left school at grade nine explained the current reality of young girls missing out on the vital traditional knowledge because young girls were out of village for school or due to the absence of traditional houses:

‘we now do not have any customs (hauskarim) where women can have their babies, today whether we give birth in houses or hospitals it does not seem to matter, but giving birth in our houses is not right, it is not good.’

All women in the study saw the benefit of building a hauskarim in Muin as a place where family planning volunteers could provide services and deliver supplies to the community. The hauskarim, and hausmeri, and the other women's house for non-childbirth related gatherings had been of great value in women's journey from adolescents into womanhood.

In the hausmeri, young girls learnt from and observe older female adults through female initiation during menarche to prepare for womanhood. Likewise, special traditional ceremonies and rituals were performed in this house to prepare women throughout the stages of entering motherhood. These activities include learning the arts of woman such as the making of bilums or string bags, singing traditional songs, practicing magic and also learning valuable knowledge, about the values, roles, responsibilities, and entitlement of a woman as member of community. Such knowledge and skills were actively transmitted from older women to younger girls. Those included the introduction of traditional family planning method; what to do during pregnancy; how to breastfeed and care for and look after young infants; confinement and postpartum care; respect for boundaries of others, ways of solving family issues and so forth to equip young women for the years of challenge ahead. These practices are held as long as hausmeri or hauskarim are available. These women's houses therefore are precious to women's identity and sense of belonging; which have been observed in other indigenous populations around the world (Iseke & Desmoulins, 2011; Jenkin, 2013).

One may argue that this practice might have placed women at a subservient or subordinate role compared to men. Yet women who went through such traditional ceremonial practices did not confirm that argument. Women on the other hand were proud of certain roles and recognition they received from the community. For instance, some women who have the skills to perform magic or provide traditional medicine or assist women in childbirth have been well regarded in the community. Another indigenous Trobriand Island magician woman in the past had been hired by a male chief to make spell for his potential bride (Weiner, 1987). Women with recognised authority and skills in the community are often vocal and take a leadership position in the community to speak out for women's interest or needs with male chiefs or leaders. Women who do not go through women's initiation or breach any customary traditions are often not recognised by the community members and frequently not identified fully as a true community member. Similar findings were reported in Wardlow's study of the Huli women of PNG; whereby

the latter group is called the passenger women, signifying women who had lost their dignity in own community (Wardlow, 2006).

The two specific haus mentioned earlier are the places where important decisions about personal, family and community life are discussed and responsibilities are distributed or shared amongst all community members to participate equally in community activities to maintain social harmony. Indeed, the introduction of arguably modern health concepts such as the promotion of modern contraceptives have somehow overlooked such important indigenous traditions and structures that might have caused social discomfort or confusion hence weaken a community's self-reliance and sense of control (Elapa, 2011).

4.5.2 Social disconnections and disorientation in community

Indigenous communities operate in social cooperation and reciprocity. A woman for example, is taught from childhood by her parents and during her teenage years regarding appropriate social relationships, interpersonal skills that will help her to participate in the community and to gain respect from her community. She will also learn some skills to manage environmental resources to sustainable living (Rappaport, 1984). This keeps the social structure and connectedness in equilibrium in indigenous communities. In indigenous communities, an individual's interest or needs are secondary to the community's collective interest or needs. Thus, the indigenous life philosophy emphasizes social respect, harmony, relationship and interdependence (Behrendt, 2012; Denzin et al., 2005; L. T. Smith, 2006).

The practice of using hausman, hausmeri or hauskarim was very vital to the sustainability of community's social equilibrium. Those houses were important places wherein all indigenous community members participated to attain traditional knowledge and learn skills through observation, participation, training and mentoring. Such knowledge and skills are imparted or transferred via traditional means through storytelling or information sharing about their customs, identity and how to relate with other members of the community with respect for harmonious living within and without community (Rappaport, 2000; L. T. Smith, 2006).

Further, the existence of hausman and hausmeri also symbolized the value of fairness and respect of equal opportunities and access for all. In these haus community members met in kibung and discussed each other needs, planned and organised community projects together. The vision was that responsibilities were to be shared equally amongst all. Each

member was delegated a task or oftentimes each member would already know the role he or she had, in community projects. For example, with regard to building of houses, men and boys would cut down trees and bring timbers for house frames; while women and girls pulled out long grasses or kunai for the roofing. Weaving of bamboos used to be done by all members for the walls of the house (Scaglione, 2003; Weiner, 1987). Even so, this practice was not observed when women needing a birthing house in Muin; men were not cooperating in building a birthing house, as told by Boeng (age 22):

If our husbands could listen to the volunteers and build the birthing or health centre then we may receive other health assistance..... men have not built the birthing house so we are not receiving any.... The men hear about this need from the volunteers that a birthing house should be built but the men just ignore and so we are unable to receive services.....

Ame age 35, mother of three children, supported:

The volunteers serve the community well but the community does not support them. The volunteers usually ask the community to assist in building the birthing house the community does not cooperate.....

Cesu age 22, mother of one child hoped: *'If men could cooperate and build a birthing house, the government could assist with other health services in the community.'*

The decaying of traditional values of social respect and maintaining social harmony was not only explained through men's attitude to not responding to women's need of a birthing house, it was also the realization that the community volunteers have been poorly recognised and supported by the village community. Women in this study appreciated the help and service of community volunteers, they spoke about the need to show their appreciation, for example to give them koha or gifts. Women in group discussion mentioned about exchanging services from volunteers with food and traditional goods such as bilum or string bags and so forth. Other members of the community however might have assumed that volunteers were employed by the organisation that trained them and were earning a good income so assistants were not given. The next sub-theme discusses the community dependency attitudes as consequences of the state introduced modern family planning programme.

4.5.3 Community dependency attitudes

Customarily indigenous communities are traditionally independent as they have their own intellectual abilities, resources and social structures to accomplish tasks for their

community survival in alignment with sustainable living practices. If the customary knowledge and practices are left undisturbed, indigenous people may continue their self-reliance and independent attitude and actions to help themselves. However as a modern lifestyle crept into the communities with ignorance of indigenous cultures, the social fabric and the wealth of their way of life began to slowly collapse (Elapa, 2011; Scaglione, 2003; Wardlow, 2006). Modern services introduced into the indigenous communities might have the effect of disabling the indigenous philosophies that the community upheld and held dear.

If the indigenous community were to choose to adopt a new way of life, they would need a new set of skills and knowledge. In the case of the introduction of modern family planning services, government's failure to build community capacity to learn and sustain the project placed these indigenous communities at the receiving end only which now created dependency. Muin's women now see modern contraceptive as an introduced subject they do not have ownership of. Women and husbands therefore do not show any interest to contribute or support the FP volunteers or family planning programmes in their community. The women and husbands view modern contraception requires modern facility and that their traditional haus became irrelevant. Jeribiang, age 20, explained:

A health centre should be built so the contraceptive methods kept in the residential house of the volunteers can be stored away in the facility. It does not look good for the FP contraceptive methods to get mixed up with the personal belongings of the volunteers. Having a separate building will enable the safekeeping of the FP contraceptive safely in a secure house away from the volunteers' belongings.

This situation is not completely correct as traditionally built haus of local woods, kunai and bamboo will be equally suitable as a community birthing house for women. Although community based FP programmes aspire to use available local community resources to provide modern contraceptive methods, women saw that it was inappropriate to have the pills kept in the volunteers' house for distribution. The women may have assumed that because modern contraceptive methods are modern substance they require storage and distribution from a modern facility.

Moreover, as noted earlier husbands were hesitant to assist with the building of the birthing house. This may also be assumed that men in community also expected the agencies that introduced the family planning services to build modern facilities to match with their modern family planning services. Such assumptions may be related to

comments made by the women in the focus group discussion in relation to incentives for volunteers:

What we think is the volunteers were introduced by nongovernment organisation....so can the organisation take responsibility as well in providing facilities.....

Women in focus group discussions expressed that men were unsupportive despite the fact that the need was made known to them and the entire community. This could be the sign of men's not considering family planning services as their social responsibility. Hence, it may suggest the fact that introduction of modern family planning had somehow reduced the value of the centuries of settled social harmony and equilibrium. Such disequilibrium now displayed as men not taking responsible attitudes to women's needs. Women were complaining that men, unlike before, were not keen to work together with women to build a birthing house for all the members of community to benefit from.

Delivering modern health and other services that ignore the importance of community's involvement or participation and through initiation of new services within community's existing construct of traditions and cultures may result in confusion, ignorance or resentment (Chile & Simpson, 2004). When a new programme is introduced without consultation with the community, it is easily expected that the community may not have a sense of ownership of the programme. Otherwise the community's acceptance and understanding regarding the introduction of a new programme displays that it proves essential to have community engagement (Chile, 2007; Wass, 2000). Furthermore, a new programme that can creatively harness community assets, local knowledge, people's skills and community networks enhances community sense of control and ownership of the project (Chile, 2007; Gegeo & Watson-Gegeo, 2002). This then will likely strengthen social connections and maintain social equilibrium which will serve to enhance the sustainability of the new programme. Overlooking the resources and community structures or networks currently available in the community may have the effect of creating disempowering attitudes, whereby the people in the communities may disregard their own skills, ability and talents to be of importance to contribute to the new programme. With that, instead of further developing the people or community, the community becomes reliant, disinterested and disoriented in their initiative to sustain their own projects (Chile & Simpson, 2004; Denzin et al., 2005; Passingan, 2013).

4.6 What could improve community based family planning services and the roles of volunteers

Two focus groups were conducted with the same women respondents. Four main themes extracted from individual interviews, relating to the strategies to improve current community based family planning services were summarised and presented back to the focus groups. The four themes were; firstly need of hauskarim or birthing house and hausmarasin or medicine house (refers to health centre); secondly, incentives for volunteers; thirdly enhance and improve volunteers' skills and knowledge and finally, need of an assistant when volunteers are sick or not available to provide family planning service. The second, third and fourth statements are interpretation of what is written in Tok-Pisin in figure 4.2 below.

As mentioned in chapter three, the women decided to first discuss these themes in their local dialects which cannot be understood by outsiders, including the researcher. After a collective agreement was reached, one to three representatives shared what was discussed in Tok-Pisin, with the researcher. This suggests that women were conscious about what relevant information could be shared due to sacredness of the traditional knowledge and respect for collective knowledge that may be of benefit to all women. As noted in chapter three, all women interviewed were invited to participate in the focus group discussion. Two focus group discussions were conducted with a total of eight women. With women's permission, the actual discussions were written on pieces of butcher paper by the researcher and photographed to make it convenient and safe for the researcher to bring back to Auckland for data analysis. Figure 4.2 shows a list of priority strategies that was proposed by women to improve community based FP service and roles of volunteers.

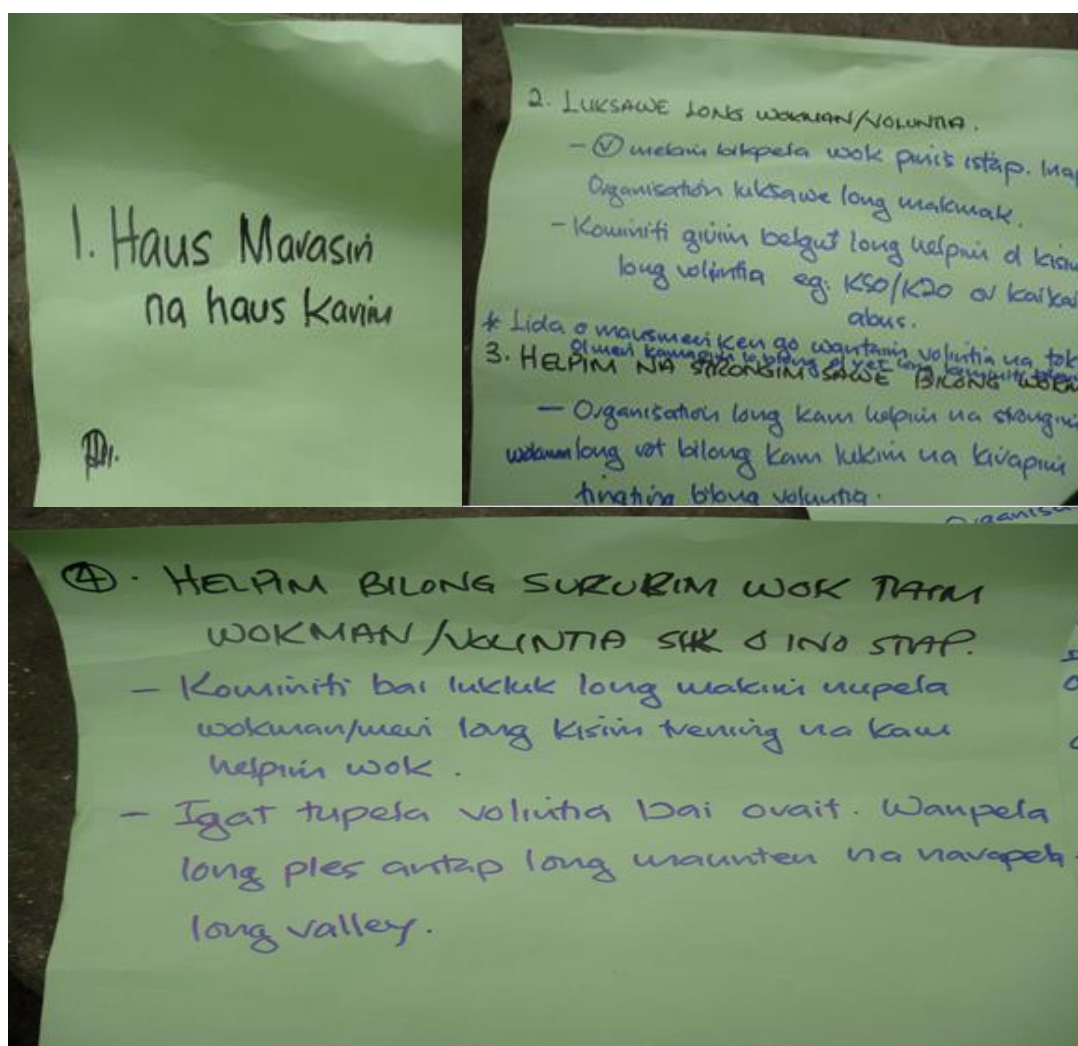


Figure 4.2 Results of focus group discussion on four priority strategies to improve community based family planning and roles of volunteers.

The difference in the themes organisation was that the second group had incentives for volunteers as third priority while first group had the same theme as the second. The reasons for each group prioritising the four themes in such manners will be discussed in the following section.

4.6.1 Hauskarim or birthing house and hausmarasin or health centre

Both discussion groups stated that hauskarim or health centre was the first priority and a real requirement as there is no health facility in the community. Women had to travel long distances which took many hours to find professional services for childbirth or to access other health services. Husbands and men who were asked to build the health facility did not respond positively leaving women taking sole responsibility of looking after their health during pregnancy, planning for childbirth and accessing family planning. Women were well aware of the potential danger each pregnancy may bring, when there was no professionally skilled trained health worker in their community.

In a modern context, it is realised then that the women respondents had shifted their knowledge of the context of a traditional birthing house which encourages the natural process of giving birth to the medical context of childbirth in giving birth in a modern health facility with the assistance of trained health workers. This change increased the expectations the women had with regard to modern health services, thus suggesting other health services and an ambulance needed for referral to hospitals were added onto the lists of modern health needs. Ikuwa (age 22), a mother of one child, suggested:

Another thing that can be improved is if we can be given an ambulance to assist us whenever we need to get to the hospital or health centre for birthing. Villagers from the mountains find it very difficult to access health services when health problems arise. We only come to the volunteers to assist in calling ambulance for us. If only we can be given an ambulance then the volunteers can assist to take us to the hospital or health centre when we call for help.

The women may be raising concern on the situation the community is without a health facility, however the female volunteer was multi-trained, notably trained in family planning as well as attending to safe low-risk childbirth at women's homes. Unfortunately, the volunteers were not educated to the level where they can be trained to deal with complications in childbirth, so women were referred to the hospital for complications, as stated by Honepe (age 35), a mother of two children;

During child birthing the volunteers respond quickly in assisting us with childbirths, and if we do not give birth on time the volunteers organise transport and take us to the nearest health facility for birthing.

The volunteers utilised their skills well in attending women during delivery in referring women promptly whenever complication was observed. Yet without a birthing house women's privacy including volunteers' performance were poorly advanced.

The women's aspiration to train members of the community to be volunteers can be seen as a means to empower the community to take control over their own issues. Empowerment is enabling the community to realise what they have, what their needs are and supporting them to plan strategies, implement and evaluate their own activities. With this the community may take responsibility over their own health such as reproductive health of the women and improve on maternal health outcomes thus reducing sole dependency and demands on outside sources by starting with what the community has (Chile, 2007; L. M. Morgan, 2001; Wass, 2000).

In this study though the village volunteers were equipped with skills and knowledge to perform safe low risk child delivery in the community, the fact that there was not a birthing house had hampered the volunteers utilising their skills effectively. Even though the women acknowledged the training the volunteers had such as attending to births and referral of complicated cases the women decided to take contraception to prevent pregnancies due to no hauskarim.

4.6.2 Incentives for volunteers

The second priority the women in group one had was the need to provide incentives for the volunteers. The second group had incentive as third priority because they believed enhancing and improving skills was more important for volunteers to best serve women's reproductive needs. Group one however argued that the incentives could be used to motivate volunteers to improve services. The first focus group stated *'since the volunteers were introduced by the nongovernment organisation, the organisation should think about providing an incentive for the volunteers.'* Unfortunately, most of the projects funded by international donors in PNG only offer financial support during the time of the project. After that the volunteers are left unsupported within the communities. The national government as the partner organisation are then expected to sustain the programs and oftentimes the lack of forward planning and resources make the programme become unsustainable (Gegeo & Watson-Gegeo, 2002; Treva, 2012; Wendt, 2004).

In both FGDs, women explored various cultural assets and resources that can be drawn from the community to support the volunteers. Women, in both individual and group discussions mentioned traditional ways of showing appreciation to volunteers for their services, such as community members giving volunteers food supplies; looking after or making gardens of volunteers. However women were still adamant that the NGOs that introduced the family planning program to the community were to provide cash incentives for the volunteers. This kind of exchange however may not seem to keep in line with the indigenous culture and therefore may not be sustainable (L. M. Morgan, 2001; Wass, 2000; Wendt, 2004).

4.6.3 Enhance volunteers' skills and knowledge

Health volunteers require ongoing training and supervision as if volunteers are not receiving updated training it will not be beneficial for the community they serve (C. J. Morgan & Deutschmann, 2003). The women in the study were able to list different types of training and supervision for the volunteers, including community in-service trainings

or supervisory visits that provide on-the-job training. Women also suggested health workers from nearby health facilities could regularly visit their village and conduct refresher training for volunteers. Lack of such assistance as mentioned by the women may de-motivate volunteers to continue providing services.

4.6.4 Need of assistant volunteers to provide FP services.

Women were concerned that the current family planning services were unsustainable. If volunteers were unavailable or sick or retired, there were no substitutes. At the time of this research, the family planning volunteers were expanding their services and activities to other nine villages. With increased workloads, women acknowledged the need for urgent trainings for new volunteers.

Ikuwa, age 22, stated that the importance of supporting this agenda '*the volunteers are getting old and their knees are becoming sore*' at times therefore it is necessary to train new volunteers to support the Basa couple. As such, the women mentioned that the community is planning now to send some village members to attend health training schools to be available to come and support and also attend to the community's general health needs such as providing first aid treatment for common minor illnesses, identify and referral of serious health conditions. Furthermore the group of women in the study said the volunteers can provide on-the-job training to younger volunteers and in that way the young volunteer may learn and assist the older volunteers when needed.

4.7 Conclusion

To conclude this chapter, this question may be asked, will then the government of Morobe Province and Papua New Guinea be able to build health centres, provide training and supervision to health volunteers while at the same time ensure ambulance services are available in all the remote rural communities in PNG to address the indigenous women's reproductive health needs? A continuing lack of awareness of local knowledge regarding the strength of the community networks and community resourcefulness will only instil the community's state of dependency. Thus it may further create avoidable burden to the national health programmes. Increased community expectation for government run facilities and services will make it more difficult for the government to meet the demands of the rural population. If only cultural capitals can be acknowledged and utilised then within indigenous communities, these may supplement or compliment the efforts of health organisations in reducing costs of services delivered to remote rural villages (L. M. Morgan, 2001; Wendt, 2004). For instance, the community may use bush material

timbers to build houses whilst the government provides health equipment or drugs to meet the community's health requirements and this may reduce the cost of goods and services for major health development to be able to have the budget to build modern health centres where needed.

Chapter 5: Discussion and Recommendations

This study set out to explore indigenous women's observations, appreciation, judgement and perception towards the benefits of the current community based family planning (FP) programme and the roles of FP volunteers in promoting women's reproductive health in Muin village (pseudonym) in Morobe Province of PNG. The following five sections include; 5.1 chapter introduction; section 5.2 summaries and discussions of the key research findings; 5.3 implications of this study with respect to current community based FP policies and programmes, section 5.4 programme development, trainings and future research related to community based FP in indigenous communities in PNG. Finally section 5.5 discusses the study limitations.

5.1 Summary of key research findings

Four research questions were developed prior to the field work (see also chapter three) to guide the in-depth interviews and focus group discussions (FGD). The first research question: 'What did women know about the community based FP and the roles of the FP volunteers in their community?' aimed to explore women's understanding and experiences of using the community based FP service and their perceptions of the roles of the volunteers. The second and third questions explored the benefits women experienced and the reasons women patronized the FP programme by becoming frequent users. Finally, the fourth question captured women's opinion around how the community based FP service and the roles of the volunteer could be improved to support women's reproductive health needs. The information that each woman gave to question four in the in-depth interviews was summarised and presented once again to the two focus groups. Then, the women in the focus group were asked to discuss ways to improve current FP programme and roles of volunteers; followed by prioritizing those recommendations in order of importance. Women were also asked to identify the local resources the community had to implement their recommendations.

This research was informed by indigenous and feminist theories. Indigenous theory is based on claiming and reclaiming indigenous cultural heritage such as language, cultural practices and knowledge and social relationships and connections that were disrupted by colonialism (Denzin et al., 2005). Qualitative research methodology was used to gain in-depth understanding of their social lives and how indigenous women make-meaning of modern FP programme and method within their relevant indigenous values, beliefs and practices. In-depth and focus group interviews were conducted with a total of ten women

from Muin village. Thematic data analysis was used to analyse the data. The results are presented in chapter four. The next three sections provide summaries and a discussion of the key research findings: women's knowledge of community based FP, the roles of community volunteers, and women's aspirations for improving current community based FP.

5.1.1 Indigenous women's knowledge of community based family planning

Indigenous women have practiced indigenous and traditional methods of fertility control prior to the introduction of modern FP into PNG in 1948 (Gunther, 2008). Indigenous knowledge on fertility control, reproduction have been localised, shared, and based on practical experiences. As such knowledge has not been written it has been transferred across different generations using oral expression or stories; hence it is believed to be true and highly regarded by the community (Moris, 2010). All respondents were using oral contraceptive pills (OCP) between four and fifteen years. The following includes a summary of findings around women's understanding of family planning, reasons and purposes in using only OCP:

1. Women expressed satisfaction with oral contraceptive pills (OCP) to space childbirth and to give them the time and energy needed to work in family farms or gardens. Women's decision to choose OCP was largely influenced by older women relatives or female friends. This finding is shared by others (Dudgeon & Inhorn, 2004; Hayes, 2010; Ullah & Humble, 2006).
2. Women's husbands had relatively no influence on women's decision to use OCP. Men were supportive of their wives' decisions to use OCP and they were happy to help their wives to collect monthly pills from the community volunteers. This result contest findings from other studies in Africa, Bangladesh and the Tari community of PNG where women needed to get permission from their husbands to use contraceptives (Porche, 2012; Ullah & Humble, 2006; Vail, 2002).
3. Women explained the convenience of using contraceptive pills as the supplies were delivered to their homes or at a nearby health post.
4. Having a regular monthly period was acknowledged as an important part of a normal womanhood. Women explained that using the OCP did not disturb their menstrual regulation. Having no regular periods was seen as a sign of infertility. Other studies in Bangladesh by Ullah and Humbles (2006) and in Brazil by dos Santos (2012) also found women's beliefs of contraception causing infertility. Women's decision to use OCP was to have more control over their fertility and

that they could choose to stop taking pills at any time and to get pregnant. The study of dos-Santos (2012) noted that women in Brazil reported having long term or permanent contraceptives had deprived their autonomy over their reproductive rights.

5. Family planning volunteers only delivered pills and condoms. They were not trained in skills or knowledge to administer injections or other advanced methods. A similar role of community volunteers has been reported in Bangladesh (Alam et al., 2012), Nepal (Shrestha, 2002) and Indonesia (Utomo et al., 2006). The community volunteers are not clinically trained to give injections rather they are expected to refer women to the health clinic for women requiring long term or injectable contraception.
6. Women chose to use OCP to space childbirth and to reduce the financial burden of raising many children. Women explained the financial burden to be relating to paying fees, uniforms or boarding; similar to those reported in other studies Indonesia and India (Alam et al., 2012; Bongaarts et al., 1990; Cleland et al., 2012).
7. Women were committed and comfortable with local FP services provided by volunteers. Although other NGOs were providing mobile family planning services in the community, women chose not to access them because the services were expensive and irregular.
8. Women also explained their main reason for using OCP was because there was no birthing house in the village. Childbirth was considered a sacred experience and women did not feel comfortable to give birth at home or at a clinic. The traditional practice of giving birth in a hauskarim had slowly disappeared with the introduction of modern family planning. The introduction of modern family planning might have somehow obstructed the traditional family planning practice, including the use of hauskarim or hausmen (see also chapter four).

5.1.2 Roles of community volunteers

The community based FP service was introduced in 1997 to increase family planning participation in rural communities. Since its introduction to Muin and its neighbouring nine villages, the volunteers have been serving about 200 FP acceptors. Women explained the benefits of having community volunteers below:

1. Community based FP programme was practical, convenient and cost effective. Studies by Alma and colleagues (2012) and Ullah and Humble's (2006) in

Indonesia and Bangladesh respectively noted that dedicated community volunteers were important for the effectiveness of family planning programmes in remote areas.

2. The volunteers were trusted and respected members of Muin community. They understood the local cultures, norms, practices and social etiquette that made women and their partners feel comfortable and safe.

Following the individual interviews, women were invited to form two focus group discussions to discuss, identify and prioritise strategies to improve the current community based family planning programme. The next section summarises and discusses the priority strategies proposed in group discussions.

5.1.3 Priority strategies to improve community based family planning programme

Each focus group discussion began by the researcher giving out a summary of individual interviews. The group then was asked to confirm and discuss that summary. The group then was asked to discuss potential strategies or activities needed to improve the community based FP programmes and enhance the roles of the volunteers. Four activities were proposed by group discussions: 1) building a hauskarim or a birthing house; 2) providing a good incentive system for volunteers; 3) providing regular in-service training for volunteers; 4) training new volunteers (refer to chapter four). The following discusses these four priorities in the order of importance:

1. All women agreed the first priority was to build a hauskarim or birthing house in Muin as the Muin village had no village health centre and women needed a birthing house where they can get the privacy and space needed for childbirth. Women considered the experience of childbirth as sacred to women only and they needed the space and place to continue respecting this tradition. Women also proposed for the family planning services to be provided at a hauskarim. Thus after a childbirth, a woman could commence straight on modern contraception before reuniting with her husband back at their family house. The hauskarim was an important place for women, and women were quite upset that the men in the village had refused to help them build it. Women in groups then decided that they would start building the hauskarim first and they would hope that the men would be more motivated to help them. The researcher left Muin in August 2013 to finish her thesis in Auckland, New Zealand. In March, 2014, to her surprise, she received a short message on her mobile from Mr. Basa, the community volunteer informing

her that the community had started building a hauskarim. The picture below was sent to the researcher on 20 April 2014 to her private facebook.com account. It shows a group of men from Muin working together to build a hauskarim. Further Mr. Basa told the researcher that the community was hoping for her return to PNG at the time they finish the hauskarim and to celebrate its opening.



Figure 5.1 Men building hauskarim in response to women's need in this study 20th April, 2014

2. The second priority identified was around the awareness of the importance for the community to look after the volunteers. They recognized the need to establish a good incentive system to support the sustainability of the family planning programme. The women realized that they could not rely on the government totally and that the community needed to also show their appreciation to the volunteers. Women thought of offering the volunteers some farm products, for example, yams, a bunch of cooking bananas, or chicken or cash depending on collective agreement by the community. Another community in Indonesia, for example, provided cloth materials or shoes for community volunteers (Alam et al., 2012); while meals or food crops were given to birth attendants in Milne Bay Province in PNG (Bettiol, Griffin, Hogan, & Heard, 2004).

3. The third priority was related to the provision of regular refresher trainings for community volunteers to update their skills and knowledge related to reproductive health and family planning. Women noted that both Mrs and Mrs Basa had not received any training since the last one in 2010. The women groups envisioned that local health administration at the nearest community health centres would be the first contact point for this training plan.
4. The fourth priority area was in relation to the need to train new volunteers to assist Mr and Mrs Basa who had been working for the community since 1997 and they were getting on in years. Mrs had often complained of having her knees hurt when walking for a very long distance to deliver health education and supplies of pills or condoms. Women also observed that the Basa couple was overworked as they served ten villages with more than 200 FP acceptors and needed substitutes to deliver supplies when they were sick or unavailable. Women also stated that there are future plans for sending one community member for professional health training in nursing school to be ready and available to serve the community later.

Those four strategies confirmed the researcher's belief that women, when they were given the opportunities, were resourceful and capable to provide positive solutions to community problems (Chilisa & Ntseane, 2010; Dian, 2009; Hesse-Biber & Leavy, 2007; L. T. Smith, 2006). The next section discusses the implications of this study with respect to sexual and reproductive health programs in rural PNG.

5.2 Implications of this study to family planning policies and programmes

The community based family planning services and its volunteers were well accepted by women in Muin. In the late 1990s, the PNG government partnered with the International Planned Parenthood Federation (IPPF) by introducing the community based family planning programme and volunteers to increase access to family planning in rural communities. The first programme was implemented in 1997, in Morobe, Eastern Highlands and East New Britain provinces. In 2010, the National Health Department of PNG also formulated the National Health Plan 2011–2020, one of the goals was to extend the reach of the village health volunteer program and community based family planning distribution system to increase family planning coverage and to improve maternal health status of women in PNG (Government of Papua New Guinea, 2010). An ambitious commitment was made by the government to expand the community based FP program to all rural locations in all twenty provinces by 2020. We still have quite a lot of work to

accomplish to reach the objective in only a few years, as no community based family planning programme has been implemented in other than those three provinces mentioned above (Government of Papua New Guinea, 2010; Hayes, 2010; Shaw, 2009). Indeed, women in this study were concerned with the seemingly little attention and support given to the FP programme by the government and the continuation of the programme once Mr and Mrs Basa retire.

Results of this study suggest three important areas require addressing to sustain current community based family planning services in rural areas. The following recommendations challenge programme developers, policy makers and those who look after and care for the health and wellbeing of women to acknowledge the existing social, cultural structure of indigenous community and that any programmes should respect and assess the potential use of those structures to enhance community health and wellbeing (Chilisa, 2012; Denzin et al., 2005; L. T. Smith, 2006). For example, in Muin community, local practice to control fertility control had existed for many decades before the introduction of modern family planning. The hauskarim has been one example of a local indigenous structure that its use can be potentially expanded for modern family planning services or other reproductive health services as the women recommended after discussions in the focus groups.

An abrupt introduction of a new ‘top-down’ programme that could without realising it, ignore local resources or structures, could without meaning to, potentially cause community confusion, resistance and hesitance to engage and become involved. For example, the introduction of modern family planning programme was accepted by Muin community with confusion and mix feelings. As the community did not have a strong sense of ownership of this programme and did not have a high level of involvement. They believed that an incentive or support for the volunteers had to be provided by the health organisation that brought the programme to Muin. Men stopped building hauskarim for women and waited for the government to build a modern childbirth facility. While the initial aim of the programme was to improve women’s access to family planning, it has overlooked the importance of maintaining community’s self-reliance and enthusiastic interest and participation to enhance programme sustainability.

5.3 Recommendations

The following recommendations highlight the importance to engage local indigenous knowledge and structures to sustainable family planning programme in rural

communities; to accommodate a holistic health approach and collective community learning strategies to improve sexual and reproductive health outcomes; and to promote and fulfil the rights of indigenous people to comprehensive sexual reproductive health to be reflected in policies and programmes.

5.3.1 Engaging local indigenous knowledge and structures to sustainable family planning programme in rural communities

Traditional methods of fertility control had been practiced by indigenous communities in PNG long before the first introduction of modern contraception by Australian military in 1948 to women in Port Moresby (Agyei, 1989). Indigenous community consider any discussion on fertility control or sexual health as sacred (Alam et al., 2012; Kies, 1987; Scaglione, 2003); is usually only shared by local community and is kept secret to outsiders (Moris, 2010). Elders and leaders of community are generally seen as the ‘guardian’ of traditional knowledge; they are believed to be the one who know best regarding any new knowledge to be adopted or incorporated into existing traditional knowledge (Denzin et al., 2005; Gegeo & Watson-Gegeo, 2002; Moris, 2010; L. T. Smith, 2006). Thus an introduction of new programme and knowledge would be effective when consulting and seeking guidance from leaderships. In PNG for example a *hetmeri* or a *hetman* (elderly women or men) are the guardian of local knowledge and the gatekeepers of the community. To ensure that a new programme is suitable and well accepted by the community, an engagement with these leaders can help facilitate community meetings or *kibungs* to introduce the project and to seek support from the community (Elapa, 2011; Gegeo & Watson-Gegeo, 2002). Related to women’s suggestion to recruit new family planning volunteers, these leaders are the best to identify and recruit those potential candidates (Cook, 2001; Maes et al., 2010; Passingan, 2013).

With regard to the importance of utilizing indigenous structures in family planning programme. Indigenous community has existing social structure for dialogue, meetings or making important decisions. For example the *hausmeri*, *hauskarim*, or *hausmen* are different types of meeting places for different social and cultural purposes. Likewise *kibung* or social meeting is generally used to discuss important matters or find solutions for community problems (Chilisa & Ntseane, 2010; Passingan, 2013). For example, the suggestion to develop an incentive system for community volunteers can be discussed in *kibung* as community elders and leaders and also other members of the community are in attendance.

5.3.2 Promoting a holistic health approach and collective community learning strategies to improve sexual and reproductive outcomes

In an indigenous community, any decision, planning and implementation of an activity is usually achieved collectively by all community members to ensure the benefits of that activity for all (Chilisa & Ntseane, 2010; Denzin et al., 2005; Moris, 2010; L. T. Smith, 2006). Every member of a community is usually given a role, and that role is learned collectively through a mentoring, coaching or apprenticeship system. For example, a young girl is trained to be a good weaver or a good dancer or a good orator by elders who mentor in a hausmeri. This existing system can also be potentially used to train family planning or other health volunteers through mentorship. A different house can be used to deliver different sexual health education for example for young boys (hausman) or young girls (hausmeri) (Elapa, 2011; Scaglion, 2003; Wardlow, 2006). Likewise the kibung can also be used by adult women and men to discuss both men's and women's reproductive health. . Same structures or social meeting can also be used to address teenage pregnancy and the prevention of STI or HIV/AIDs.

Likewise, these mentoring, coaching and training of skills (for example, skills as a hunter or a warrior) from elders to younger generation can potentially be used to train family planning volunteers or other health volunteers. This training activity was suggested by women in focus groups as both Mr and Mrs Basa were getting on in years and they needed some assistance as their work was recently expanded to serve other nine villages. Women also provided suggestion on the use of Tok-Pisin or local dialects to train volunteers and that the training materials used pictures and simple language. Likewise, the training can be based on oral tradition, storytelling or other culturally relevant methods. Studies suggest that the performance of volunteers is positively associated with the support and acknowledgement received from community and relevant health organisations (Alam et al., 2012; Shrestha, 2002; Utomo et al., 2006).

5.3.3 Promoting, protecting and fulfilling the rights of indigenous women to comprehensive sexual and reproductive health policies and programmes

The Universal Declaration of Human Rights (1948) article sixteen ensures the protection of the rights of men and women of full age, without any discrimination to marry and to found a family. Further the states should ensure that women or couples have access to complete information about sexual reproductive health, family planning, safe and legal abortion, and to make informed choice about family size (International Conference on

Population and Development, 1994) without coercion, violence or discrimination. The same human rights are applicable to indigenous communities (The United Nations Declaration of the Rights of Indigenous People [UNDRIP], 2007) as stated in articles 22 and 24. Hence, indigenous women reserve the rights to self-determine what is best for them according to their cultural beliefs and to retain appropriate practices that best promote their reproductive health. This signifies the importance of programme planner and policy makers to engage indigenous family to identify relevant cultural practices, community assets and networks, and local structure to efficiently develop culturally appropriate and sensitive family planning programmes and policies. This requires organisations and programme developers to consult with indigenous women and communities to identify local practice, resources and that may strengthen the proposed programme. For example, this research proves women are resourceful and capable to identify and prioritise issues, community resources, plan an action and lead the effort to build a birthing house.

The ICPD 1994 and the Beijing Conference 1995 called for a comprehensive sexual and reproductive education and services for not only women but also couples through the promotion of gender equality. Hence the provision of family planning services to only women without other reproductive health services (antenatal care, obstetric emergency care, safe delivery, safe abortion services) or education and counselling services deprive both men's and women's rights to comprehensive reproductive health care.

To ensure the protection of the rights to quality sexual and reproductive health services, regular evaluation and monitoring of programmes are important (Davidson, 2005). Results of this study argue for community's capabilities to involve in programme evaluation utilizing the existing social system, such as the community *kibung* or *gemsao kibung* (church meetings) and so forth. For example, women in this study conducted a monitoring role related to the performance of the community based FP programme and pointed out the need for refresher training for community volunteers to update their skills and knowledge and to recruit and train new volunteers.

5.3.4 Recommendation for further research

Both the charter of the Indigenous Tribal People of the Tropical Forests signed in Penang (1992) and the Declaration on Cultural and Intellectual Property Rights of Indigenous people signed in New Zealand (1993) call for the states to develop practices and policies which recognise indigenous people as the guardians of their customary knowledge and

that indigenous people have the right to self-determination and to protect and control dissemination of that knowledge and create new knowledge based on cultural traditions (Posey & Dutfield, 1996). Further to this acknowledgement of the rights of indigenous people to intellectual and cultural property, indigenous people also have the rights to participate in project management, control over their own knowledge and that all investigation in indigenous territories should be carried out with consent or under joint control and guidance (Denzin et al., 2005; L. T. Smith, 2006). The first beneficiaries of indigenous knowledge must be direct indigenous descendants of that knowledge (Cook, 2001; L. T. Smith, 2006). Research agenda with indigenous people should focus strategically on the goal of self-determination of indigenous people. For example, in this research, women got together to define priorities and act on their goal – building a *hauskarim* - which will be directly beneficial to the women in the community.

Whilst conducting a research study with indigenous community, often the approaches, the research process, the methodology and methods are highly important. In some cases, the process becomes far more important than the outcomes. The processes are expected to be respectful, to be empowering, to enhance collective learning, build capacity and new knowledge to enable the self-determined goal of the community. For example, prior to her visit to the community, the researcher approached local leaders and community volunteers to learn about respectful behaviour, social etiquettes, norms, values or local traditions to gain community trust and acceptance (Denzin et al., 2005; Passingan, 2013; L. T. Smith, 2006). The researcher also visited local elders and leaders to gain access and permission, to work with the community.

One pathway in which indigenous research is being advanced is through community action projects or local initiatives. The other pathway is through the space gained within institutions for indigenous research, mostly found in universities in developed nations like, Australia, Canada and New Zealand. A community action project promotes community empowerment, independence, self-determination to take full participation in the research planning and implementation to enhance the benefit of the research to the community (Denzin et al., 2005; Gegeo & Watson-Gegeo, 2002; L. T. Smith, 2006). In this research, for example, place, time of interviews or group discussions were organised by women. Women's self-determination and protection of indigenous knowledge was respected in which the researcher gave space and authority for the groups to discuss the question collectively and then only chose specific information they were willing to give to the researcher. This respectful attitude and being humble is important not only for

insider or outsider researchers. For example, although the researcher was an indigenous woman of PNG, from a different tribe from the Muin, the women viewed her as a ‘friendly’ outsider, even so sacred knowledge or practice remained that must not be shared with outsiders, even friendly ones.

5.4 Limitation of study

In the individual interviews, women approached the researcher with caution and only gave short and straight answers. It could be that it was the first time for these women to be interviewed by an outsider. Although the researcher, herself an indigenous woman, born, raised and having spent most of her life in Lae City, two hours by car from Muin village, she still would have an outsider status. The other reason for women giving short answers could be that women were not fluent in Tok-Pisin the language used in the interview. The community used local dialects for daily communication and Tok-Pisin was used only with an outsider. Future researchers should prior to undertaking their research become acquainted with local villages’ etiquette prior to conducting their research. Furthermore, indigenous community members could be trained in research to be co-researchers with future researchers, to overcome issues of misinterpretation related to indigenous knowledge provided by interviewees by interpreter (Passingan, 2013; L. T. Smith, 2006; Vaioleti, 2006).

Indigenous community participates in a communal dialogue when dealing with community issues through sharing of information and reciprocity amongst all community members. Therefore one-on-one interviews wherein the researcher asks questions and expects an interviewee to answer might not be culturally appropriate. This approach could potentially cause some discomfort for the women. Being aware of this situation, the researcher had made some changes in her last four interviews, when she asked questions in the form of storytelling and shared her personal experience with the women. Further, as family planning was considered as a sacred topic to be discussed with an outsider, women would feel more comfortable to discuss this topic collectively in groups like the *geamsao kibung* (Chilisa, 2012). The social meaning of *kibung* might be similar to the *talanoa* method, a Pacifica research method in the ways meetings were conducted face to face, involving specific groups or general community meetings. Different from *talanoa*, however, *kibung* is usually conducted with a purpose or a specific agenda. *Talanoa* however is described as a free-flow meeting without any rigid framework (Vaioleti, 2006). *Kibung* derivate from the term ‘ki’ meaning key or important and ‘bung’ means meeting or gathering (Tok-Pisin). Therefore it is necessary for future researchers to note

that PNG is diverse in culture and that not one research method may suit every community for study. Prior to field research, researchers need to identify unique approaches that may be employed as research methods for each indigenous community in PNG so as to avoid discomfort or harm to indigenous community before progressing into conducting a study (Chilisa, 2012; Denzin et al., 2005; L. T. Smith, 2006; Vairoleti, 2006).

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Glossary

Geamsao	Local name in Yabem language for church women's group in Southern part of Morobe Province
Haus man	Specially built house only for boys and men where girls and women are not allowed inside. The house is mostly used for traditional boy initiation into manhood and passing on of traditional knowledge from older men to younger boys and men.
Haus meri	Similar to haus man, this house is specifically built for girls and women where boys and men are not allowed inside. It is house for girls' initiation into womanhood and passing on of traditional woman's knowledge from older women to younger girls and women.
Haus karim	A house specifically built for woman for the purpose of child birthing in rural villages. This house can be separately built or the same haus meri as defined earlier but this time it is used for providing privacy to women giving birth in villages.
Haus win	A small hut built next to the main residential house in a rural village that is used for relaxation or entertaining visitors.
Hetman	Male elderly man or male leader
Hetmeri	Female elderly woman or female leader
Kibung	Meeting
Kina	Papua New Guinea currency that is equivalent to American, Australian or New Zealand Dollars.
Kotec	One of the two main local languages that is spoken by Northern region of Morobe Province in Papua New Guinea.
Toea	Papua New Guinea currency that is equivalent to American, Australian and New Zealand cents.
Tok-Pisin	One of the three common languages of Papua New Guinea, which is mostly spoken by people in Northern part and islands of Papua New Guinea.
Yabem	One of the two main local languages of Morobe Provinces which is mostly spoken by people from Southern region of Morobe in Papua New Guinea.

Appendix A: AUTECH Approval Letter



24 May 2013

Sari Andajani
Faculty of Health and Environmental Sciences

Dear Sari

Re Ethics Application: **13/80 Women's perceptions on the roles of family planning community volunteers in promoting family planning and women's reproductive health in rural Papua New Guinea.**

Thank you for providing evidence as requested, which satisfies the points raised by the AUT University Ethics Committee (AUTECH).

Your ethics application has been approved for three years until 23 May 2016.

As part of the ethics approval process, you are required to submit the following to AUTECH:

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 23 May 2016;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 23 May 2016 or on completion of the project.

It is a condition of approval that AUTECH is notified of any adverse events or if the research does not commence. AUTECH approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTECH grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.


All the very best with your research,

A handwritten signature in black ink, appearing to read 'Madeline Banda'.

Madeline Banda
Acting Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Zuabe Tinning gqh9737@aut.ac.nz; compass.ztinning@gmail.com

Appendix B: Morobe Provincial Government's Approval letter



MOROBE PROVINCIAL ADMINISTRATION

<p>Telephone: 473 1525 473 1524 Facsimile: 472 4745 Email: provadmin@datec.net.pg</p>	<p>Office of the Administrator P O Box 572 LAE Papua New Guinea</p>
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<p>Ms. Zuabe Tinning Public Health Student Auckland University of Technology Faculty of Health & Environmental Science Department of Public Health Akoranga Campus North Shore AUCKLAND, NEW ZEALAND</p>	<p><i>Date:</i> 23rd January 2013 <i>Reference:</i> 1-2-0 <i>Action Officer:</i> <i>Designation:</i> <i>Your Reference:</i> <i>Date:</i></p>
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Dear Ms. Tinning

RE: APPROVAL GRANTED FOR FIELD RESEARCH

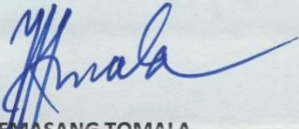
Your letter dated 9th January, 2013 is acknowledged and approved for you to conduct the field research in the Province.

The Provincial Administration through the Division of Health will assist and support your field research.

Liaise directly with the Acting Provincial Program Advisor (Mr. Micah Yawing), Health Division on your planned field research programme.

Thank you for choosing Morobe Province to do your field research.

Yours sincerely



KEMASANG TOMALA
 Provincial Administrator

Appendix C: Consent forms for women participants

(Pidgin version of this form for participant is attached)

Consent Form for Interviews



Project title: *Women's perceptions on the roles of family planning community volunteers in promoting family planning and women's reproductive health in rural Morobe Province, Papua New Guinea*

Project Supervisor: Sari Andajani

Researcher: Zuabe Tinning

- ☐ I have read and understood the information provided about this research project in the Information Sheet dated _____.
- ☐ I have had an opportunity to ask questions and to have them answered.
- ☐ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- ☐ I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- ☐ If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- ☐ I agree to take part in this research.
- ☐ I wish to receive a copy of the report from the research. (Please tick one): Yes ☐ No ☐

Participant's signature:.....

Participant's name:.....

Participant's Contact Details (if appropriate):

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

Witness signature:.....

Date :.....

Approved by the Auckland University of Technology Ethics Committee on date 23/5/2013
AUTEC Reference number: 13/80

Note: The Participant will retain the pidgin version of this form. (Attached)



Pepa bilong Kisim Tok Orait

Bilong bekim ol askim insait long wok painim aut

Het Tok: Tingting na lukluk bilong ol meri wantaim pasin ol i bungim long taim ol i sawe kisim femili plening sevis long asples bilong ol insait long Morobe Provins, Papua Niu Gini.

Wasmeri bilong wok painim aut: Sari Andajani

Wokmeri bilong wok painim aut: Zuabe Tinning

- O Mi lukim na klia long olgeta toksawe istap insait Toksawe Pepa we ol i mekim/toktok long dispela wok painim aut bai kamap long dei namba ____ mun ____ yia ____.
- O Mi klia olsem, mi inap askim sampela askim long taim mi no klia na bai wokmeri insait long wok painim aut bai inap bekim i kam long mi.
- O Mi klia olsem wokmeri insait long wok painim aut bai kisim ol toktok mi mekim long taim mi bekim askim bilong em igo insait long redio bilong kisim toktok. Mi klia tu olsem bihain bai wokmeri i harim toktok bilong mi long redio na tanim tok igo long tokples bilong ol waitman na raitim igo daun long pepa.
- O Mi klia olsem mi ken lusim dispela bung bilong wok painim aut o rausim tokpisin bilong mi na go sapos mi ino laik istap insait long dispela wok painim aut. Mi klia tu olsem, dispela pasin mi mekim bai ino inap putim mi long sampela kain hevi long taim bilong bung o bihain long taim bung bilong wok painim aut i pinis.
- O Mi klia olsem long taim mi lusim bung bilong wok painim aut long namel, olgeta o hap stori na toktok bilong mi wokmeri i bin kisim long taim bilong wok painim aut, em bai mas rausim na bagarapim olgeta.
- O Yesa, mi wanbel long stap insait long dispela bung bilong wok painim aut inap wok i pinis.
- O Mi laikim wanpela ripot bilong dispela bung bilong wok-painim-aut bihain long taim wokmeri pinisim olgeta wok bilong raitim stori na kaikai bilong dispela wok-painim-aut.

Makim wanpela bilong tupela tasol: Yes O No O

Meri husat i lukim, ritim na wanbel long olgeta tok istap antap na wanbel long istap insait long dispela wok-painim-aut iken putim mak wantaim pen or pinga bilong em long hia:.....

Raitim nem bilong yu:

Ples yu stap long em bai wokmeri bungim yu:.....

.....

Mak bilong husat i lukim meri putim mak antap:.....Dei.....Mun.....Yia.....

***Tok orait bilong yusim ikam long Auckland University of Technology Ethics Committee long dei: 23 mun: 5 yia: 2013 AUTC Reference number: 13/80**

Note: Participant's copy of consent form in pidgin for in-depth interview.

(Pidgin version of this form for participant is attached)



Consent Form

For Focus Group- Discussions

Project title: *Women's perceptions on the roles of family planning community volunteers in promoting family planning and women's reproductive health in rural Morobe Province, Papua New Guinea*

Project Supervisor: Sari Andajani

Researcher: Zuabe Tinning

- ☐ I have read and understood the information provided about this research project in the Information Sheet dated
- ☐ I have had an opportunity to ask questions and to have them answered.
- ☐ I understand that identity of my fellow participants and our discussions in the focus group is confidential to the group and I agree to keep this information confidential.
- ☐ I understand that notes will be taken during the focus group and that it will also be audio-taped and transcribed.
- ☐ I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- ☐ If I withdraw, I understand that while it may not be possible to destroy all records of the focus group discussion of which I was part, the relevant information about myself including tapes and transcripts, or parts thereof, will not be used.
- ☐ I agree to take part in this research.
- ☐ I wish to receive a copy of the report from the research (please tick one): Yes ☐ No ☐

Participant's signature or finger print:.....

Participant's name :.....

Participant's Contact Details (if appropriate):

.....

Witness (DNO) signature :.....

Date:.....

Approved by the Auckland University of Technology Ethics Committee on date 23/05/2013 **AUTEC Reference number:** 13/80.

Note: The Participant will retain the pidgin version of this form. (Attached)



Pepa bilong kisim Tok Orait

Long istap insait long bung toktok bilong wok-painim-aut

Het Tok: Tingting na lukluk bilong ol meri wantaim pasin ol i bungim long taim ol i sawe kisim femili plening sevis long asples bilong ol insait long Morobe Provins, Papua Niu Gini.

Wasmeri bilong wok-painim-aut: Sari Andajani

Wokmeri bilong wok-painim-aut: Zuabe Tinning

- O Mi lukim na klia long olgeta toksawe istap insait Toksawe Pepa we ol i mekim/toktok long dispela wok-painim-aut bai kamap long dei namba ____ mun ____ yia ____.
- O Mi klia olsem, mi inap askim sampela askim long taim mi no klia na bai wokmeri insait long wok-painim-aut bai inap bekim i kam long mi.
- O Mi klia olsem, mi mas noken tokaut long nem na stori bilong ol meri istap insait wantaim mi long bung toktok bilong wok-painim-aut.
- O Mi klia olsem wokmeri insait long wok-painim-aut bai kisim ol toktok mi mekim insait long bung toktok wantaim ol arapela meri igo insait long redio tep rekoda. Mi klia tu olsem bihain long dispela wokmeri bilong wok-painim-aut bai harim ol toktok bilong mipela na tanim igo long tokples bilong ol waitman na raitim igo daun long pepa.
- O Mi klia olsem mi ken lusim dispela bung bilong wok-painim-aut o rausim tokpisin bilong mi na go sapos mi ino laik istap insait long dispela wok-painim-aut. Mi klia tu olsem, dispela pasin mi mekim bai ino inap putim mi long sampela kain hevi long taim bilong bung o bihain long taim bung bilong wok-painim-aut i pinis.
- O Mi klia olsem long taim mi lusim bung bilong wok-painim-aut long namel, olgeta o hap stori na toktok mi bin mekim insait long bung toktok wantaim ol arapela meri bai hat long rausim. Olsem na wokmeri bai mas luksawe long dispela na ino ken raitim toktok bilong mi igo daun long pepa.
- O Yesa, mi wanbel long stap insait long dispela bung bilong wok-painim-aut inap wok i pinis.
- O Mi laikim wanpela ripot bilong dispela bung bilong wok-painim-aut bihain long taim wokmeri pinisim olgeta wok bilong raitim stori na kaikai bilong dispela wok-painim-aut.

Makim wanpela bilong tupela tasol: Yes O No O

Meri husat i lukim, ritim na wanbel long olgeta tok istap antap na wanbel long istap insait long dispela wok-painim-aut iken putim mak wantaim pen or pinga bilong em long hia:.....

Raitim nem bilong yu:

Ples yu stap long em bai wokmeri bungim yu:.....

Mak bilong husat i lukim meri putim mak antap:.....Dei.....Mun.....Yia.....

***Tok orait bilong yusim ikam long Auckland University of Technology Ethics Committee long dei: 23_mun: 5_yia: 2013_AUTEC Reference number: 13/80__**

Note: Participant's copy of consent form in pidgin for focus group discussion.