CHAPTER V

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

This research is a descriptive study that explores the factors influencing rural women's access to reproductive health services in Kun Hing Township in the southern Shan State, Myanmar/Burma. The study population comprised 496 people living in 17 rural villages. This included 399 women of reproductive age, 74 village leaders, and 23 local health service providers. The study investigation instruments consisted of 3 separate, but inter-related, questionnaires which were verified by 3 experts and supervisors. The data was reviewed by descriptive statistics that summarized percentages, range/mean/median values, as well as by analyzing relevant factors. It took the researcher 3 weeks, during May 2013, to interview all 496 participants.

5.1 Conclusions

The findings of this study are based on the data collected from the 3 inter-related, but separate, questionnaires administered to 496 individuals living in the southern section of Kun Hing Township. In brief there were 74 village leaders, most of whom were male (97.3%), 399 women of reproductive age, and 23 local health service providers (all female). In summary 424 of the 496 respondents (85.5%), participating in the RH Survey exercise, were female.

The study aimed to identify and illustrate the various types of barriers and constraints rural women face in accessing reproductive, and other basic, health services in the Shan State. This included some of the following factors:

Predisposing factors: (1) the maintenance of certain local beliefs, such as the "very early" introduction of supplementary foods during the first weeks/months of an infant's life, that can adversely affect the health of newborn children.

Enabling factors: (1) a weak public sector health care delivery system that was only visible in township centers but was totally non-existent in rural communities, (2) far distance from "target villages" to the township centers where the only modern health facilities [i.e. hospitals and/or clinics] were located, plus the lack of transportation [especially during the rainy season] to allow villagers to travel to the 2 township centers located in Kun Hing township, (3) a government health care delivery system that frequently hires and deploys "ethnic" Burmese health workers to township hospitals, creating additional cultural and linguistic barriers between patients and service providers, (4) an absence of government health workers/officials making regular mobile visits to rural communities to provide health education and/or specific promotive/ preventive/ curative care services to mothers, children, and other villagers, (5) the provision of public sector health care services, at the township hospital level, that is usually on a "fee-for-service" basis regardless of the seriousness of the condition and/or during times of emergency and (6) low income levels that make it difficult for rural residents to make routine visits to the township centers to obtain timely medical/health care during pregnancy, delivery, and the post-partum period, and/or when obstetric complications and other emergency situations arise.

At the same time the survey highlighted the presence of a large group of local health service providers, mostly TBAs and some AMWs that apparently treat most minor and major illnesses, as well as provide the vast majority of RH services at the village level in a "user friendly" environment.

5.2 Discussion

The study identified and illustrated the various types of barriers and constraints rural women face in accessing reproductive, and other basic, health services in the Shan State.

Although central and township health workers rarely visit rural communities, in this section of Kun Hing Township, and village women similarly infrequently visit township/sub-township hospitals and clinics to obtain RH health services such as ANC, Delivery, PNC, FP, and Immunization services, it was surprising to learn that most of these important RH services were available, in some manner or form, at the village level from local health service providers.

In the past TBAs played a very important role in providing ANC, Delivery, and PNC services to pregnant women, post-partum mothers, and newborn infants. Nowadays, however, a

new category of health worker [i.e. the AMW] has begun to undertake similar responsibilities and accordingly provide a considerable amount of RH services at the village level. Although not as experienced as some of the TBAs with respect to addressing certain types of deliveries [e.g. breech births], AMWs have begun to provide regular ANC, Delivery, and PNC care to pregnant women, mothers, and newborn infants.

These health service providers are not officially recognized by government authorities. Pfeiffer C and Mwaipopo R. (2013) findings were different from that found in this research study as traditional birth attendants play an important role in reproductive and maternal health in Tanzania. The Tanzanian Government promotes TBAs in order to provide maternal and neonatal health counseling and initiating timely referral. However their role officially does not include attending deliveries. This finding is different to that of the RH survey in the Shan State as up until now local TBAs provide assistance for women at the time of delivery.

The situation in parts of Timor-Leste's is also different to that found in Myanmar, as the former is one of the world's newest developing countries and has decided to incorporate traditional birth attendance in its health care delivery system through a "family health promoter initiative" in an effort to improve the reproductive and child health situation. This initiative is aimed at improving primary health care delivery as well as increasing its health-care workforce. The present research, however illustrates that central and/or township health authorities [i.e. the MOH] do not recognize TBAs as part of their health-care workforce in rural areas of the Shan State.

The present study in the Shan Shan also demonstrated the important role played by the "Outreach Health Worker" from Ka Li sub-township center. This individual is an elderly woman, 60+ years of age, who was previously posted to one of the sub-health centers located in this section of Kun Hing Township. Although the sub-health center has been closed for many years this "outreach health worker" [originally trained as a midwife] has continued to serve the local population.

One of the reasons for her involvement in the provision of RH care is that she is an experienced "birth attendant" capable of performing episiotomies. She also is one of the few individuals in this section of the township authorized to sign and distribute formal "birth certificates" and accordingly her services are in demand by many local women/families.

The SWAN sponsored health team in Kun Hing Township, made up of 6 AMWs, has in the past 2-3 year period evolved into the most important source of FP services, and their efforts have resulted in a huge percentage of married women of reproductive ages presently using modern FP methods. The CPR in 16 of these 17 villages is approximately 80%, whereas the overall CPR for Myanmar/Burma [i.e. for the entire country] is estimated to be at only 46% (World Bank, 2010), while UNFP mentioned that the CPR was only 37% (UNFP, 2011).

The dramatic increase in CPR has had an important impact on reducing Crude Birth Rates, Infant Mortality Rates, Early Childhood Mortality Rates, and Maternal Mortality Rates in these 17 communities as SWAN sponsored health workers conduct annual village household "demographic-family planning-vital events" surveys and can compare the results on a yearly basis.

This high CPR has already started to have a positive impact on the overall health status of women, infants, and young children in these communities as CBRs, CDRs, Population Growth Rates, IMRs, CMRs, and MMRs have begun to decline to relatively low levels that one generally would not associate with a rural/remote area of Burma.

A similar finding was observed from research conducted in Somalia. According to WHO (2013) in Somaliland, where work on birth spacing was first spearheaded in 2010 because it was the first region to become accessible as conflict receded, more than 18,000 women have obtained essential reproductive health information as part of "interpersonal communication" sessions. More than 1,300 women have now started using modern methods to space their families and thus improve their own health and that of their children. According to Dr Humayun Rizwan, a WHO Primary Health Care doctor "The numbers may look modest, but after two decades of the total absence of any such health efforts, they represent a breakthrough" (WHO, 2013).

Although local women, in Kun Hing Township, have to pay for some of their RH services, most indicate that the cost is not expensive. The TBAs and AMWs, however, are local people and do not necessarily expect any financial compensation for their services, other than to recover the cost of their supplies. Some women paid their "service fees" with small amounts of cash, while others paid with agriculture products such as rice and vegetables.

It was interesting to observe that in certain communities, where some respondents indicated that they had to pay for their respective ANC, Delivery, PNC, or FP service, others

stated that they were not obligated to pay for these same RH services, implying that unlike government/township hospitals which "turn away patients" not able to demonstrate that they have sufficient funds to pay for their medical care, local health service providers are much more flexible even when they generally charge some fees for their services. In Kenya a similar situation was found, where a study indicated that clients are willing to receive a package of reproductive health services from one midwife. More than 90% indicated an interest in receiving a package of reproductive health services from a community midwife, that included ANC, Delivery, PNC and FP services (USAID-APHIA II, 2012).

The present survey also indicated that the knowledge level, beliefs, and behavioral practices of local village women, were very positive with respect to certain health issues related to pregnancy and childbirth. However, information needed to perhaps be revised when it came to issues dealing with breast-feeding, as a considerable number of women did not know or feel that they should try to exclusively breast-feed newborn infants for approximately six months.

According to WHO, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Thereafter, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods, while continuing to breastfeed for up to two years or more.

The American Academy of Pediatrics reaffirms its recommendation of exclusive breastfeeding for about 6 months, followed by continued breastfeeding as complementary foods are introduced, with continuation of breastfeeding for one year or longer as mutually desired by mother and infant.

Exclusive breastfeeding is the perfect way to provide the best food for a baby's first six months of life, benefiting children the world over. But breastfeeding is so much more than food alone; breastfed infants are much less likely to die from diarrhea, acute respiratory infections and other diseases: a non-breastfed child is 14 times more likely to die in the first six months than an exclusively breastfed child. Breastfeeding supports infants' immune systems and helps protect from chronic conditions later in life such as obesity and diabetes. Suboptimum breastfeeding still accounts for an estimated 800,000 deaths in children under five annually (about 13% of total child deaths), according to the Lancet 2013 Nutrition Series. Data from 2011 indicate that only 39 per cent of 0-5 month olds in low-income countries are exclusively breastfed.

Adequate **complementary feeding** of children from 6 months onwards is particularly important for growth and development and the prevention of under-nutrition. Childhood under-nutrition remains a major health problem in resource-poor settings. In 2011 over a quarter of children less than five years of age in low-income countries, or 165 million children under five years, are stunted (low height-for-age), and large proportions are also deficient in one or more micronutrients. That means they require the addition of nutrient dense, high quality foods in sufficient quantities to their diet along with continued breastfeeding. There is evidence that complementary feeding practices are generally poor in most developing countries, meaning that many children continue to be vulnerable to largely irreversible outcomes such as stunting and poor cognitive development, as well as to significantly increased risks of infectious diseases like diarrhea and pneumonia. (UNICEF)

According to the RH survey, in the Shan State, some respondents thought one could introduce liquid and/or solid foods within the first 1-3 months of delivery, while others thought that one could introduce other foods, in addition to breast-milk, within the first weeks following delivery. Of the 362 women that answered this question 67 (or 18.5%) thought that newborn infants should be exclusively feed breast-milk for only 0-1 month, 98 (or 27.1%) thought it should be 1+ - 3 months, 53 (or 14.6%) thought the proper time-frame was 3+ - 6 months, 105 (or 29.0%) thought it was "exactly 6 months", while 39 (or 10.5%) thought exclusive breast-feeding should last > 6 months.

The researcher inquired, in more detail, as to when and which types of foods are introduced for newborn/recently born infants. The researcher learned that some mothers start to feed the newborn infant solid food when it is only 3-5 days old. Mothers feed chewed rice, which they then put into a banana leaf to grill on a fire. They supposedly feed this type of food because their infant "cries when they are hungry". Phuong H Nguyen, (2014) stated similarly that in Vietnam 73.3% of children were given pre-lacteal foods in the first three days after birth. This was somewhat different from Nepal, where Rajendra Karkee (2014) stated that mothers start to introduce cow/buffalo milk to infants 12-22 weeks after birth. Douglas Quenqua (2013) also mentioned that according to the "Centers for Disease Control and Prevention" in a national survey of 1,334 mothers in America, 40 percent said they gave their baby solid food before they were 4 months old, with 9 percent starting as early as 4 weeks.

Health Canada explains Breastfeeding as follows:

- Breastfeeding is the only food or drink your baby will need for the first 6 months.
- Babies who are breastfed should get a vitamin D supplement of 10 micrograms (µg) or 400 international units (IU) each day. This will prevent vitamin D deficiency.
- Continue to breastfeed for up to two years or more, as long as you and your child wish to do so.
- Continue to give your breastfed infant a vitamin D supplement of 10 µg (400 IU).
- At 6 months, breastfeeding is still your baby's main food source, but it is time to begin adding solid foods. Formula-fed infants should also be introduced to solid foods at this time.
- Start with foods that contain iron and offer them a few times each day. Iron supports your baby's growth and development. Iron-rich foods include meats such as beef, lamb, game, poultry, and fish. Meat alternatives include eggs, tofu, and legumes such as beans and lentils. Iron-fortified infant cereal is also a common first food.
- Gradually increase the number of times a day that you offer solid foods.
- Offer your baby a range of nutritious foods from your family meals. Let them discover different textures and experiment with feeding themselves.
- Give your baby foods they can eat using their hands. Offer pieces of soft-cooked vegetables, soft fruit such as banana, grated cheese, bread crusts and toast.
- If you are making the transition to cow's milk as your child's main milk source, wait until your baby is between 9 and 12 months old. Start with homogenized cow's milk (3.25% M.F.). Do not offer skim or partly skimmed milk (1% or 2% M.F.) before 2 years of age.
- If you are going to make fortified soy beverage your child's main milk source, wait until they are 2 years of age. Rice or nut beverages should not be used as your child's main milk source.
- Pay attention to your baby's hunger cues. Trust your child to decide how much they are going to eat at any meal. (Government of Canada)

The researcher also asked women about the foods a mother should consume after she has delivered. According to Shan culture, for the first month following delivery a mother should only eat grilled meat and some vegetable soup.

With respect to the soup, it should contain only salt and some green leaves. After one month until 3 months, following delivery, a mother's diet is still restricted as she can eat only a few types of vegetables, but can start to eat some fruit. After six months, following the delivery, mothers can eat additional kinds of food, but not like a "normal person" and accordingly her diet may not be nutritionally suitable for breast-feeding a newborn infant or young child.

According to the RH Survey many local women were quite knowledgeable about a wide range of health issues, problems, and topics even though they (a) did not have opportunities to attend school and accordingly could not on their own read about these matters, (b) rarely came into contact with any government health workers/officials, and (c) rarely received any sort of health education and/or direct services from medical/health staff stationed at township hospitals or as part of mobile health clinic visits.

The source of their information and care primarily came from different groups of local health service providers, some of whom have been working as TBAs for 40 years while others, such as the AMWs, have been working in their communities for a much shorter period of time.

As a rule the only clinical/health facility operated by the Burmese government [i.e. Ministry of Health (MOH)] are the township and sub-township hospitals that are located in urban areas. The level of care provided at these health facilities varies greatly in terms of the "range in clinical/health services" as well as in the overall quality of care. In brief this situation often depends upon the categories of health/medical professionals deployed to these sites as well as the latter's individual professional experience(s).

A key feature of the Burmese central government's health care delivery system is that it usually operates on a strictly "fee-for-service" basis, with generally "no exceptions" made to cater to emergency situations and/or the medical needs of indigent individuals or families.

Villagers have to pay for any medical care provided at the township/sub-township hospitals [and clinics] and most villagers simply do not have sufficient funds for this purpose, even in times of serious illness or emergencies.

This topic [i.e. the cost of hospital care] was further investigated with respect to women of reproductive age who experienced serious obstetrics related complications during pregnancy, childbirth, or shortly after delivery and who subsequently travelled to a hospital for appropriate or emergency treatment.

All villages had several traditional medical practitioners and it was these individuals who generally treated local villagers for minor as well as major [i.e. more serious] illnesses, conditions, or after an accident.

Village leaders also indicated that central, state, and/or township health workers and officials rarely if ever visit rural communities in this part of Kun Hing Township. Visits, when they do occur, take place once every 6-12 months, and these visits are geared to providing villagers with some type of message or information [not health education] and not used for the actual provision of specific health services.

Village leaders indicated that visiting government health workers do not provide health education regarding RH services, nor do they promote or make FP services available at the village level.

Village leaders, in every community, also indicated that government health workers do not provide actual services or health education for 6 important RH topics [i.e. FP, immunizations, health education regarding the importance of ANC examinations during pregnancy, the importance of referring women with obstetrics complications to a hospital, the importance of breast-feeding, and the importance of weighing young children to determine if they are growing normally or suffering from malnutrition].

Village leaders also indicated that local religious leaders and elderly members of the community generally do not provide coercive opinions to villagers to either adopt or reject FP services, leaving the decision entirely up to the individual or couple.

This component of the questionnaire also explored whether or not central or local government authorities had made any provision for the construction and/or support of local elementary schools in the "target intervention area". Only Wan Lao had a government sponsored school, while in each of the other 16 communities villagers constructed their own schools, hired individuals to serve as local teachers, and contributed to other overhead costs of maintaining and operating these facilities.

In brief central and township governments had made very few, if any, financial contributions to the establishment and/or maintenance of health care service delivery as well as an education system for local communities and their respective residents.

The overall picture gathered from the data collected as part of the "Local Health Service Provider" Survey is that although villagers living in rural communities of Kun Hing Township have very little access to basic health care from either central or township government health authorities, important RH services [ANC, Delivery, PNC, and FP services] are nevertheless provided by local health service providers. The latter include TBAs, AMWs, and a Midwife.

Although the small cohort of "interviewed" VHVs provide some information to local villagers on a number of health topics, their respective limited formal training and lack of practical experiences usually do not allow them to actively participate in the provision of basic RH services.

The central Burmese government has not made adequate financial or technical investments necessary to establish a viable health care delivery system. As such, the large Kun Hing Township Area presently does not contain any health centers nor has it established a schedule of regular mobile clinic/outreach health teams to routinely visit rural communities to provide health education on a wide range of topics as well as "specific" RH and/or basic health services to local residents.

Evelyn Sakeah (December, 2014) found in rural Ghana a situation that was different from rural areas in the Shan State. The Community Health Officer (CHO)-midwives provide integrated services that include skilled delivery in CHPS zones. The midwives collaborate with District Assemblies, Non-Governmental Organizations (NGOs) and communities to offer skilled delivery services in rural communities. They refer pregnant women with complications to district hospitals and health centers for care, and there has been observed improvement in the referral system. Stakeholders reported community members' access to skilled attendants at birth, health education, antenatal attendance and postnatal care in rural communities. The CHO-midwives are provided with financial and non-financial incentives to motivate them for optimal work performance. The primary challenges that remain include inadequate numbers of CHO-midwives, insufficient transportation, and infrastructure weaknesses.

Although TBAs have performed village level deliveries, and other related services to pregnant women, post-partum mothers, and newborn infants, probably for endless generations, several new categories of local villagers have recently become involved in the provision of a wide range of RH services, that includes ANC, Delivery, PNC, FP, and Early Childhood Nutritional Surveillance services.

The AMWs are younger women that usually serve as "private medical practitioners" called upon to treat many varieties of minor and major illnesses that occur in their own as well as some neighboring villages. As AMWs are trained to treat ill patients, they usually travel to neighboring villages, via motor-cycle, for this purpose. Some township health departments have organized regular Auxiliary Midwife training courses at the township hospital. The trainee candidates do not receive any scholarships or funding to attend these 6-month basic health training courses. Instead each participant has to use her own financial resources. Upon completion of the course the graduates return to their home communities to serve as "private sector medical practitioners". They may, however, initially practice with their trainers, who are midwives by profession, to learn more about treating patients. The AMWs have to pay tuition fees, as well as their daily living costs, while attending these training sessions. In the eyes of their trainers and the local state health department the new AMW graduates are considered to merely be "health volunteers" within the central government's health service delivery infra-structure. They do not receive any salaries or stipends nor do they obtain any other type of technical or financial support to provide specific RH services to local community members.

The AMWs are, however, gradually becoming an important source of RH service delivery in the Kun Hing Township area. The introduction and/or expansion of FP services by local AMWs through an SWAN initiated RH program has dramatically increased FP acceptance in several sections of the Kun Hing Township area over the last couple of years. This successful FP initiative does not appear to have been affected, either positively or negatively, by the attitudes and/or role of monks and elderly members of these communities. Although it is very rare for pregnant women or post-partum mothers, as well as newborn infants, to die in "developed countries" [i.e. from obstetrics and/or pediatric related causes], this is not the situation in many so-called "developing countries". The Maternal Mortality Ratios (MMRs) in countries like Bangladesh (240), Pakistan (260), India (200), Indonesia (220), and Somalia (1000) have very

high MMRs (WHO, 2014). Although the MMR in neighboring Thailand is reportedly 48, it is estimated to be approximately 200 in Burma; (World Health Statistics, 2012) but this figure is for the entire country as a whole, including large urban areas, some of which have sophisticated medical facilities. In certain rural/remote areas, such as the Shan State, the MMR is undoubtedly very high and potentially higher than the figure of 200 per 100,000 live-births. Similarly Infant Mortality Rates (IMRs) in developed countries such as Japan (2), Singapore (2), and South Korea (3) are extremely low, while that of many "developing countries" such as Indonesia (25), India (41), Bangladesh (33), Laos (54), Pakistan (69), and Somalia (90) are very high. In neighboring Thailand the IMR is 11, while the overall IMR for Burma is estimated to be 40 (World Bank, Infant Mortality Rate (per 1,000 live births) 2010-2014). In rural/remote areas, such as that found in much of the Shan State, the IMR is probably much higher than the figure for Burma as a whole.

5.3 Recommendations

Local health service providers [AMWs] need to receive further training to deal with the vast array of issues, conditions, and problems that they potentially face on a day to day basis, in the absence of a "viable" or "functional" health care delivery system that in fact only exists in town or township center. It is very important that these AMWs are trained to raise health awareness on many issues, in their respective communities. The information collected as part of the RH Survey will be used as a guide to establish appropriate RH training and service delivery initiatives.

5.3.1 Planning

The researcher has made tentative inquiries (a) about sending a group of 3 dynamic AMWs to attend a special 1-2 month obstetrics training course at the Mae Tao Clinic [in Mae Sot], and (b) about sending a group of 4-6 AMWs to attend a specially designed RH clinical and general medical care training course at remote health facilities located in ethnic minority inhabited areas of Chiang Mai.

The researcher has also recently organized and conducted [October, 2014] a new RH training course for 26 health workers from different townships in the Shan State aimed at expanding the SWAN RH service delivery initiative to other areas of Shan State.

5.4 Limitations:

The researcher initially planned to "randomly" select households, in the "target villages", to include in the RH Survey exercise. However as the monsoon rains began to fall, and many villagers started to spend more time in their fields, it was decided to interview "all" women of reproductive age [15-44 years] who were present in the "survey villages" during the interviewers' on-site visit. The researcher had also originally made tentative plans to select "survey villages" according to several criteria that focused on (a) distance to the township centers, (b) ethnicity of local residents, and (c) the presence and/or absence of village level local medical practitioners. This plan also had to be modified once the researcher arrived in Kun Hing Township, as the annual monsoon, or "rainy", season had begun, making road communication exceedingly difficult. As such the researcher, after consulting with her local "interviewer team", decided to conduct the RH Survey in the 17 villages where these health workers were presently providing regular health [and RH] services.