Risk Perception of Women on Pregnancy, Childbirth and the Postpartum Phase and the Association to the First Delay: A Case of Rural Nepal

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RISK PERCEPTION OF WOMAN ON PREGNANCY, CHILDBIRTH AND THE POSTPARTUM PHASE AND THE ASSOCIATION TO THE FIRST DELAY: A CASE OF RURAL NEPAL

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Susma Thapa

Abstract

Maternal health is recognized as an urgent public health concern leading to maternal mortality in developing countries. Most child deliveries take place at home where care seeking is often delayed. This study examines the factors associated with the risk perception of women during pregnancy, childbirth and the postpartum phase that affect women's decision to seek care in Lapilang VDC of the Dolakha district in Nepal. A community-based cross-sectional qualitative design was used where semi structured interviews were conducted among 20 women of reproductive age. Based on the Health Belief Model, the findings suggest that women have perceived susceptibility, but they do not see it as severe enough to let them seek for biomedical care. Use of antenatal care services is higher than during the childbirth and the postnatal phase. Most of the births take place at home, with minimal preparation. Having trained attendants is often only an emergency option. At home, only traditional postnatal care (PNC) is given. Education and one's previous experience on child bearing affect the risk perception of women. Similarly, early marriage, burden from the nuclear family, and high anxiety level of primigravida contribute to the perceived risks of women on pregnancy, childbirth and the postpartum phase. Delays in recognizing and responding to complications of pregnancy, and in seeking care from outside the household are common. Where the traditional practice of pregnancy, an undermined perception of the seriousness of the risks, reliance to medical care only in time of emergency, limited decision-making power of women and dependence to strong beliefs on fate played a role. In addition, transportation barriers including poor quality of roads and high cost of transport, distance to hospitals and high cost of health services have shown a moderate impact. Results imply that improving birth preparedness strategy with all of its components is likely to result to the availment of the services of trained professionals for childbirth. To improve the maternal health in rural Nepal, both the traditional and biomedical care should go together. In the process, improving the availability of and access to the birth facilities within each primary health centre, a high involvement of governments, local and international non-governmental organizations, and increasing maternal health awareness through community-based programs by the actors as a mother-in-law, husband, FCHVs should be ensured.

Key words: maternal health, health belief model, risk perception, pregnancy, childbirth, the postpartum phase, and delay

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List of Acronyms

ANC: Antenatal Care

ANM: Auxiliary Nurse Midwife

AHW: Assistant Health Worker

DHO: District Health Office

FCHVs: Female Community Health Volunteers

HBM: Health Belief Model

MMR: Maternal Mortality Ratio

MoHP: The Ministry of Health and Population

PHCC: Primary Health Care Centre

PNC: Postnatal Care

SBA: Skilled Birth Attendants

SHP: Sub Health Post

SDIP: Safe Delivery Incentive Programme

TBAs: Traditional Birth Attendants

TT: Tetanus Toxoid

VDC: Village Development Committee

WHO: World Health Organization

Chapter One: Introduction

Poor maternal health is a serious unresolved issue worldwide with implications on maternal mortality. Maternal mortality refers to the death of a woman during pregnancy or within 42 days of termination of pregnancy, from causes related to pregnancy and childbirth (WHO, 2012). Each year, 350,000 women all around the world die from complications of pregnancy and childbirth (WHO, 2012). Recent estimates reported that about 800 women die every day from preventable cause of death (WHO, 2012). The Millennium Development Goal-Five (MDG-5) has been set to improve maternal health, with the target of reducing the 1990 maternal mortality ratio (MMR) by three quarters by 2015 (Van den Broek and Falconer, 2011). There are considerable worldwide efforts to reduce maternal mortality in recent decades. For the year 2010, the global-level maternal mortality rate decreased by 1.3 - 2.3 percent (Van den Broek and Falconer, 2011). Maternal mortality has decreased by fifty percent from 1990 to 2010 (WHO, 2012). In general, it can be said that this is a significant progress in maternal health improvement. However, further reduction is still needed to reach below the estimated 5.5 percent decrease annually to achieve the MDG-5 target by 2015.

Maternal mortality remains to be a major issue for health systems, despite the progress made in reducing the maternal mortality ratio in many countries. South Asia and Sub-Saharan Africa have a prevalence of over ninety percent of total maternal mortality (Garg et al., 2006, Van den Broek and Falconer, 2011, WHO, 2012). According to WHO (2012) MMR is estimated to be about 170 in Nepal in 2010. The MMR in Nepal decreased substantially between 1996 to 2005, from 539 to 281. This figure has been reduced by 48 percent between 1996- 2000 (MoHP and New Era, 2012, Karkee, 2011).

Every pregnancy has risks. More than 10-15 percent of women face unexpected complications such as eclampsia, obstructed labour, haemorrhage and abortion (Van den Broek and Falconer, 2011). The commonly seen medical causes of maternal mortality are likely prevented with access to skilled birth attendants and emergency obstetric care services (Garg et al., 2006, Van den Broek and Falconer, 2011). According to the 2008 data, skilled attendants assist 65.7 percent of women in the world during prenatal, childbirth and postnatal stages. According to the Nepal Demographic and Health survey, in 2011 a total of 36 percent of women gave birth with experienced professionals and only 35 percent of births took place at health facilities (MoHP and New Era, 2012). Rural women in developing countries are more vulnerable than those in urban areas (WHO, 2012), especially among poor groups, which is directly related to the

socio-economic factors. In addition, teenagers and old- aged women are at greater risk of pregnancy complications and death (WHO, 2012).

In Nepal, birth is largely regarded as a natural phenomenon with no medical attention (Brunson, 2010). In relation to traditional practice, the process of childbirth is highly regarded by women and the community, shaping the women's understanding of the risk and safety of childbirth (Kaphle et al., 2013). The risk of pregnancy and childbirth seen by the women in the socio-cultural basis makes a difference than the biomedical perspectives (Kaphle et al., 2013). This concept is deeply rooted. It is less likely to understand the importance of medical care of pregnancy, the availability and use of skilled birth attendants and access of health care. Low utilization of skilled birth attendants in Asian countries like Nepal and India is a result of traditional concepts of childbirth as a natural process (Brunson, 2010). Safe delivery is difficult to achieve when the pregnant women are not willing to be assisted by skilled attendants in case of obstetric emergency (Brunson, 2010). More information is needed regarding women's perceptions of risk for pregnancy, childbirth and the postpartum phase and the factors that influence the awareness of the need for professional assistance. The decisions of women and the actions they take are based on their assessment of their pregnancy risks and the options available to them. Women believe that maternal deaths as well as other deaths are caused by themselves and are not preventable (Gupton, 2001). Thus, women are not yet aware that pregnancy may bring risk and that most maternal deaths are preventable (Van den Broek and Falconer, 2011, WHO, 2012). Based on these findings, I assume in this study that the understanding of women regarding the risk during pregnancy is the first step towards the realization of care needs and seeking for health care in order to improve maternal health. Therefore, attention should be paid to both the biomedical and social interventions (Simkhada, 2006). This study will focus on the socio-cultural barriers to improve maternal health.

1.1 Socio-Cultural Determinants of Maternal Health

Maternal health is inseparable from ethnicity and cultural elements in a multicultural and ethnically diverse country like Nepal (Shrestha, 2013). Women's understanding of health and risk differ according to ethnic group (Suwal, 2008). In Nepal, nearly 28 percent of deaths of women of childbearing age were due to non-medical causes, such as socio-economic factors, where ethnicity also play a role (Suwal, 2008). This can be because of the attitude of women lack of willingness to seek for health care during pregnancy and their reliance to home delivery practice (Suwal, 2008). Women's decision-making power also differs according to ethnicity. Ethnic groups like the Gurung, Newar, and Magar have a high degree of home delivery (Suwal, 2008). A study conducted in Kavre district, Nepal by Tamrakar and Chawala (2012) found that women

belonging to Tamang ethnicity have greater occurrence of stillbirth. A study conducted in three rural districts in Nepal by Shrestha (2013) shows that socially disadvantaged[1] and suppressed groups like Janajati and Dalit have high prevalence of maternal mortality. They are disadvantaged in terms of social power, education and income opportunities. Religion as a socio-cultural determinant plays an important role on the attitudinal and behavioural formation of women. In Nepal, Buddhists and other religious groups have more relaxed attitudes towards gender roles compared to the orthodox Hindus (Suwal, 2008). Families with a relaxed and flexible attitude are less likely to restrict female family members and give them space to make their own decisions. Age and education as socio-cultural determinants have a major impact on the perception of women about childbirth (Shrestha, 2010, 2013). Brunson (2010) mentioned in a study that women in their 30s and 40s are more likely affected by cultural practice compared to younger women. This is because younger women are influenced by the modern education system and are less likely to follow traditional thinking and consider taboos. Younger women are more concerned of acquiring biomedical care, using medical facilities and having skilled birth attendants.

Several factors are involved in the process of childbirth, such as family, neighbours, relatives etc. Each of them could have a different perception and opinion. According to Shrestha et al. (2012) family and relatives have a strong impact on maternal health as they make choices regarding preparation of delivery, place of delivery, and selection of birth attendants, among others. Evidence suggests that dominance of the mother-in-law in a family strongly contributes to aversion for institutional delivery (Simkhada et al., 2006). Mothers-in-law particularly in rural areas, as they usually did not experience having biomedical care during pregnancy and childbirth, pose a strong influence over the pregnant women's decision of not seeking antenatal care. Thapa and Niehof (2013) stated that most of the women in Nepal have considerably low decision-making power over household and health care issues. Therefore, it is crucial to explore the perception of women influenced by actors such as husbands and mothers-in-law regarding pregnancy related complications and its management.

[1] Ethnicity in Nepal is split into two different groups in the society. One is upper caste that includes Brahman, Chhetri, Newar and are treated as an advantaged group. The lower caste includes Dalit and Janajati, which are disadvantaged.

1.2 Maternal Health in Nepal

Over the past two decades, the high level of maternal mortality in developing countries has increasingly been recognized as an urgent public health concern. Even though Nepal is still in the 60th position in world ranking for maternal mortality (WHO et al., 2014), MMR in the country has already shown a significant decline. According to the Demographic Health Survey 2011, MMR in Nepal has decreased from 870 in 1990 to 380 in 2008, which counts as 56 percent decrease (MoHP and New Era, 2012; WHO et al, 2014). In 2010, Nepal received the MDG award for reducing maternal mortality by 48 percent in a decade from 1996 to 2005 (Karkee, 2011). The MDG-5, which aims to improve maternal health and reduce MMR by three quarters by 2015, has pushed the issue of safe motherhood as a national priority for Nepal. In response to the need for accelerated action to achieve the desired reduction in maternal mortality, the Government of Nepal (GON) has devised different strategies and programs.

The Safe Motherhood Action Plan (1994-1997) and at present the National Safe Motherhood and New-born Health Long Term Plan (2006-17) sanctioned by the Ministry of Health and Population (MoHP) followed the different activities that ensure safe motherhood. The policy placed emphasis on strengthening maternity care at all levels of health care delivery system enhancing technical skills of the health care providers at all levels and strengthening referral services for emergency obstetric care. The program puts forward the importance of skilled birth attendants (SBA), use of doctors, nurse and auxiliary nurse midwives, birth preparedness during pregnancy, and includes cash incentives for mothers who take institutional delivery (MoHP and New Era, 2012, Malla et al., 2011). The GON focuses on women's empowerment, education, gender equity and legal rights so that these factors can contribute on utilization of health services and improvement of maternal health.

The Safe Delivery Incentive Programme (SDIP) began in 2005 to increase the coverage of skilled birth attendants (SBA) and thereby contribute to poverty reduction (Bhandari et al, 2014). The Maternity Incentive Scheme has proven to contribute to the increased utilisation of health services (Malla et al., 2011). Moreover, GON has adopted a policy for SBAs in 2006 aiming to increase service coverage to 60% by the year 2015. However, progress has been slow as SBA coverage reached only 28.8% in 2010 (Bhandari et al., 2014). Never the less, GON expect to meet the MGDs through the continuous implementation of these activities. Despite the effort over the years from the GON and different NGOs/ INGOs, significant barriers still exist for women in order to seek maternal health care (Malla et al., 2011). Thirty-four percent of all maternal deaths occur during the antepartum period, thirty-eight percent occur during childbirth and twenty-eight percent during postpartum period. The most common complication that

leads to death in Nepal are postpartum haemorrhage (32%), Hypertension disorder (25%) and abortion (13%) (Choulagai et al., 2013). Haemorrhage as a leading cause of death has significantly declined by 43 percent from 1998 to 2008/2009 (Malla et al., 2011). Maternal deaths occurred at health facilities (42%), at homes (41%), during transportation to the facilities (7%), between facilities (5%), private clinics (2%) and at homes of service providers (1%). Two percent occurred in other places such as in the cowshed, jungle and field (Malla et al., 2011).

Home delivery is a common practice in Nepal (Brunson, 2010, Suwal, 2008). Thus, unless there are complications, women do not consider regular check-ups as essential in rural areas (Suwal, 2008). Nevertheless recent studies suggest that the cultural construction of birth in Nepal is moving away from being a natural phenomenon towards one that requires professional skills, at least in the case of emergencies (Suwal, 2008). However, this movement is not yet widely in practice. Acceptance of the need for a biomedical care does not necessarily lead to the use of services by women, as they are less likely to be in the position to decide in the family. Infrastructure and health facilities are in place, yet, women do not make decision to use them. As a result they fail to recognize obstetric emergencies (Brunson, 2010). The reasons behind women delaying the decision about pregnancy and obstetric care are not entirely clear. However, specific issues such as the time taken to decide to seek care, places where care was sought, financial constraints, and sociocultural factors influence the seeking process (Shrestha, 2013). It is not clear whether the perception, ignorance or physical barriers are the real challenge in the context of Nepal.

1.3 Risk of Pregnancy, Childbirth and Obstetric Complications

Each pregnancy is a risk and complications can develop at any time during the antenatal, childbirth and postnatal stage (WCaF, 2013). Each year in the world, more than 500,000 women die from complications of childbirth, in which over 99 percent of the deaths occurred in Asia and Africa (WCaF, 2013). In Nepal, lifetime risk of maternal death is 1 in 190 (WHO et al, 2012). Maternal and new-born health report of *saving the lives of mothers and babies facts and figure* (WCaF, 2013) stated that more than 80 percent of the deaths are due to direct obstetric causes. Usually, these can not be predicted, but can be prevented, such as bleeding, infections, hypertension and complications of unsafe abortion (WHO et al., 2012). Every woman who dies have usually suffered about 20 complications but the lifelong disability and pain are preventable (WCaF, 2013).

Early pregnancies have higher risk of complications, which also count as one of the leading causes of maternal mortality. Therefore there is a need for specific attention from the beginning of the gestation (WHO, 2012). Timely identification and health

approaches are necessary to reduce mortality and morbidity. Skilled care is highly emphasized before and after the childbirth.

1.4 Decision Making

Women need timely access to skilled care during pregnancy, childbirth, and the postpartum phase. However, their access to care is often imposed by delays (Furuta & Salway, 2006). These delays have many causes, including insufficient community and family awareness and knowledge about maternal health as well as logistical and financial concerns, unsupportive policy and service gaps. It can be caused by not recognizing signs of complications and severity of illness, difficult landscape and unavailability of transport, cost considerations, lack of adequate health care facilities and skilled health personnel, and previous negative experiences with the health care system etc (Malla et al., 2011). In some areas in Nepal, health services are not readily available. Health professionals and traditional birth attendants are only available to women if they can recognise complicated pregnancies and seek for care (Barnes-Josiah et al., 1998). Women die because they are not aware of the medical problems they face during pregnancy. This is due to a delay in decision making about care, or because it takes them too long to reach appropriate care (Garg et al., 2006).

Barnes-Josiah et al. (1998) identify three action areas to focus on to reduce maternal mortality: 1) expand the referral system to minimize obstetric emergency 2) make women, family and TBA aware of emergency obstetric care and 3) expand of quality services by existing medical facilities. It seems this action area basically explains the biomedical perspectives, and risk described, as emic perspectives are not taken into account. This study basically focuses on the second action area in which women's understanding is explored. Family and health personnel are observed as a confounding factor that may have influence on women's understanding of risk, recognizing the problem and making a decision when needed. No comprehensive systematic review has yet explained the gap between the risk perceptions of women and decision-making that prevents timely access to health care during pregnancy, childbirth and the postpartum phase.

1.5 Problem Statement and Reason for Study

According to Furuta and Salway (2006) the maternal health status and mortality are influenced by sociocultural diversity, minority ethnic community and rural geographical location with inaccessibility, illiteracy/low education level, traditional culture domain etc. Socio-cultural aptness is an essential element of health care efficiency (Furuta and Salway, 2006). Since Nepal has a very diverse culture, an extensive understanding of

women regarding health practice is essential to understand for improving safe motherhood. The present study attempts to recognize the risk perception of women by understanding knowledge, attitude, belief, norms and practices on pregnancy and childbirth, and awareness to seek for health care, so that possible determinants of maternal mortality are recognized. The outcomes are expected to identify strategies to improve safe motherhood if found to be beneficial.

Dolakha district was chosen due to cultural diversity. Dolakha district is composed of more than 18 castes. Studies have been done in a similar topic in the Dolakha district, findings of which are similar to the results of this study. The researcher assumed that the determinants of maternal health that this study intends to examine are visible in the area. Home delivery is practical choice in Dolakha and many women think that pregnancy and birth do not require special care. Attributions include comfort, trauma and perceived costs, which are to be regarded in this study as important elements to explore the understanding of women's perception. The selected area in Dolakha, the Lapilang VDC, is a mix of advantaged and disadvantaged groups in the caste system (RHDP, 2009). It is of the researcher's interest to see how these factors will affect the understanding of the risks of pregnancy and the practice of childbirth. The rural development project (RHDP) from July 2007-2008 has provided a safe motherhood programme for the women in Dolakha (RHDP, 2009), and would look at how the training affects women or how it can possibly bring about change in their health practices.

A study by Shrestha (2010) has already mentioned cast, ethnicity, geography and problems with access to care for obstetric emergencies as factors contributing to maternal mortality in Dolakha. It is therefore a justified area of study to assess women's attitudes and practices as they change over time and to know which factors contribute to their decision of seeking medical care.

Chapter Two: Research Objectives and Conceptual Framework

2.1 Research Objectives

This study investigates Nepalese women's perceptions of the risks of pregnancy, childbirth and the postnatal stages that influence them to make a decision and initiate actions to seek health care and evaluate its association with the first delay in Dolakha, Nepal.

2.2 Conceptual Framework

This paper focuses on risk perception of women in pregnancy and childbirth and behaviour attitude on seeking care. The aim of the study is to assess the factors that shape women's perception of the risk, its impact on decision-making, which may be responsible for the delays in obtaining health care services. A better understanding of the relative importance of factors that contribute to delay could lead to improvements in the quality of obstetric services for women in Nepal.

Risk perception of women

Risk perception is personal assessment of the likelihood of specific type of accident happens, and how concerned a person is with the consequences (Weinstein, 1980). Additionally, influences related to the activity is an element of risk perception (Weinstein, 1980).

Risk perception, specifically in this study, describes the views of women on pregnancy and the way they recognize the danger signs during pregnancy and childbirth. The study will recognize the possible risk factors for safe motherhood, which affect the decision to seek help. Risk perception goes beyond the individual as it is bound by social and cultural constructions that are reflective of values, beliefs and practices (Weinstein, 1980). Individual's education and knowledge level, beliefs, cultural practices and subjective norms determine the perception level. Therefore, in this study, it is important to look at the education, current health beliefs and attitudes, cultural practices and social norms. It encompasses the response of women regarding the potential and emergency risks of pregnancy and childbirth and their decision on how to manage these risks. Therefore, perception of risks is described from an emic and etic perspective of health and illness (Niehof & Price, 2008). These terms originate in anthropology. Emic perspectives mean the risks based on the local interpretation of experiences in thoughts and beliefs, or a description of the phenomena as understood by the women who participated in the study. On the other hand, etic perspectives mean a scientific understanding of the risks of pregnancy and childbirth from a medical perspective, or a

description of the phenomena as seen by someone outside the experience such as the FCHVs and ANMs. Thus etic perspectives represent the clinical risks and complications of pregnancy and childbirth as assessed by medical practitioners, including bleeding, infection, hypertension, abortion complication etc. Conversely, emic view may subjectively define the risk as no risk e.g. pregnancy as a natural process and lack of need for external intervention (Suwal, 2008). The emic view may also define the risks according to their understanding, belief and experiences, which are largely influenced by culture and social norms.

Risk perception and decision to seek care

The process of decision making starts once health needs are perceived, identified and considered as appropriate for a certain type of care (Berman et al., 1989). Health related behaviour and decision making are affected by many factors. Using the Health Belief Model, this study aims to understand belief, norms and practices involved in risk perception and decision-making for care so as to ensure healthcare efficiency. However, this study is not designed to test specific theoretical models rather, the framework is used to offer direction for determining variables and how these variables are operationalized in exploring the gaps in women's perception and intervention.

Health belief model

The Health Belief Model (HBM) was developed as an attempt to explain the decision of an individual with respect to preventive health care (French et al., 1992). This model was developed for the first time in the 1950s to evaluate why screening of tuberculosis was not be successful in the USA (Hayden, 2009). Personal beliefs influence on a person's health choices and behaviour. HBM explains that health behaviour is determined by an individual's beliefs and perception about particular health problems and illness, and available resources address these problems (Calnan, 1984, Champion and Skinner, 2008). In this study, HBM is adopted in order to understand women's thoughts, behaviours and decision with regard to providing health care related to pregnancy and childbirth in rural Dolakha district, Nepal. The components of HBM describe the socio-cultural construction of health beliefs related to pregnancy and childbirth risk.

HBM mainly builds on the following four components, which make theoretical constructs for the exploration of the perception of women in this study. These components together assess the women's understanding of risks and explain decisions on health behaviour (Champion and Skinner, 2008, Hayden, 2009).

1. ***Perceived susceptibility:*** Perceived susceptibility refers to the belief about the likelihood of getting a disease or risk of being exposed to threat for a particular person in particular circumstances. This means how much risk a person perceives he/she has (Hayden, 2009). Suwal (2008) stated that women predominantly from rural Nepal do not consider regular check-up until there is a serious complication in pregnancy and childbirth. Recognizing a danger sign brings about the realization of needs for care. Women may be aware of the risk but it does not guarantee that they will act for biomedical care. It is essential to see to what extent women see the risks, how they confront the problems related to pregnancy and obstetric complications. The greater the risks are perceived as susceptible, the greater likelihood that they will seek for care (Hayden, 2009). A study conducted in Nepal by Thapa & Niehof (2013) stated that women's perception of low risk pregnancy is related to non-use of available contraceptive methods. Suwal (2008) mentions that health facilities are in place but women in rural district find it difficult to make decisions to utilize them. This study intends to look at how women recognize the problem and how they respond to the risks. Perception of increased susceptibility does not always lead to behavioural change. Other physical barriers, traditional practices and social norms should be taken into account (Hayden, 2009).

2. ***Perceived threat/ seriousness:*** If an individual does not see a health problem as risky or threatening, there is no stimulus to act. Perceived feeling about the seriousness of risk includes evaluation of both the medical consequences, including pain, disability, death and social consequences such as impact on work, family and social relations (Hayden, 2009). Perceived threat explains a women's belief about the seriousness, and how severe it can harm her. To make a decision on whether to seek medical care or not, one must believe in both susceptibility and severity, so health choices can be weighed. Pregnancy is a risk, and there is a 10-15 percent chance of unexpected complications (Van den Broek and Falconer, 2011). For safe motherhood, the government of Nepal has developed the birth preparedness strategy, which is the process of planning for a normal birth during pregnancy and prevention of obstetric emergency (Brunson, 2010). This includes antenatal care check-up, money saving, identification of delivery place, identification of blood donor in case of emergency. However this strategy has not been implemented effectively in Nepal. One of the strong factors leading to this is the people's perception of childbirth as a natural phenomenon that does not require preparation (Brunson, 2010). Another factor is the deeply rooted traditional belief and practices of home delivery. Another one is the previous experience of access to health care facilities, which may be experienced to be difficult in terms of distance, cost and time. After analysing the impacts and the severity of each case, the person tends to act according to priorities. It is necessary to understand a woman's knowledge, education

level, any formal and informal training of health and education that may have impact on perception of risk related to pregnancy and childbirth that make them decide to put it as a priority. Moreover, it is equally important to recognize how the woman explains her experience with other diseases in general. This can help get an insight on how concerned a person is for health care and for the diseases that might be usually contracted (Hayden, 2009).

3. ***Perceived benefits:*** A person's belief of giving importance to certain health actions decreases the risk of potential complication. A person tends to make a decision and adopt a healthy practice, when s/he believes that the decision they are taking would benefit them (Champion and Skinner, 2008, Hayden, 2009). When a person perceives a threat, whether these perceptions lead to behavioural change will be affected by the person's belief with respect to perceived benefits of the various measures available to reduce the threat (Hayden, 2009). Health related perception such as having iron capsule during the antenatal period to control anaemia or respect for the mother-in-law decision to please her by doing home delivery might also influence behaviour decision. Mullany et al. (2007) describes in a study that more than ninety percent of women in Nepal who perceive benefit of oil massage to the newborn demonstrated oil massage to the new-born in every two weeks during the postnatal period. The outcome should be clearly understood by a person, so that a person makes decision for health practices.

   The government of Nepal has launched Maternity Incentive Scheme to mothers in 2005 with the purpose of increased hospital-based delivery by skilled health professional by providing cash in hand and quality care during delivery (Baral, 2012). People were able to manage the cost of travel and medical expenses. This scheme contributed to the increased utilisation of the health services (Malla et al., 2011). Perception of the risk of pregnancy and obstetric complications are examined by assessing whether women make a decision based on the benefits. People tend to adopt healthier behaviours when they believe that the new behaviour will reduce the chances of developing a disease and illness (Hayden, 2009). Moreover, women may be ready to deal with a barrier if they feel there would be a beneficial outcome in the end. Therefore, the perception of barriers, and the role of women in this barrier is an important point to take into consideration.

4. ***Perceived barriers:*** The last concept of HBM explains that decisions on health action are influenced by perceived barriers to change. When an individual evaluates an obstacle on his / her way of determining health behaviour, decision could not be made. Perceived barriers play a significant role in behavioural outcome (Hayden, 2009). Demand side barriers perceived by women on decision making are lack of knowledge on biomedical care, distance of health facilities and cost of health care, or high influence of an emic

view of problems, traditional belief and practice, family and social restriction on the roles and decision-making power of women (Ensor and Cooper, 2004). Fear of pain and embarrassment are also common issues women perceive as barriers in seeking for health care (Mullany, 2006). Supply side barriers include availability of service and insufficient supply of quality care (Ensor & Cooper, 2004).

Perception of women is different in different ethnic groups and so is women's decision making power within their household (Simkhada et al., 2006, Suwal, 2008). It is important to consider this factor in the study to understand the ethnic background as barrier to particular group of women to make decisions on pregnancy and childbirth, such as decision on the place of delivery (Shrestha et al., 2012). In addition, religion and gender play a greater role in the context of Nepal on attitude and behaviour of women. In this study, a number of possible factors, such as family role and power of women in decision-making are important points. Cultural and traditional practice of taking care of pregnancy and recognizing obstetric emergency is taken into account in this study. This study makes the distinction between the factors contributing to risk perception and the perceived barriers to develop their behaviour practices.

More recently, other constructs have been added to the HBM thus, the model has been expanded to include cues to action and self-efficacy in 1988. ***Cues to action*** explain how a person's attitude and behaviour is influenced by what triggers a specific action. These cues are any events, people or things that make people decide on certain health behaviour. In this study, women could be helped by the information of the specific programs of health education, mass media campaign (radio, television), midwives and health workers. Therefore, it is necessary to determine if these cues are influencing the perception of women. On the other hand, ***self-efficacy*** is about an individual's own belief to do something regarding health and behaviour. In this study women's understanding of self-efficacy is essential to distinguish. Self-efficacy is greatly affected by education, role in the family, and the social construction of women's power of decision making for household matter, financial issue or health care. Women's decision is largely influenced by her husband or mother in law, or negotiation between husband and wife often takes place before taking decision on seeking for health care (Mullany, 2006). Figure 1 shows the components of the health belief model and its relation to behaviours.

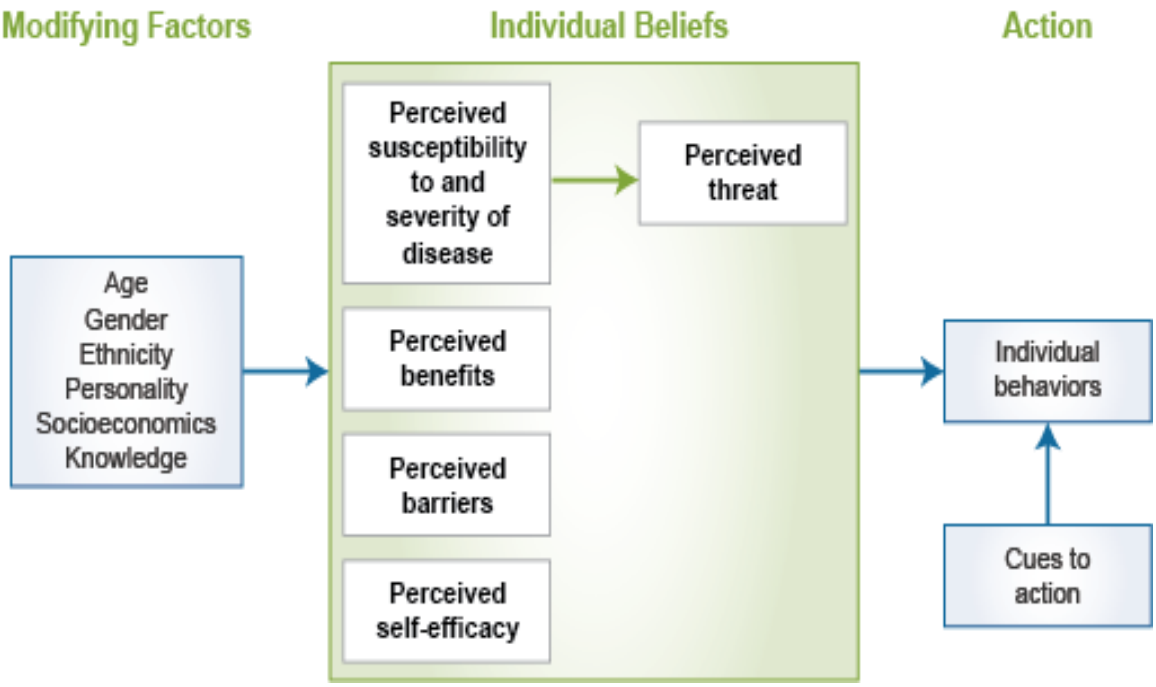

Figure 1 The components and linkages of Health Belief Model

Source: Adopted from Champion and Skinner, 2008.

Three delay model

The three-delay model is a framework developed by Thaddeus and Maine in 1994 to evaluate the determinants of maternal death due to delay in seeking for health care, which is widely used in studies in developing countries (Barnes-Josiah et al., 1998, Waiswa et al., 2010). The three delay model states that pregnancy-related mortality is unavoidable due to delays in 1) Recognizing danger signs and deciding to seek care; 2) Accessing services and reaching appropriate care; 3) Receipt of appropriate care once a health facility is reached (Barnes-Josiah et al., 1998, Knight et al., 2013, Waiswa et al., 2010). The first two delays relate directly to the issue of care encompassing factors in the family and community while the third delay is connected with factors related to health facility and quality of care. It has been observed that first delay strongly influences the probability of the second and third delay to happen. An observant community approach based on cultural and gender issues could help effective prevention of the first and second delay (Waiswa et al., 2010). Similarly, improving the quality of health care minimizes the third delay. Therefore contributing to the reduction of the first delay, which has significant implications for the second and third delays has great impact on reducing maternal morbidity and mortality (Barnes-Josiah et al., 1998).

The three phases are not independent, one influences the others. For example, according to Barnes-Josiah et al. (1998) probabilities of transportation delays or low quality of care at the nearest facility affect the decision to seek for care (Barnes-Josiah et al., 1998). Figure 2 shows the three delays and the factors associated with the delays.

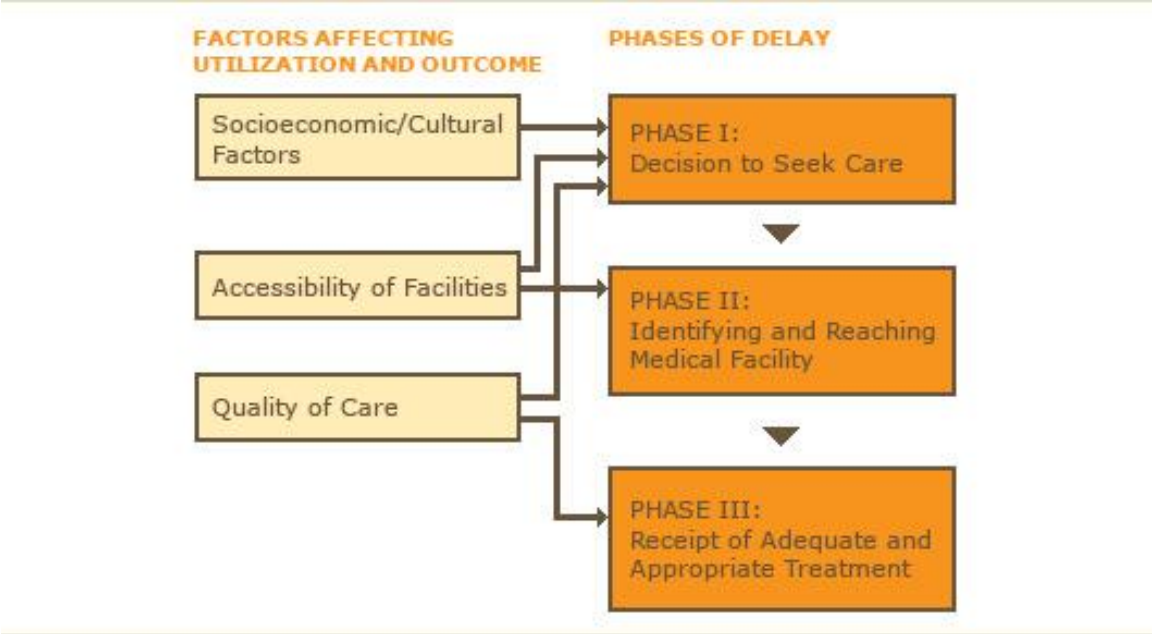

Figure 2 Three Delays Model

Source: Adopted from Knight et al., 2013

The first delay is a framework that describes the barrier to access appropriate medical help, measuring if women can recognize the danger signs of pregnancy and childbirth and timely decide to seek care (Barnes-Josiah et al., 1998). According to a study conducted in rural Nepal, the first delay is affected by the decision in seeking care beyond the domestic activities, in which the cultural practice of keeping pregnancy private is one of the key influencing factors (Mesko et al., 2003). Women living in the rural villages of Nepal may not be aware that obstetric complications are due to this delay. Woman's perception remains largely unknown, aside from the fact that several factors play a role in developing their perception. It is unusual for women's views in these settings to be explored in relation to the reasons for their decisions. Although improvement can be seen in the seeking of care during pregnancy and childbirth, the three delays still need to be addressed.

The three-delay model has been effective as a framework to analyse the complex situation of obstetric complications from the family level to the facility level. Therefore,

the aim of the study is to assess the risk perception of women on pregnancy, childbirth and the postpartum phase, and its impact on behaviour, which may be responsible for the first delay. Thus this study shows the perception of women and the sociocultural factors that have influence on their delayed decision making to seek for medical help for obstetric emergency. In the study, the first delay would be measured as outcome of the research. The outcome is expected to enrich the understanding of gap between women's risk perception and the first delay.

2.3 Research Question

On the basis of literature findings, background and conceptual framework the research question can be formulated as:

What are the factors associated with the risk perception of women regarding pregnancy, childbirth and the postpartum phase, that are relevant to the first delay?

Sub Questions

1. What risks do women perceive during pregnancy, childbirth and the postpartum phase?
2. What socio-cultural factors shape women's recognition of the existence of these risks?
3. What factors shape women's recognition of the risks as important?
4. What factors influence women's decision to seek care?
5. Is there a correlation between the factors that shape women's recognition of the existence and/or importance of risks and women's decision to seek care?

2.4 Operationalization

Risk perception, in this study, refers to the understanding of women about the risks and complications during pregnancy, childbirth and the postpartum phase. This includes how women see susceptibility to the risk, and the severity of the possible consequences. This study intends to differentiate between awareness and perception. Perception comes once a person becomes aware of threats. While the woman may/may not act according to the awareness, she would be able to perceive barriers and analyse the benefits of taking an action. Therefore, high risk perception of women indicates high level of awareness of risks so as to seek medical care while low risk perception indicates those who understand risks as risks but do not make seeking care a priority.

Decision-making, in this study, refers to the act when a woman decides to timely seek for skilled care during pregnancy, childbirth and the postpartum phase. **Female autonomy,** therefore**,** is assumed in this study as one socio-cultural factor that has an influence in decision making for medical care. This is assessed by the role of women in the household decisions and how she makes decisions about health needs. Moreover, whether the decision would be independent or dependent, is influenced by husband and in- laws in decision-making and access to health care.

Ethnicity is a variable that shapes beliefs and is one of the socio-cultural determinants considered in this study. It is an attempt of the study to see if the risk is perceived similarly in different ethnic groups or if health practices are similar in the study area.

Gravida: The pregnant women are categorized according to the gravida. Gravida is a numerical designation of the number of times the woman has been pregnant. Moreover, primigravida indicates that the woman is pregnant for the first time while multigravida for more than once.

Chapter Three: Methodology and Study Area

3.1 Study Design

A cross-sectional study was conducted in Dolakha district, Nepal from November to December 2013. This is an explorative and descriptive design, which explores the perspectives of women in risk perception towards pregnancy, childbirth and complications. In-depth interviews and narrative inquiries support the qualitative design.

3.2 Data collection Methods

Secondary data

Secondary data for this study were obtained from National Demographic and Health Survey 2011, the District Health Office of Dolakha and Lapilang Village profile 2011.

Primary data

Primary data were collected through semi-structured interviews. The narrative inquiry method was used prior to the in-depth interviews with three cases to facilitate the in-depth interview. First, three cases were taken for narrative inquiry of women on the complications they experienced during pregnancy, childbirth and the postnatal phase (details of narrative inquiry is explained later). Secondly, data were collected through in-depth interviews with 20 women of childbearing age. Although the interview guides were prepared, some probing questions were established during the interview. Third, data were collected from the four key informants. Two were Auxiliary Midwife (ANM) and two were Female Community Health Volunteer (FCHV) of Lapilang VDC. Key informants were interviewed using similar interview guideline that was used in in-depth interviews, so that data can be collected from both insiders' (interview respondents) and observers' (health professionals) perspectives.

3.3 Inclusion/Exclusion Criteria

The inclusion criteria were reproductive-aged women who are either currently pregnant or had a delivery in the past year, to minimize the recall bias. For the narrative inquiry, three cases were selected based on the experience of women with pregnancy related complication. Each case represents one of the three different phases of pregnancy, childbirth and the postnatal period.

3.4 Sampling Methods

For the narrative inquiry, information was obtained with the help of FCHVs and ANMs to identify the complicated cases that happened in the last few years. Women who experienced the complication were left to explore their situation and expressed the opinion regarding the situation. The narratives served as a supplement to the understanding of the respondent so that they were able to explore in-depth interview.

A purposive sampling technique was used for in-depth interviews. The reason behind the choice of purposive sampling is to ensure that the respondent met the inclusion criteria of being pregnant or delivered a baby within one year of data collection. The researcher, together with one FCHV and ANM, selected the participants for the in-depth interview. Twenty-four women in total were approached and twenty were selected for the interview. First, records of antenatal visits from the sub health posts and delivery were studied to estimate the number of pregnant women and the number of women who delivered babies in the last 12 months. From the record that met the inclusion criteria, eight women were selected and the others were approached at their homes.

Women's understanding of risks regarding pregnancy and the complications and influencing factors for taking the decision were then explored through in-depth interviews. This study intended to investigate through the diverse perspectives existing in the community, therefore different socio-cultural and educational background, ethnicity and age group were taken into account for the interview. The reason behind the choice of these variations of the respondent was to have a concrete understanding of women from different socio-cultural determinants of maternal mortality, which is explained in the introduction section of this study. However, the findings did not intend to signify the statistical variations.

3.5 Data Collection Procedure

The data collection process took place in the narrative inquiry, in-depth interviews and key informants. First, permission was obtained from the Dolakha district health office. Lapilang VDC of Dolakha was deliberately chosen which consist of diverse community based on the availability of the characteristics of desired samples. FCHV and ANM of the study area were contacted to assist in fieldwork, who stayed with the researcher during the fieldwork. FCHV and ANM were deliberately chosen to help during field visits considering their familiarities of the details of the status of women in pregnancy and childbirth. In addition they belong to the same community, and have an idea of age, ethnicity, and education of women. There was always one FCHV (Lapilang VDC, ward number 4) who stayed with the researcher during the interview. She assisted with a

number of complex questions to translate it for the understanding of the local people. The researcher and her assistant ensured that the respondents are comfortable in answering the question without difficulties and embarrassment. Each participant is approached individually to ensure privacy and confidentiality. The setting and time of the interview were scheduled according to the convenience of the participants. Discussions with key informants are also planned accordingly.

Narrative inquiry

To investigate the understanding of the real phenomenon, narrative research was established for the study. This method allows the researcher to study the complexity of the phenomenon by the experiences of women through live experiences (McCormack, 2004). In addition, it is assumed that not all respondents may have experienced actual risks and complications, thus it is possible that they could not provide information on certain potential health risks. For the extensive understanding of the women, three cases were considered including those who experienced complications during pregnancy, childbirth and the postpartum phase. Of the three cases, a woman died of childbirth, leaving only two women able to participate in the inquiry. The women expressed their situation, and provided information on how they acquired the complication and were unable to seek for medical assistance.
These three cases were selected and approached with the help of the ANM. Verbal consent from the women was taken, ensuring that they agreed to share their story. They were informed of the purpose of the study to ensure that their names remain confidential. The women were approached individually for a narrative inquiry. They were asked to tell their story and their opinion on the factor responsible for the situation.

The stories obtained from the women were used in conversations with the respondenst for in-depth interviews. They were asked for reactions and opinion on a given scenario. The narratives were used to explore the opinion of women by giving real cases that have happened with other women in the community, which the respondent may not have experienced. While probing the question to the respondents, these narratives were used as an example, so that they could empathize and explore the opinions of the various risks of pregnancy, childbirth and the post-partum period.

In depth interview

In-depth interview was the main method of collecting primary data used in this study. Face to face interviews give opportunity for both the researcher and the informants to gain better understanding of the subject by two-way communication, thus quality and

reliability of the data is expected to be high (Legard et al., 2003). The method allows researcher to collect descriptive information on women's risk perception and the determinants that influence perception. Factors interfering decision-making for seeking health care were also included, alongside questions that encompass risk perception, and health seeking behaviours. An interview guide was prepared beforehand based on the research question. The interview guide was semi structured with open-ended questions. The order of the questions was not fixed, so that the flow and sharing of information was a natural process.. The components of the health belief model was taken into consideration for question construction, thus tradition, cultural practices, education, gender and women's decision making power that contribute on risk perception and decision making were examined.

The in-depth interview consisted of five guided questions (refer to Annex I). The stories of the women from the narrative enquiry were included in the interview during probing and where situation demanded those stories as an example. Narratives gave them an opportunity to describe their perception on pregnancy, childbirth and complication, the factors influencing the perception, and how other factors hinder them in making a decision. Therefore, the conversation began with the natural process of pregnancy, experiences during pregnancy, later phases of pregnancy, childbirth and the postpartum period. The researcher clarified the discussion by various probing questions. The researcher acted as a moderator, guiding the respondent from one topic to another, while building an informal and friendly atmosphere. Creating a natural atmosphere for conversation helped maintain focus and gave the researcher a space to balance conversations and note taking. During the interviews, the research was taking notes. The FCHV present with the researcher was also taking notes during each interview to assist the researcher. After each interview, the researcher and the FCHV made sure to make a comprehensive note by putting all the information gathered during the interview. Eight respondents allowed for the use of a recorder, permission for which was taken before the interview was conducted.

Key informants interview

The additional information in support of the study was collected from key figures of health care in the village: two auxiliary midwives (ANM) and two female community health volunteers (FCHV).

The researcher felt the need for key informants in the community. A female community health volunteer, as she works at the grassroots level, is knowledgeable when it comes to promotion of safe motherhood, child health, family planning, and other community based health services that promote maternal health. They easily interact with the community women since they provide door-to-door health awareness and maternal

health services. Similarly, the women go to the ANMs in the sub health post for antenatal check-up and if they have a serious complication related to pregnancy and childbirth. Therefore, both the FCHV and ANM are familiar about the attitudes and practices of women regarding maternal health. To represent the etic perspectives, key informants were asked how the women perceived the risk and the attitudes and practices related to pregnancy, childbirth and the postpartum phase. For this, the similar interview guideline that was used in interviewing women was used, but the questions are more focused on key informant's observations and their assessment of women's practice.

3.6 Data Analysis

The researcher analysed manually the qualitative data collected from the respondents and secondary data from the National Demographic and Health Survey, District Health Office of Dolakha, and the Lapilang Village Development Office.

Analysis techniques of conceptualizing, coding and categorizing were followed according to the grounded theory (Bradley et al., 2007). The researcher reviewed the notes, interview guidelines and tapes accordingly and made a summary from the raw data that was further analysed and coded and elaborated in line with the concepts. The raw data found in the form of words and notes were first reduced to abstract theme and coding. After code generation, thematic coding was done and the researcher classified the codes. Appropriate themes and sub-themes were extracted. Then, all data were interpreted according to theme and were drawn up for the report. Furthermore, data were placed with different categories and subcategories followed by variables. The researcher ensures that the components of the health belief model were taken into account during the coding and categorizing different variables, however it was followed by research sub questions. Risk perceptions of the women and the determinants have an influence on perception. The factor influencing decision-making was analysed following with the health belief model. Eventually recognized themes were brought back together and a concrete conclusion related to the first delay was drawn.

3.7 Ethical Consideration

In conducting the study, permission was taken from the University of Wageningen and the Nepal Health Research Centre in Kathmandu, Nepal. In addition, verbal permission was obtained from the District Health Office (DHO) in Dolakha and the local authority of Lapilang VDC. All data were handled and stored anonymously.

In this study, the participants were first asked verbally, and then informed consent was taken stating their willingness to participate in the study. This also means that the

participants were fully informed about the purpose of this research. Furthermore, this research guaranteed the participants' confidentiality with the assurance that their names and other identifying information would not be made available to anyone who is not directly involved in this study. During the research, a good integrity was maintained in terms of sincerity, consistency of thought and action during data collection. Although interview guideline did not contain personal questions, it was expected to encounter some social issues as putting up with social norms is a topic touched during the narrative inquiry. The participants were reassured of confidentiality, the FCHV convinced them that the information is for scientific research and that data can help to promote the health of the women. The researcher duly respected the social and cultural values of the participants.

3.8 Study Area

Dolakha is a mountainous district lying in the northern part of Janakpur Zone within the central development region of Nepal. It covers a total of 214, 278 hectares of land, of which 74,974 hectares lies at High Himalaya, 85,617 hectares at High Mountain and 53,687 hectares at mid mountain (Secretariat et al., 2012). This study was conducted in the rural village Lapilang in Dolakha district located in the northern part of Nepal (Shrestha, 2010, 2013). It has an area of 33 sq.km and total population of 5864 (Lapilang Nepal, 2009). The village is in the mid hills and extends to high Himalayas, where access has historically been very limited. According to data from VDC Lapilang the number of male literacy is 2,223 and 1,719 female (Lapilang Nepal, 2009). Data suggested that the men were getting more opportunities for education than women. Lapilang village consists of a total of nine wards, in which women from the ward 2, 3,4,7,8 and 9 took part in the study. Dolakha has a high poverty incidence accompanied by relatively high mortality rates, which contribute to an overall high rate for the country (Shrestha, 2010, 2013).

Figure 3 District map of Nepal

Source: Adopted from SDC Nepal, 2005.

Reason for choosing this area

The district was chosen mainly for two reasons. First, a similar kind of research on maternal mortality and its determinants was conducted by Shrestha in the district of Dolakha in 2009 and 2012 (Shrestha, 2010, 2013) hence there was a database on the subject. Second, the researcher lives in the neighbouring district that is why she is familiar with the location and culture, which would help with any problems that might arise during the fieldwork.

Shrestha (2010) stated that maternal death in Dolakha is mostly due to preventable causes such as postpartum haemorrhage, placenta, infection and obstructed labour. Moreover, most of the decisions about seeking health care is done by the male member in the family (Shrestha, 2010, 2013). Which is also supported by Thapa and Niehof (2013) that women with lower economic autonomy and domestic decision-making autonomy are less likely to take their own decisions regarding health care. This interesting finding inspired the researcher to research by exploring the factor women's perception of risk and its relationship to the delays in decision-making and seeking healthcare in the similar area.

The village has a number of cultural communities. The dominant caste and ethnic background of the residents are Janajati Thami who are also considered as the disadvantaged group and other caste includes Brahman, Chhetri, Newar, Sherpa, Tamang, and Sunuwar (Lapilang Nepal, 2009, Shrestha, 2013). People from these disadvantaged communities have less power to make any decision in regards to social activities as well as health related behaviours. These study areas, therefore, provided the researcher with ample opportunity to meet with women has different socio-cultural background. Moreover, Shrestha raised education, cultural values, gender and women's empowerment issues in his study that the researcher like to be considered in this study. All these considerations justify the selection of this area.

Maternal health care in the study area

The village consists of one Sub-Health post (SHP), which is the first contact point for basic health services with one ANM and one Assistant Health Worker (AHW). SHP is the lowest level government institution, which is the main site for grass-root level community-based activities. With regard to maternal health services, the SHP provides basic antenatal services that only include physical examination, distribution of iron and folic acid capsules and tetanus toxoid (TT) immunization and family planning services. In addition, two beds are available for birthing. However, the SHP is not yet established as a birthing centre for 24 hours and there is a lack of emergency obstetric services (EOC). SHP is open from 10:00 in the morning until 2:00 in the afternoon on weekdays and does not provide the laboratory services. The SHP provides very basic maternal health services. For advanced services or complication management, health facilities are available in the district headquarter in Charikot which is 30 kms. away from the study area. The ANM assists during delivery, recognizing danger signs, and timely referral to appropriate health facility. She even pays a visit to homes in case of emergency because she lives in the same village and therefore easily accessible to the women for emergency. Moreover, to improve maternal health services, the DHO has placed a total of 33 FCHVs in all the wards of the Lapilang Village. Maternity kits are provided to FCHVs for home visit and they also attend to deliveries of

Sub-health post at Lapilang VDC

mothers who cannot travel to the SHP. The FCHVs are actively working in Lapilang. Moreover, when they experience complications on pregnancy and during labour, they accompany women to the hospital. However, they are not professionally trained for safe delivery.

The village has two parts separated by a river. It is difficult for people to travel between these two parts, because there is no bridge, but only a hanging bridge over the river. To make it easy for people to get access to medical facilities, the SHP has established branches and recruited an ANM to the other side of the river. The purpose of the established new branch of SHP to the other side of the village was to provide basic maternal health care to the women, which is not readily accessible from this side of SHP. However, as a result of geographical imbalance, health posts are still not easily accessible for patients from the periphery of the village. Resources are limited, and the terrain can be difficult to access, and the endless landslides during monsoon season make the situation worse. The hilly and mountainous terrain in the district is among the major challenges to reach the SHP and also to provide health services at community level.

For emergencies and in case of complications, the nearest health centre is in Charikot. There is one PHCC, and private hospitals namely Dirghau General Hospital, Gaurishankar General Hospital, and Tsho Rolpa general hospital. There is also a district hospital in Jiri, which is not convenient for the people of Lapilang because the distance is 2 to 6 hours by bus or a whole day of walk. They have to go through Jiri crossing Charikot. Using the medical facilities in Charikot are their first priority, than the district hospital in Jiri. But in order to access these medical facilities, the only way is via the earth road wherein only one public bus travels early in the morning each day. If they miss the bus, they would have to wait until the next day. People from the village have to walk for an hour to get to this bus. In addition, the cost of transport is considerably high. Local and intermediate means of transport are not well developed in the study area. The traditional bamboo made carrier (*doko*), or a stretcher is available from the DHO. Local stretcher made of bed sheets or blankets are being used in the community to reach the health facility or main road, especially for emergency cases.

Chapter Four: Results Analysis

4.1 Background of the Respondents

This section presents the age, educational background and gestational history of the interview participants. The age distribution shows that out of 20 women, 10 are in the age group 15-24, the other 8 in the age group of 25-34, and two are above 35. Two-nurse midwives and two FCHV who participated in the study are key informants and are aged 26, 36, 38 and 52 years old, respectively.

Regarding the educational status of the respondents, only six have high level education, which means completing grade eight. The other fourteen include those who have never been to school and those who have not finished the eighth grade. They are considered to have low or no formal education.

The interviews were conducted with seven pregnant women and thirteen women who had a delivery in the past year. Two of the pregnant women were in their third trimester of pregnancy, two in their first trimester and three in their second.

Nine women belonged to the upper caste, including Chhetri and Newar. Eleven were from the disadvantaged groups, including lower caste e.g Biswokarma and Janajati group e.g Thami. The ethnic group Thami dominates the chosen village.

The pregnant women were categorized according to the gravida. Three of them were Primigravida, and four of them were multigravidas. Similarly, of women who delivered in the last year, two were Primi gravida and 11 were multigravida. (Detailed profiles of the respondents in Annex II)

Table 1 profile of the respondent's in-depth interviews

Characteristics of Respondents	Age (years)			Education Level		Gravida		Total
	15-24	25-34	35+	Lower Level	Higher Level	Primi gravida	Multi gravida	
Pregnant women	5	2	-	5	2	3	4	7
Delivering during the past year	5	6	2	9	4	2	11	13
Total								20

4.2 Narrative Inquiry

Two narratives were prepared for antenatal and postnatal phases of gestation. Inquiry was done with the women who has had suffered due to the complication of pregnancy. Since one woman died during the childbirth, the narrative could not be made from the women who have experienced the complication. However, the researcher thought the story could be helpful to arouse the understanding of the respondents about death of a woman due to an obstetric complication. Therefore the story was taken with the help of the Auxiliary Nurse Midwife, which is not a narrative inquiry but a story. The cases were as follows:

Problem during antenatal phase

The woman was 28-year-old in a nuclear family. She had a miscarriage of her first baby in the fourth month of pregnancy. She had a frequent check-up with the ANC, but she did not go to the hospital when she first encountered bleeding during the 4th month of pregnancy. Her family was supportive and asked her to go to the hospital, but she refused because she was afraid that she would get an operation. She thought if she is fated enough to have a child, she would. If not, there would be a miscarriage even in the hospital. She thinks she got those problems due to heavy work, which simply cannot be avoided because domestic work has to be done every day, even during pregnancy. Now she is 6 months pregnant and has been regularly visiting the ANC.

Problem during childbirth phase

She was a 30-year-old woman. She died eight months before our data collection. The Auxiliary Nurse Midwife described the story. According to her, she had never been in antenatal check-up. She was asked several times to check-up and for iron and calcium supplement provided by the health centre, but she refused each time. She showed no interest in antenatal check-up because she was ashamed of being pregnant for the fourth time. The baby was stillborn, and she delivered at home without help from anyone. She had heavy bleeding during delivery and after the baby was born. Some of her neighbours saw and ask help from the ANM.

The ANM thought she needed hospital treatment because the bleeding was non-stop. By the time the ambulance arrived, she was already dead. The ANM further explained that if they would have come for ANC check-up during pregnancy, they may have become aware of the complications beforehand and could have acted on time. The baby could be borne safe and she would not have died.

Problem during postpartum phase

The woman is 34 years old. She had high fever and bleeding after the day of delivery. The condition was getting worse. She thought she would die, but no one took her to the hospital. She even asked the family to take her to the hospital but everybody complained of having a busy time. She therefore left the situation to fate as she thought she could not go on her own. The traditional healer then treated her for a few days. Luckily she survived, but became sick for two months. She was weak and malnourished. At the time of the interview, she said she still feels weak because of that. She said it is her husband who has paid no attention to seek medical care. He refused because of difficult access to the hospital. She said it would not have happened if the hospital were located close to their house.

The narratives show that women are at risk and have been suffering from the complications of pregnancy in the study area. They are aware of the need for medical care at least at the time of complication. However, certain barriers come up between the awareness and the decision making for seeking medical help such as family support, decision making power, time, dependence on fate and religious beliefs, and embarrassment. It has been found that women have kept their household work as top priority than their health needs.

4.3 Risk Perception of Pregnancy, Childbirth and the Postpartum Phase

In the content analysis carried out after the interviews were conducted according to the health belief model, three main themes emerged. These themes are in line with beliefs, knowledge and barriers, which would be used in analysing risk perception and factors responsible for perception and identifying barriers.

Perceived susceptibility and seriousness

Women participating in the study found that pregnancy is a difficult phase of life. Most respondents have some information about the risks (shown in table 2), but almost half of the respondents are not aware of the danger signs during pregnancy and childbirth, and the postpartum phase. Primigravida women are more anxious about complication of risk since they have never experienced such problem by themselves, and they did not know what the dangers could be. Therefore the narratives are used to visualize the potential risk of pregnancy and childbirth to the women. Those who were aware are the women who had experienced delivery in the last year, while very few of the women are aware that the postpartum period can be a risk that invites complications. They are those who were able to take a rest and nurture themselves with a nutritious diet during this period at their maternal home. According to them, they saw dangers such as

bleeding, retained placenta and abnormal delivery during childbirth (i.e. shoulder comes first during delivery instead of the head of the foetus, abdominal pain, obstruction of labour, and white bleeding).

Table 2 Danger signs according to the women

Dangers of pregnancy and childbirth seen by the women are as follows

- Bleeding
- Retained placenta
- Severe abdominal pain during antenatal, natal and the postnatal phase
- White bleeding during pregnancy
- Obstruction of labour and prolonged labour
- Abnormal delivery i.e. shoulders/legs come first during delivery instead of the head of the foetus.
- Delay in starting labour later than 9 months of pregnancy.

One respondent (E) expressed her opinion as follows:

> Pregnant women may face problems during pregnancy and that may exist until the moment of birth. If pregnant women engage in hard work, such as carrying heavy loads and too much housework, women can get bleeding. It can be worse if the woman does not take a rest and this also leads to a challenge to the foetus and the mother. In addition, good nutrition contributes to good health of pregnant women. Some women have a weak body that cannot resist the simple complication. However, the basic thing you need is to be fortunate, if you're lucky, all this trouble and complication will never come to you. If you are not so lucky, you may get a problem.

Likewise, other women (C) who had a recent delivery shared her opinion as:

> I do not know what danger signs are called for pregnancy and childbirth, but it is essential to have delivery without any trouble, if not TBA, you should go to health centre, SHP, PHCC or Hospital for delivery. I went to consult the ANM, when I did not get on to labour until nine months of my pregnancy.

The causes of risk and complications during pregnancy and childbirth may be due to medical and non-medical factors. They consider the poor diet (containing only rice and lentil soup, but not the varieties of vegetables, eggs and meat as often), heavy household work and weak body to contribute to their proneness to complications. Some of the respondents are aware of medical problems such as high blood pressure, anaemia, pale skin, which they think could be a problem during pregnancy and childbirth. One pregnant woman (R) said:

> I do not know how complication arises. I think there is something disturbing inside the body that causes abortion. This may be due to not having a nutritious diet during pregnancy, or heavy workload. This makes the body weak and cannot control the baby inside and get the abortion. But heavy bleeding or obstruction of baby during childbirth is serious, if not lucky enough to get an ambulance in time we die. This is something that scared me.

Similarly, another woman (O) who also got some knowledge from the FCHV and ANM said:

> Some women have high blood pressure, and they are prone to headaches and weakness during pregnancy. They also get bleeding during childbirth. Besides weak body cannot effectively push women into labour and baby can die in the womb. It was my neighbour who has high blood pressure that was found out during her visit to the ANC. She often complained of headaches too. Therefore, we must take less salt in the diet that helps to maintain the blood pressure.

On the other hand, postnatal complications are often neglected until the women get severe bleeding, fainting, severe infection or unconsciousness. In contrast, other respondent's perception directed them to worry about the lives of their new born baby. One woman (D) who delivered in the last year said:

> Women face a lot of problems during pregnancy and childbirth, especially in nuclear families where women has no enough manpower for help in domestic work. I am aware that the busy day of household work with little rest was not enough for the growth of my foetus, but I had no choice but to do all the household work for the whole day. That is why I was so afraid that my baby would not be borne healthy. Thank God, I had the rest of my parents' home[2] during the postpartum period. I think this is the reason I restore my health and my child's.

Etic perspectives of ANMs and FCHVs regarding susceptibility of risk

While analysing the women's risk perception from the etic perspectives of the observer, one FCHV shared that all women do not have the same perception. Most of them are aware of risk and complication of pregnancy and childbirth. However they do not consider postnatal complications as complications at all. In many conditions, women found themselves susceptible to risk. For example, if they do not take iron capsules,

[2] It is a tradition in Nepal that women with postpartum go to their parents' home for a few months to take a rest, and during that period, they could have plenty of rest, nutritious diet and oil massage for the mother and the child.

they could bleed or if they do heavy work, they could have a miscarriage. Therefore an awareness program has helped them to know that they might be potential victims.

The postpartum phase

The postpartum period is mostly taken care of by following the tradition of rest and good nutrition. This might be the reason the postnatal phase is seen as the safe period by the women. This part is mostly neglected in terms of seeking medical care. Almost all of the respondents believe that the risk of complications during the postnatal period does not happen often. If it happens, it should be the lack of rest and nutritious diet. According to the respondents, if things do not go according to traditional practice, complications can arise with the mother and the child because of weakness. A pregnant woman (J) has shared her experience of postnatal risk as:

> I live with my husband and two kids. When I was in the postnatal phase of my second child, I had only 10 days to stay with my parents. Nobody was there to help my husband at home that was why I came back from my parents' house too early. I returned to the normal household work and had all kinds of hard work. I did not get enough rest and did not receive care at that time. I often feel weak and I think older people in the community were right to say that when women do not recover by having enough rest, nutritious diet and massage during the postnatal phase, her body gets weak and prone to illness. Therefore, getting plenty of rest and care is very important, but I was not lucky enough to have everything. This time I am going to call my sister during the postnatal phase.

Past experience and susceptibility of getting the illness that was perceived as serious have influence on women's decision making.

The woman on the basis of emic perspectives believed that traditional care of the mother and her baby during the postpartum phase is a good health practice. This might have a huge role in reducing the complications of childbirth and postpartum phase, as it contributes to the restoration of health. During the time of complication, even though it was rare that women get help from the ANM, one woman (M) puts her statement about her neighbour as:

> My neighbour had a fever on the next day of delivery. It may be that she had a prolonged labour. Her husband went to the SHP and get medicines from ANM. After taking medicine and postnatal nutrition she recovered her body. If we have problems such as fever, bleeding, we can get medication from ANM, but we rarely need this. For the rest of the problems such as abdominal pain and weakness, oil massage and postnatal nutrition will help us heal better.

Education, experience and socioeconomic status

Respondents have their opinion that the causes of risk and complications are rooted in social, economic and psychological issues. Some respondents have an emic view of risks based on tradition and experiences.

A woman (K) who recently had a baby and also from the disadvantaged group explained the socio-economic factors as an important cause of the problem, according to her:

> Money is the biggest problem to cause a health problem. If one does not have enough money for a nutritious diet, such as meat and vegetables, it may affect foetal growth and health of pregnant women, but the real problem for us is that we do not have a bridge over the river, we do not have a good road and bus facilities to the hospital. If there was a bus to the headquarters in Charikot, immediate treatment can be given during pregnancy and childbirth in case of complications.

Etic view of the Health workers (ANMs) regarding the risk factors

An ANM also stated that the perceptions of women regarding pregnancy, childbirth and postpartum differ based on their education, age, experience, and socioeconomic status. According to her, all the respondents visited ANC, though it's not regular as per the standards of WHO. Educated women visit ANC more often than the women with lower education. Younger women are more afraid of having complications during pregnancy than older women or the women with pregnancy experiences. Similarly, women with a joint family and have support in household work get more encouraged to seek medical care than women with a nuclear family. However, the practice of delivery and their concerns towards health are almost alike. Another ANM further added:

> Educated women have more regular visits to antenatal clinics than the uneducated women. Primigravida women come to me more often than multigravida women for inquiry about their maternal health and related problems. However, when it comes to delivery, all educated Primigravida or multigravida prefer home delivery and choose to deliver by her own. They only call me when they feel some complications either during pregnancy or during childbirth.

According to the ANMs, marrying at a young age is very common in the community. They also get pregnant early. Those who married early terminate their school and stay at home to deal with housework. Early pregnancy and little knowledge about the care of pregnancy is a risk factor for them.

Luck and fortune

Some of the respondents, both primigravida and multigravida women continue to view pregnancy and childbirth as requiring no special medical care such as antenatal and postnatal examination, delivery by the trained birth attendants. They do not perceive the risk of pregnancy and childbirth in advance. During the postpartum period, they are more likely to assume that there is no risk at all. These women are illustrated by the stories that have been prepared from the complicated cases during the three different stages of pregnancy. One woman of age 37 (F) said:

> The life of the woman goes with destiny. If she is fated to live a happy life, she will be married to a kind and amiable husband and she would get a cooperative family. She would also get children without any difficulty. The woman's life is full of struggles but she is strong enough to fight against it. Our grandmother and aunts had more workload and difficulties in their time, but even then there were no health posts and health workers. Regardless, they stayed in good health and had more children than we do. There was no hospital during that time. Now as the number of health posts and hospitals increase, so are the problems. So what happened to these women is that they were unlucky. Otherwise, why would God choose them instead of the others? It is unfortunate that women face many problems. Being a woman is sometimes a punishment.

While talking about birth preparedness, four elements are involved in the process antenatal care, saving money, identification of the delivery location and identification of blood donors (Malla et al., 2011). Most of the women stated that they have their own way of preparation that is mostly concerned with the postpartum period. They start to collect ghee for food, oil for massage, and they buy goats and chickens so they can eat meat during the postpartum period. Many women (18 respondents) prefer home delivery. Besides, each respondent had at least one antenatal visit. One pregnant woman (S) responded:

> I am going to give birth soon, however I don't have any plan to go to hospital. We don't need to take these things seriously. All the women in community give birth at home and they all are absolutely fine with their babies. If we take iron and calcium during pregnancy, nothing bad happens during childbirth. If something bad happened I should consider myself an unlucky person.

Some of them share that they do not worry about the risk of pregnancy as long as they are fortunate enough to live healthy. Here are some of the respondents' opinions regarding the risk perception.

> Pregnancy is always a risk. Women can face a lot of difficulties in having a baby but we do not have to worry about such a risk in advance. Only the unfortunate will suffer from that. Those who are blessed with the power of God, they are always protected against any threat. When God blesses us with a baby, he gives the courage to give birth. We also know that sometimes things do not go the normal way: women get bleeding and there can be obstruction in labour. At that time we call upon a person for help who can manage the complication, e.g. TBA, FCHV, and ANM. After all, health professionals are there to save us. We are also told by the FCHVs that women need to deliver in the hospital, and we appreciate it, but getting delivery at home is more comfortable and cheaper for us and the hospital would not minimize complication if the death is fated.

Another respondent (L) who believes her birth was dangerous because of a foetal hand stuck in the vagina during childbirth thought it would have been safe if she had attended ANCs regularly. In addition, she explained that the complication could occur with all pregnant women. She is not aware of what kind of risks needs special attention, yet it is certain that fate is important to secure her life. She went through prolonged and complicated labour and due to lack of availability of the vehicle, she could not manage to reach the hospital. Then she stayed home and she had to carry all the pain of complicated labour. She is so grateful to God that she is fortunate she did not die.

Health professionals and health facilities

Another woman said problems during pregnancy and childbirth has to do with lack of care, which is antenatal check-up during pregnancy. In addition, she said she would know about the potential risks in advance by antenatal examination. A woman (A) who had a hospital delivery last year, said the following:

> I went to PHCC for the delivery because TBA makes the labour more complex at home. They put a lot of pressure on the abdomen to push down the baby during delivery, causing unnecessary pain to the women. I was not happy with the way they perform the delivery. I felt pain and gone through a lot of distress when I took the delivery of my first child.

Likewise, pregnant women (E) stated that home delivery could cause the risk of birth. Normal childbirth never causes a problem. When there is complication, it is difficult to manage at home and taking the pregnant woman to the health centre is rather difficult.

The majority of women did not know how the complication occurs and what could be the risk. So far they are safe and had children without any problem, they do not want to pay attention to it. They think that they are fortunate enough for not having any

problems. When narratives were used to these women to visualize the possible complications, one woman (S) expressed her opinion as:

> These women were really unlucky. I think not all women experience difficulties. If I would be one, I would pray to God to save me. I'd probably expect my family will help me get over the pain, and that they will take me to the hospital as soon as possible. FCHVS in the community are very supportive. They also go with us to the hospital and support us through the journey. This is what we can do for another, if I am not condemned to live, I would be sick or die. Family support is very important, especially during the emergency situation.

Etic perspectives of ANMs on the causes of obstetric complications.

According to the ANMs, the complications mostly occur due to two reasons. First, FCHVs had a lot of work on women's awareness about birth preparation, so that the risk and complications can be detected in time, yet women do not see the need for it, except antenatal check-ups, which is not enough to prevent the risk and complications. Second, women come to them when the TBA and traditional healer are unable to manage the complications. Usually it is too late to take action and they would need to go to the hospital in Charikot that takes time to reach. FCHVs also said that health professionals either at home or at SHPs are not a priority choice.

The majority of women and key informants also agreed that the delay in deciding to seek for health care is a cause of serious complications.

4.4 Sociocultural Factors Shaping Women's Perception and Behaviour

Women's risk perception influences their preference of health practices with pregnancy, childbirth and postpartum care.

Perceived benefits

According to HBM the combination of perceived susceptibility and severity of health problems has been labelled as perceived threat (Champion and Skinner, 2008). Even if a person is susceptible to a serious health condition (perceived threat), whether this perception leads her to behavioural change will be influenced by the person's belief regarding benefits of the various available actions (Champion and Skinner, 2008, Janz and Becker, 1984).

The antenatal phase

Women's concern about antenatal check-up is relatively higher than the other two phases of pregnancy. The Safe Motherhood Programme in Nepal recommends that

pregnant women be examined at least four times during a pregnancy. All the respondents visited ANC at least once and made sure they had iron supplementation capsule and TT vaccination. FCHV has been working on raising awareness on maternal and child health. Women were largely influenced by the FCHV. However, there is a variation in their preference according to the respondents' education status. In this study, educated women visited an antenatal clinic maximum three times (Table 3). Women who have low education visited the antenatal clinic either one or two times, but could not give it continuity.

Table 3 Frequency of antenatal examination at health centre.

Education Level *	Frequency of Visit to ANC			Total
	1 times	2 times	3 times	
1	1	2	3	6
2	9	5	-	14
Total	9	8	3	20

* 1 = high education level (above grade 8)
2 = low education level (below grade 8)

Etic view of key informants about the awareness of the importance of the ANC

ANMs believed that most women are now aware of the importance of antenatal check-up by FCHVs. It means that the awareness program affects the perception of women. If this awareness program succeeds in such a way that women use skilled professionals' help during childbirth, it can minimize pregnancy complications. Moreover, an FCHV said that women now see the importance of iron capsules and TT vaccinations in their health during pregnancy, so there are low cases of anaemia and bleeding during pregnancy. In addition, it is provided to them free of cost by the government. One pregnant woman (J) said:

> Even if I could not make it for an antenatal check-up, I would like to get iron capsules from the health centre, so sometimes I send my husband to get iron capsules from the SHP.

When one considers the etic point of view of the health professionals who have been watching women's attitudes and behaviours, one can conclude that the awareness program helped them enough to avail the services of the antenatal clinic, at least for the iron capsule or TT immunization so that they are no longer susceptible to the complication. Likewise, women have seen the benefits of using the antenatal clinic that is why the majority of the women have visited the ANC.

The childbirth phase

Since women believe that many women in their community gave safe births at home, they are motivated to choose home delivery. They also prefer the assistance of their relatives or neighbours instead of trained community health workers. Most of the respondents stated that preference of home delivery is for greater comfort, familiarity, less trauma and perceived cost. They see the advantages of choosing home than anywhere else. Women also prefer to choose their family and friends for assistance because of embarrassment. They think people other than family or neighbours would gossip about how they made noise during labour and how they screamed during pain. Therefore the understanding and the practice of childbirth at home is largely influenced by emic perceptions of women that have been in practice for many years. One pregnant woman (T) stated her opinion as

> I'm going to deliver my baby at home, but I did not think anyone is going to help during childbirth. I will manage somehow. Other than neighbours or family no one will be involved for sure. I cannot take any risk by involving an outsider, so others will know how I screamed and cry during labour. Outsiders might start gossiping and that will embarrass me later. They might even compare me with other women in the community who cried less than me during labour.

Women from the different ethnic background have similar kind of practice during three phases of pregnancy. They undertake home delivery more often. When they give childbirth in the hospital, it is because they are having problems during the prenatal examination or they had experienced complications during the last birth. However, that caste and ethnicity might not be the only influential factor in the perception of women for practicing delivery. In addition, primigravida and multigravida mothers have different opinions based on their understanding and exposure to the risk. Hence, women of all ages and from different ethnic backgrounds have an almost similar practice of delivery.

Table 4 The relationship between cast and delivery practice

Ethnicity	Hospital	Home delivery assisted by				Respondent (N)
		FCHW	ANM	Relatives/ Neighbours	Without assistance	
Higher caste (Chhetri, Newar)	1	2	1	4	1	9
Disadvantage group (Lower caste + Janajati)	1	2	2	6	-	11
Total	2	4	3	10	1	20

Most of the women were aware to some extent of the dangers of pregnancy, childbirth and the postpartum phase. However, few women believe that this problem is serious. They think they must experience these complications if they want to have the pleasure of having a baby. According to them, there is no need to "over-react" because the childbirth process is innately difficult, but with risks not requiring medical care. Also, they do not feel the need to know the potential dangers because they experience safety at the moment. Because of strong spiritual faith, they rely on traditional healers in case of complication. One pregnant woman (M) responded after hearing the narratives of the cases that had complications during the pregnancy and childbirth as:

> Some women have problems during pregnancy. Therefore, one must receive adequate care with food and avoid heavy work during pregnancy. We have FCHV and ANM to help us in case of emergency. Yet faiths are very important to get through problems. I believe in traditional healer (*jharfuk*). They have a strong power to heal the problems and that works better than treatment in hospital. The traditional healer has treated us since the old times and they have always walked us through every difficult situation. However, if I get problems, such as bleeding and obstruction during delivery, I would go to the hospital. But I would also follow the traditional healer at the same time. If am fortunate I will not have any trouble during pregnancy and childbirth.

Although the narratives explain the serious consequences of the problems of pregnancy few respondents admit that they should make use of the SHP or hospitals before going into any trouble. Health centres and health professionals are always seen as the option at the time of complications.

Etic view of the ANMs based on the past experiences of women

The experience of the past has affected the perception of women. One ANM explained the practice of women based on past experience. Women who had no problems with their last child worry less about the risk. On the other hand, those who had problems with a previous child prefer hospital delivery. Similarly, women who have problems during ANC check-ups plan to have child delivery at a hospital.

4.5 Factors Influencing Women's Decision Making Regarding Maternal Health Practices.

Barriers in decision-making include the time, distance, cost of transport and accessibility of the health center.

All the respondents admitted that the SHP and other Hospitals in Dolakha are always welcoming and health professionals are supportive when they visit. However, for the

birth and post-natal check-ups, the SHP is not their priority. The woman said that they think of health professionals and SHP or hospitals only at the time of complications. Taking care of pregnancy and childbirth in advance by the health care provider and SHP is largely not in practice. However, the equipment and materials also limit the SHP, therefore they are also limited in managing serious complications. Eventually some cases need to be sent to the Charikot PHCC and hospitals. Few women said that they are not willing to visit PHCC and hospitals because of work pressure and lack of time. Two women said they did not have to visit because their grandmother who had not visited the health centre is still in good health. So they would like to do what she does.

Table 5 Causes of not visiting the PHCC and Hospitals by the respondents

Causes of not visiting the PHCC and Hospitals	Respondents
Long distance	13
Transport cost	9
Unavailability of the vehicles	12
Not willing to visit (Work pressure, Lack of time, No need to visit)	7

One woman (P) with one-year-old baby said:

> If there was a bridge over the river and if there are buses at least every 3-4 hours to the headquarters where the hospital and health centre are located, women may prefer to go to the hospital during pregnancy and for delivery. Then we don't need to bother other people in the community to carry us in a stretcher.

On the contrary, some women both primi and multigravidas in the community believe that physical barriers are not major barriers in using health care services. Most of primigravidas believe that care for pregnancy and childbirth at home is much better than anywhere else. Health care facilities are for emergencies. A multigravida woman (L) explained her opinion as:

> SHP is not so far for me. But I think what they do there is also similar to what we do at home. Home is very comfortable for the delivery of the baby. The only difference is ANM can identify the potential complications before it was too late to reach the hospitals. But most women have no complication. Those who get it might possibly not be managed by the SHP, and will eventually be asked to go to PHCC / Hospitals in Charikot.

On the other hand, limited resources and services of the health facilities are leading the women to decide to choose the facilities far for them, which is mostly difficult to access. For example, a woman (Q) who had delivered recently explained her experience as:

> The first thing I think during complications is a hospital in Charikot but not the SHP because if you get a serious complication you will be referred to the hospitals eventually. I think SHP is providing a good service during pregnancy by examination of the mother and the baby, also providing iron and TT vaccination. Soon there will be a bridge over the river and the road will be reconstructed, then we will get more buses to Charikot and we will get prompt treatment in an emergency.

Similarly, another pregnant woman (E) said:

> I live with my husband and two children, and I am often busy with household work, I barely have time for rest. There is no way that I have time to go for delivery at a SHP, PHCC or hospitals but I could manage to have iron capsule and TT vaccine at a health post.

The government of Nepal has provided the women's health services free of charge for pregnancy, childbirth and postnatal check-up. Women who delivered at the hospital even get incentives of some amount. However, a woman said that the cost of health care is still not cheap for them because of the cost of the laboratory and transportation. Women prefer health services of the SHP, which are cheaper than those of private clinics. Hospital and PHCC are far away, so they go to the nearby SHP for antenatal services, in addition to iron and folic acid capsules that are free of cost. A woman with three children who had a delivery last year (K) said:

> I do not think delivery on health centre is necessary for childbirth. Delivery can be done comfortably at home with the family. I cannot deal with the difficulty of going to SHP or PHCC with a big belly and deliver where only one or two people will be there at the time of birth, then return home after delivery on a stretcher. It is really troublesome and unnecessarily expensive. The cost of transportation and the hospital sometimes may not be affordable. Thank God, I was lucky that I had delivered the baby without problem. I wish we had a good road and vehicle facilities and the health centre was near. It would be easily accessible to the health centre at the time of complication.

Woman autonomy in decision-making

Most women make the decision by their own with regard to the antenatal check-up. But for the place of delivery they should consult with husband and family, especially the mother-in-law. While they know this is not an obligation, they choose to follow their culture in respecting their elders. Moreover, One pregnant woman (M) said:

> If I wanted to go to the hospital or SHP for a check-up I would have had no objection from the family. I can take my own decision, but they neither stop me in seeking to care, nor encourage me to go to the SHP. Thus I do not choose to go anywhere but stay at home. All my children were born at home with the help of neighbours and all were fine. So this time it will also be good if God is kind to me.

Another pregnant woman (E) shared as:

> I don't go to get medical help without consultation from my husband. It is not necessarily obligation but I like to share it with my husband. If my family tells me not to go to the health centre I wouldn't, even though I wish to go.

Women's deep respect for elders and their culture of obedience have a major role in women's decisions. Some women said that they go to the SHP or ANC by their own, even without consultation with the mothers in law, but they cannot make their own decision to go to the hospital and PHCC, or decide on the location of the delivery. In fact, either the husband or father/mother-in-law first decides on who to consult and where to go at the time of emergency during pregnancy and childbirth.

Women (D, H, and K) expressed that they are not fully aware of the dangers and risk and complication of pregnancy and childbirth, such as symptoms during pregnancy that need immediate medical concerns and the preventive measures for the dangers at home. Therefore, they wish to have some programs related to women's health to enhance their knowledge.

Impact of cultural and traditional practice and decision making of women

Distance to health and the cost of transporting not only affect women's preference for health care and treatment, but faith in the traditional practice of care of pregnant women and care of women during childbirth have a strong influence on women's health behaviour. Women are aware of the need for medical care, but the awareness does not always reflect on their actions. They also know there are trained health professionals, but they rarely decide to avail of their services. A woman (Q) with a 6-month-old child said:

> Women feel secure to deliver in familiar surroundings at home. I feel comfortable to show my private organ during delivery to my mother, grandmother and sister at home, which does not happen at SHP and the hospital. One can rest peacefully at home after childbirth, which is not possible in the hospital. You're always worried that you have to go home.

Likewise another multi gravida pregnant woman (J) who was prepared to have home delivery expressed the reason as:

> My aunt and sister gave birth at home and are fit and fine. Pregnancy is not a risk. There is little difficulty during childbirth, women only go through pain and hardship and you become weak for some time. Once you get nutritious diet, adequate rest and massage during postnatal stages, all will be well.

Etic perspectives of ANMs regarding barriers to the use of health services by women.

The etic view by the ANM is that the costs and the geographic location or distance affect women's perception of making decisions for preferences for health services, but women strongly prefer home delivery. Traditional beliefs and faith play a role in choosing to utilize the health services. According to the ANMs some women are not aware of the fact that they need medical help to prevent from the potential risk and complication. FCHVs have in some extent succeeded to convince the women in the community to utilize the antenatal care services such as iron capsule, regular physical examination and TT vaccination. Yet they are not convinced to have a safe delivery by the trained person either at SHP or home. If the SHP is closed, ANM is also available in their home. Some of the respondents believe that fate is everything, if they are fated to get problems, they would, and they cannot go beyond the fate.

Chapter Five: Discussion, Conclusion and Recommendations

5.1 Discussion

This chapter offers discussion and analysis based on the result presented in the previous chapter.

Risk Perception of Women

The antenatal phase

Pregnant women and mother have a similar perception of risk. However, the women who had delivered a baby are more aware of certain pregnancy related risks than primigravida. Not all kinds of danger signs are recognized but the women often considered bleeding, malnutrition, and white bleeding as danger signs during pregnancy. Their perception is also influenced by the susceptibility of certain risks, such as lack of a nutritious diet, heavy workload during pregnancy that may lead to bleeding and miscarriage. Moreover, when the women encounter the dangers, their perception of severity of the risk gets higher. They analyse the consequences of the problems and seek for the care, whether it is a medical help or in a traditional way.

According to the HBM, the women in many ways perceive pregnancy risks as threat after analysing its benefits. Almost all women start getting antenatal care, though not as frequent as the standard of WHO (WHO, 2012). As reported by the DoHS's Annual Report (2011/2012), antenatal care services are increasing, but the standard of four visits is yet to be achieved (MoHP and New Era, 2012). The women use antenatal services than care during childbirth and postnatal services. This is mainly attributed to two reasons. First, FCHV's effort to make the women become aware of the susceptibility and severity of the potential risk during pregnancy and childbirth. The benefits of receiving iron tablets and having tetanus vaccine are cues that lead them into utilizing ANC services. Second, ANC services available at nearby SHP and the iron capsules and vaccine are free of cost. A similar rate of high use of antenatal care, but relatively low prevalence of skilled attendance at birth, was also reported by Rajendra Karkee et al. (2013) in rural Nepal.

The childbirth phase

According to Kaphle et al. (2013) the women developed their understanding of risk and safety from the traditional practice of taking care of pregnancy and childbirth. The emic view of women that giving birth is natural and requires no medical intervention makes the risk difference from biomedical risk. They see less importance in seeking biomedical care. As compared to the findings of this study, the women of the village prefer the

natural way of delivery at home with the assistance of the relatives or neighbours. The most prevalent, cheapest, easier to obtain, and most trusted is the traditional way of practice. As long as the delivery is normal, women of the village do not want any outsider to be involved in the childbirth process. Reasons mentioned are familiar surroundings and the familiar people who make the childbirth easier. Although women (16 respondents) are aware of certain risk and complication during childbirth such as bleeding, obstructed labour, prolonged labour and delay in starting of labour, the practice of delivery is still strongly associated with traditional practice without the professional assistance. Moreover, if there are risks considered to be serious, they seek medical help at the time of complication. In contrast, the etic view of ANMs believe that biomedical assistance could minimize the risk of pregnancy, childbirth, which also support the findings by Kaphle et al. (2013).

The postpartum phase

Postpartum risk is seen from the emic view. Therefore, the risk has been perceived as risk from the ancient time. It has been in the tradition that women during the postpartum phase need rest and plenty of nutritious diet to recover health. Nepalese women have been following the traditions with or without realizing that it is to prevent the risk.

It is noteworthy that I did not find women in this study who mentioned the postpartum problems and complication that are recognized to have serious implications. None of them seek postnatal care from health facilities. One reason is that they have not seen the cases often. Second is they do not believe this phase can create serious problems since it is perceived by the women as the rest period. However, the older women and the women who had baby are aware of the risk of postnatal phase such as bleeding and fever and weakness as complications during the postnatal phase. These symptoms, according to them, are due to not taking enough rest and having plenty of food, and oil massage based on the tradition (*sutkeri Syahar*).

Different studies conducted in Nepal have reported that utilization of postnatal services is relatively lower than other two phases (Khanal et al., 2014). Women think that the postnatal phase is one of the dedicated periods where the body goes weak and needs rest and good diet to recover from it. They do not seek postnatal care services. The study conducted by Khanal et al. (2014) shows that those who had ANC visit and experience danger sign during the antenatal phase are more likely to attend postnatal care services from the health facilities. However, none of the women in this study have stated that they had visited PNC services from both SHP and hospitals. Nevertheless, during the time of severe bleeding and infection, some of the women took medicine from ANMs at home. Majority of the women have a low perception of risk of the

postnatal phase. This can be explained on the basis of HBM model, women see the risks are not so severe to motivate them to use PNC services available at SHP. On the other hand, traditional practices of postnatal care have positive association with rare occurrence of postnatal complication that make decide against seeking health care.

Factors shaping the recognition and the importance of risk.

Socioeconomic factors

The women are aware that lack of money leads to a poor diet and that weak body is susceptible to complications during pregnancy, childbirth and the postnatal phase. Socio-economic factors have appositive influence on practicing home delivery. This is closely related to the findings of Wagle et al. (2004) that low socio-economic status of the family is more likely to be the reason for home delivery because it is cheapest and comfortable. Hospital costs discourage women to visit hospitals. Although the service is free of cost, travel, laboratory and medicine cost are still not affordable.

While analysing the etic view of the health professionals, women's attitude and practices, education, age, experience and socioeconomic status are positively associated to the risk perception of women. A study by Mrisho et al. (2007) gives the similar interpretation of the findings from Tanzania, where risk perception with severity is strongly associated with socioeconomic factors such as lack of money, lack of transportation, sudden onset of labour, available health services and medical professionalism, tradition and culture and decision-making power of women within the household to choose the place of delivery. This study comes close to the conclusion of Mrisho et al. (2007) that women's preference for home delivery is largely influenced by the traditional practice and risk is perceived to be an outcome of fate. Many of them stated that the road, transport and long distance are barrier to use of health professionals at health facilities. However, these factors are not only the reason for fewer visits to SHP, hospitals and PHCC. Women visit health post when they encounter complications, which is beyond the level of SHP. That is when hospital visits are deemed necessary despite the long-distance.

Luck and fortune and faith in God

The women interviewees are strong believers in fate or luck and in the grace of God. They use this in weighing risks and complications and their association their health practice. The impact of customary beliefs in luck, fortune and the role of God can be described by O'Connell and Downe (2009) as the belief in fate that leads to how a person tends to be committed in following the cultural and traditional practice automatically, leaving individuals with no choice but to practice what they are doing.

The emic view of woman taking care of pregnancy and childbirth in traditional way at home and understanding of risk as the outcome of fortune has positive association with low perception of risk. Therefore, they are less likely to seek for professional care during the prenatal period, low utilization of health professional during delivery, and low utilization of SHP and the hospital.

Education and experiences

The level of Education had influence on the women's risk perception and health practice. High education level and informal education regarding safe motherhood from FCHVs and ANMs develop the susceptibility of risk and visit for ANC, however it has less influence on the women during childbirth and the postnatal phase. For this susceptibility is there, but the severity comes late when they come with complications. HBM explains that combined levels of susceptibility and severity provide the energy or force to act and the perception of benefits (minus barriers) provide a preferred path of actions. A study from Pakistan by Agha and Carton (2011) suggests that the use of ANC is higher than the use of PNC and the women with primary or higher education are more likely to have an institutional delivery. On the other hand this study confirms that the multigravida women with low education are more likely to perceive risk and be worried with the complication than Primigravida or better-educated women. This is also supported by the study conducted by Bolam et al. (1998) stating that these two factors have positive association with home delivery

Agha and Carton (2011) reported that women are less likely to deliver at a health facility because they had previous experience at an institutional delivery because of unpleasant experience with the health professionals. This is contrary to the findings of this study, because in this study, health centres and health professionals are not cited as reason for the low utilization of the health centre. The health professionals had a positive impact on the use of health services during different phases of pregnancy. The ANM developed a seemingly effective strategy to provide iron/folic acid up to the next ANC visit so that the women would come for next ANC check-up.

Factors influencing women's decision to seek care

No risk perceived

Traditional pregnancy care at home is perceived by women to be more convenient and thus they are less likely to perceive the risks attached to it and the importance of seeking medical help. The reason for not availing the services of health professionals is the perception that the services are not needed. ANMs are available in the SHP or at home service, but the pregnant women of the village do not approach them until they

encounter actual complications. Unless there is any serious obstetric emergency, they do not perceive that professional health care should necessarily be sought. This supports the works of Gayen and Raeside (2007) who found that health professionals are often not considered unless there are any emergency.

Female autonomy

The risk perception and decision making are strongly associated with the women's decision-making power in the household and health care matters. Agha and Carton (2011) recognised that women's decision-making power in the household affects the use of ANC services. High level of women's autonomy results to a high level of use of medical facilities for the delivery than those with low level of women's autonomy. In relation to this study, most of the women are unrestricted to make a decision for internal care service in comparison with childbirth and the postnatal phase, which is associated with attending ANC services. This is because the ANC requires less effort from the side of the patients and costs less compared to delivery and PNC. It is less likely that risks are perceived or that management of risks is addressed beforehand.

By the time the complication occurs and needs the decision, it is often the husband or the older female in the family who makes decisions. The younger female tends to exert influence indirectly. It is possible for the husband and the entire family to leave the women who makes final decision alone. In this regard, the women make decision with their husbands and mothers-in-law in choosing a place and assistants for delivery. Most women have low decision-making power. Thapa and Niehof (2013) explained that women are less empowered to make household decisions, even in seeking for medical services by themselves. It is rooted from the culture that women are obliged to respect their husbands and mothers-in-law and consider them in making decisions related to maternal care.

Low level of education and early marriage of women are factors that contribute to their disempowerment making them depend on the family for healthcare decisions. Women cannot just decide without considering the reaction of older members of the family and the consequences of her decision. The self-efficacy component of the HBM model explains that a person thinks of the outcomes of the behaviour so as to execute the behaviour successfully. The study by Mullany (2006) which incorporates the HBM, states that self-efficacy of the women is greatly affected by their role in the family and social construction of her power in decision making.

Past experience, embarrassment and gravida

The other reason women prefer home delivery is because they would like to avoid gossips about their way of dealing with pain during labour, causing them extreme embarrassment. This factor has a negative impact on the use of health care. Despite this, a few women have practiced health centre delivery and have taken help from the trained birth attendants at home. These are the women who experienced certain pregnancy related problems in the previous delivery or encountered problem during the ANC. The multigravida women perceive the threats from the previous experiences and opt for institutional delivery. Therefore, embarrassment and past experiences have positive association to risk perception and in choosing a person and place during childbirth.

Physical barriers

Road condition, vehicles and cost and distance also have some influence on people's willingness to use roads to access health facilities. According to the study conducted by Parkhurst et al. (2006), in countries such as Bangladesh and Uganda, some barriers to the use of professional maternal health services have been identified. The distance to the nearby health centre, lack of vehicle, and cost of the service are found to be most influential. In connection with these findings, the results of this study also indicate that the geographical imbalance and distance to PHCC and hospitals, limited access to vehicles, transportation and health care cost have major impacts on low utilization of health services. These factors have a small influence in the use of ANC because of the availability of the SHP in the village. Nevertheless, at the time of emergency, these factors have large influence especially where medical facilities difficult to access. Transportation barriers are often overcome by the use of local intermediate means of transport, which are still not well developed in the study area. However, identifying transportation does not necessarily signify the difference in seeking for medical help. But seeking help during the time of emergency even worsen the condition of the women. Barriers related to the availability of stretchers, to transportation, ambulance and their costs and availability have a moderate effect on decision making of women, thus lowering the use of institutional delivery.

Fate and fortune and grace of god

The reason for choosing home delivery without trained attendants is largely influenced by the emic view of women in line with their beliefs in luck and fortune. The women expressed that childbirth as a natural phenomenon is from God’s grace especially when it comes to having a safe delivery. For them, risk is inevitable but the complication is in the hand of God. This confirms the findings of Paul and Rumsey (2002) that childbirth is

a natural event and prevention of complications for healthy childbearing is an act of god. HBM explains that until the risk is perceived as severe, it does not become a priority if they are not perceived as severe threat. For this reason, they do not expect delivery complications or problems and therefore use family and relatives for assisting in childbirth, and the TBAs and Traditional healer during complications. Family and relatives are invariably known and trusted members of the community and are also highly accessible and affordable. TBAs, nurses, doctors and staff at hospitals/clinics are most likely to be considered as outsiders in the locality.

Relation between women's perception of risk and decision to seek care

Caste and ethnicity

Suwal (2008) states that understanding of risk is different in different ethnic groups. Thus, belonging to lower castes and disadvantaged groups influences the utilization of health services during the pregnancy and childbirth phases (Karkee et al., 2013). Similarly, Shrestha (2010) found that caste and ethnicity in Dolakha to be major influencing factors on attitude and practice of women in achieving good maternal health. In contrast with this study, other caste groups are not significantly different from the low caste groups and indigenous groups in terms of perception of risk and practice of maternal health care. The reason behind these contradicting findings from Shrestha (2010) in a similar district can be because of the fact that this study was unable to cover the large sample population, therefore this finding cannot give the general overview. On the other hand the researcher believes that intercultural and intercaste marriages[3] are largely practiced in the particular village. This shows a balance when it comes to influence of caste in health practice. Rather, what influence the utilization of ANC services are time and load of household work, formal and informal education, and degree of family support. Moreover, almost all women, regardless of the cast and ethnicity, have the same kind of practices of preferring home delivery with help from family and/ or neighbours.

Birth preparedness

This study contributes to the proposition that birth preparedness package can enhance the antenatal care utilization from the SHP, which is supported by the Health Belief Model. Women have seen the benefit of using ANC. However because of certain barriers such as distance, time and busy schedule, the perception and intentions are not always translating into actual behaviour.

[3] Inter caste marriage was found in many household between Thami caste (disadvantage group) and Thapa caste (advantage group).

Few women (two respondents) believe that hospital delivery is important. It is because they can manage potential complications if any. Among the respondents, no one stated that trained birth attendants are essential for normal delivery at home even though they are easily available to them. ANMs are an option for the management of complications. They even come in second and third in the list after TBA and traditional healer during emergency. This confirms the findings by Karkee et al. (2013) about birth preparedness that even though women are aware of the importance of skilled birth attendance, quite a few had actually delivered with assistance from skilled attendants. However, both studies found that the common factor for not getting help from trained attendants at birth is women's strong preference for home delivery except in cases of emergency. The availment of services of skilled birth attendants whether at home or at the SHP/ Hospital can enhance the PNC services. Some degree of susceptibility is there, but it is not yet treated as the priority. According to the findings by Khanal et al. (2014) and Paudel et al. (2013), use of ANC, and delivery by health professionals may rise postnatal services in Nepal.

Other components of birth preparedness strategy are less likely to be taken by women. Women see traditional practices with emphasis on the provision of postnatal care during the postnatal phase as preparation for the birth. To save money on food, buying the ghee and goat s or chickens for the postnatal phase are part of birth preparedness. Therefore, the birth preparedness package is not yet well understood and executed by the women. However these are considered significant progress in ANC, which is strongly associated with the findings of Brunson (2010) which state that the perceptions of pregnancy and childbirth as a natural phenomenon which does not require preparation is a major challenge for the birth preparedness strategy in Nepal.

Delay

According to the analysis of the emic view of the women and the etic view of the health professionals, delays in decision making of the women in seeking for health care lead to complications. Decision-making is often delayed at household level.

1. Women said that they do not pay attention to dangers and risks until there is an emergency. They are less likely to perceive pregnancy-related risks, complications and lack of birth preparedness practices that could lead them to delay decision-making. Their strong beliefs on fate do not let them practice the use of available resources by timely decision-making. Factors mentioned under the heading of factors influencing women's decision to seek care (p 46-49) have an influence on the women's understanding on giving importance to the perceived knowledge and

putting them into practice. The traditional practice of home delivery and lack of assistance from a trained person lead them to increased risks and delay their decision making process.

2. Delays occur in choosing the right person and the right place for the management during the complication. ANMs are the only skilled persons in the community, and making the decision to seek care from the ANM after the unsuccessful visits to TBAs and traditional healers only make the risk more severe. When complicated cases reach the emergency status, ANMs are not able to handle the case at community level and thereby refer the case to the hospitals. Physical barriers again delay their access to the health centre. This long chain of procedures slows down emergency obstetric management.

The findings of the study suggest that the first delay has strong associations with the risk perception and decision making of seeking health care of the women. According to Barnes-Josiah et al. (1998), in Haiti, lack of confidence and trust in available medical services are the reasons for delayed decision to seek for care. In this study the most of the women are less likely to perceive severity of the risk. Their belief of fate and trust in God to save lives without parallel action from their side does not lead them to seek medical help. This also supports the findings from Shrestha (2010) in the similar district who found that under-estimation of the severity of the complications and lack of family support have impact on the delay in seeking medical help by the women. Hence, both of the studies suggest that the first delay has a strong association with the perception of women seeing the risks as less serious to seek for care. The delay is further lengthened by socio-cultural and physical barriers in reaching appropriate health services (the second delay) such as distance to PHCC and hospitals, cost of transport and health services, geographical imbalance, lack of family support, and lack of money. These findings are also explained by Shrestha (2010) citing factors such as lack of transportation, prolonged transportation, seeking care at more than one medical facility as well as delay in receiving prompt care, lack of money for transportation and health services can cause delay in reaching an appropriate medical facility.
Expanding the birth preparedness strategy and the use of ANMs either at SHP or at home to provide good quality care is necessary. The improvements in SHP utilization during ANC and childbirth can reduce the consequences of the second and third delay as well.

This study is a building block for the creation of larger survey, therefore, one cannot have a statistically significant association with a study that covers a limited area.

5.2 Conclusion

The importance of risk perception of women related to sociocultural determinants and their influence on decision-making for health care is reported in different studies (Suwal, 2008, Brunson, 2010, Karkee, 2011, Waiswa et al., 2010). This study tries to assess the factors associated with risk perception and their influence on decision-making. This may be responsible for the delays in seeking for biomedical care. The hypothesis culled by the researcher is that the socio-cultural factors and practices of pregnancy, childbirth and the postpartum phase have positive association with the risk perception of women, thus affecting seek medical care. Undermining these risks makes the women less likely to seek for medical care. Table six shows the major findings on risk perception from the emic view of women and from the etic view of ANMs and FCHVs.

Table 6: Risk perception from emic and etic view in different phases of pregnancy.

Risk perception	Emic view of Women	Etic view of ANMs and FCHVs
The Antenatal phase	1. Nutrition: women give importance to the good nutrition during pregnancy for the health of both the mother and the baby. They are aware that lack of good nutrition makes them weak and may cause bleeding during pregnancy. Therefore, lack of nutrition is susceptible to increased risks during pregnancy. 2. Birth preparedness: is perceived by the women as preparation of good food and oil massage for the mother to recover faster after childbirth. This is rooted in tradition, and does not match with the biomedical model.	1. Women are aware of the importance of iron capsules and T.T vaccine. Thus they see the benefits of using ANCs. ANC utilization is higher than the childbirth and the postpartum phase. This is related to the availability of the service at the community level at SHP and the effort of FCHVs on awareness of maternal health care services. 2. FCHVs do a lot of work to promote women's awareness about birth preparedness focused on delivery by trained professionals to prevent the risk and complications, yet the women seem to not consider the need for medical services, except for the ANC, which is not enough to prevent the risk.
The Childbirth phase	1. Delivery practice is largely influenced by traditional practice at home by the family and relatives. This is because of familiar surroundings, convenience at	1. Few women prefer hospital delivery. They are those who had experienced problems in giving birth to their previous child and during ANC.

	home, and the preference of women to not involve people other than family and neighbours to avoid the embarrassment. 2. Physical barriers such as vehicles, cost of transport, and distance to health centres are the factors for not going to health centre and not availing services of trained professionals. 3. Childbirth at home is safer, and until there is complication risk is not seen as risk.	2. In contrast, physical barriers have moderate effects, but their preference to home delivery and belief on fate has a strong role in deciding against the use of health facilities and services of trained professionals. 3. ANMs are available at SHP or at home but they are called only at the time of complications, and when family, traditional healers and TBAs fail to manage.
The Postnatal phase	1. Post-natal risks are seen from the emic perspectives, and the postnatal phase is done in a traditional way. The women take rest at their maternal homes during the postpartum period to help them recover faster. They believe that this way would help them avoid complications and less likely to need medical care. 2. Nutrition is perceived as important factor in order to prevent potential complications and to ensure fast recovery during the postnatal phase.	1. Women's education, faiths in god, past experiences, belief in fate and the traditional practice of postpartum care have a positive association with the perception of risk and preference of care. 2. With high nutrition and plenty of rest, postnatal complication is less likely to happen. Therefore, it is often neglected, until women get severe bleeding, fainting and infection.

Both the views of women and health professionals, this study concluded that a delay in the decision of women in seeking health care have positive association with risk perception. The women are less likely to perceive pregnancy related risks as serious. The lack of birth preparedness practice leads them to delay decision making at the time of emergency.

Nepalese women, their families and most of their communities greatly appreciate the traditions of care of pregnancy, childbirth and the postpartum phase. Their traditional beliefs profoundly shape women's views of risk, influencing decision making and the use of health care. This intense cultural based view of risk during pregnancy, childbirth and the postpartum period do not match with the medical view of risk. Taking into account the socio-cultural determinants, health professionals should associate with local women's cultural beliefs, and provide locally based health care for mothers. Women will

be more likely to attend maternity care services within their spiritual traditions and practice, making medical care more accessible.

Moreover, the barriers related to transport have an effect on the low utilization of health services. These barriers must be addressed as part of health interventions, either by providing transportation to PHCC and hospital, by reducing the travel expenses or by establishing a birth centre at SHP. However, efforts should be made to design interventions, to increase the use of a trained person during childbirth and the PNC. Interventions need to increase awareness of pregnant women on the importance of acquiring assistance of trained health practitioners during childbirth and the use of PNC after delivery. Expanding the coverage of existing referral networks, improving community recognition of obstetric emergencies, and improving the ability of existing medical institutions to deliver quality obstetric care, are all necessary. However, services will continue to be under-utilized if women and their families perceive them as not needed. The current study suggests that improvements in the level of perception of women and reduction of physical barriers to achieve the health services will have impact in improving maternal health.

5.3 Recommendations

Based on the findings of the study, some recommendations could be formulated. It is difficult to generalise the findings based on the small coverage of this qualitative research. However, this study points out that the risks are perceived as serious at the time of emergency, therefore health care seeking behaviour is profound for obstetric emergency.

- Improving maternal health requires a number of strategies. The most important of these strategies is that both traditional and modern treatments should go hand in hand in the same institution to ensure the maximum effectiveness of both traditional and biomedical modes of care. Hence partnership with the government, NGOs and INGOs and local community is necessary for the effective intervention and expected outcomes.
- Community-based interventions are required to improve skilled attendant during delivery. The traditional practice of care during delivery and postnatal care practices need to be addressed by culturally acceptable community-based health education program. This is to increase likelihood of having a skilled attendant during delivery, recognizing danger signs, and timely referral to appropriate health facility. It is practical to involve trained TBAs who are familiar with the practices of women.

Maternal health can be improved and women preference of home delivery can also be maintained.

- Reduce early marriage and encourage women's education. Increasing the education level means also increasing the awareness of women in giving importance to health care. This may contribute to women empowerment so that they can make decisions by their own regarding health service utilization.
- Birth in Nepal mainly takes place at home, on the basis of this study. Enhancing the birth preparedness program to increase the frequency of the ANC through awareness programs, provision of trained midwives during childbirth at home or establishment of birthing centre in nearby SHP are seen to improve maternal health status of women.
- Lack of planning for birth or obstetric complications and delayed decision making at the household level hinder access to obstetric emergencies. Therefore, health education and awareness program regarding safe motherhood are seen to minimize these barriers, which also need follow up and monitoring.
- Women trace the susceptibility and risk from lack of nutrition during the three phases of pregnancy. Therefore nutrition oriented community-based program can improve the maternal and child health through the government, NGOs / INGOs.
- Younger women have high perception of risks and hence, this can be a stepping-stone in the implementation of birth preparedness.
- On the basis of this study, a large sample quantitative research can be done, which can be useful in policy making.

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Annex I

Interview guideline for in-depth interview and key informants

i. Age:
ii. Education level:
iii. Week of gestation/Time of delivery:
iv. Number of children:
v. Gravida:
vi. Caste:

1. Risk perception of women
    a. What is
        i. Pregnancy
        ii. Safe delivery
        iii. Postpartum?
    b. What do you think about the risk of
        i. Pregnancy,
        ii. Childbirth
        iii. Postpartum?
    c. Do you know the danger sign is occurring during
        i. Pregnancy,
        ii. Childbirth
        iii. Postnatal?
    d. Do you think your pregnancy and childbirth is / was safe?
    e. If yes, why do you think it is / was the safer
    f. If not, why do you think it is / was the safer

2. Factor shape women's recognition of the existence of the risk.
    a. What do you think about the causes of the risk of pregnancy and childbirth and the postpartum phases?
    b. Do you think that the risk and death during pregnancy, childbirth and postnatal complications because of your faith or is there something else rather than biomedical causes, such as the power of god, witch, cultural explanations of risk.
    c. Are / were you experiencing some complications of pregnancy?
        i. If so, what do you think the reason for this complication?
        ii. If not, why are you safe from the complication.

3. Factor shape women's recognition of the risk as important

    a. Do / did your antenatal follow-up, if so, with whom and why you need this? If not, why not?

    b. Did you have training and education regarding safe motherhood?

    c. Who you choose for your delivery? (Close relative, TBA, midwives, or health care provider). Why did you choose them?

    d. Do you think pregnancy and obstetric complication could be saved if they are supported by health professional on time? During childbirth if so, how did you know? If not, why not think so?

    e. Do you agree with the old generation of the mother's perception (risk) pregnancy and childbirth, or do you have a different opinion on it?

4. Factor influencing women decision to seek care

    a. Do you think health professionals are better for your health in terms of providing health care? Are they reliable?

    b. Do you have any good / bad experiences with the health and health care provider about the safe motherhood?

    c. Have to decide on your own based on your understanding of risk? If so, how do you take decisions and implemented, if not, what factors interfere you on making the decision, such as for prenatal care, birth preparedness, postnatal care etc.

    d. Does your husband and family agree with your opinion toward risk perception, or do they support you if you're looking for biomedical care?

    e. What are the factors that you should consider before making a decision?

    f. How your family supports you during pregnancy and childbirth?

    a. What are the factors you see barrier to make a decision regarding health care.

    g. Do you think you should have Knowledge about pregnancy care If so, how do you think you are able to enhance your knowledge, if not why do not you feel so?

5. The correlation between factors that shape women's recognition of risk and decision to seek care

    a. What factors are responsible for complication during pregnancy and childbirth?

    b. How do/did you manage the situation if encounter any during pregnancy, childbirth and the postpartum phase?

    c. Do you think that women's health cares are influenced by social and cultural construction?

Note: The discussion topics with key informants and in-depth interview were not markedly different, so not included differently.

Annex II

Information details of the in-depth interviewee

Respondents	Age	Education	Ethnicity/ Caste	Maternal Status	Gravida
A	20	7 grades	Thami	Delivered in the last year	Primi
B	18	8 grades	Basnet	Pregnant	Primi
C	34	Never been to school	Thami	Delivered in the last year	Multi
D	25	9 grades	Thami	Delivered in the last year	Multi
E	30	Never been to school	Thapa	Pregnant	Multi
F	37	Never been to school	Thami	Delivered in the last year	Multi
G	30	Never been to school	Thami	Delivered in the last year	Multi
H	19	12 grades	Thami	Delivered in the last year	Primi
I	29	Bachelor	Thapa	Delivered in the last year	Multi
J	28	6 grades	Basnet	Pregnant	Multi
K	40	Never been to school	B.K	Delivered in the last year	Multi
L	24	Literate	Khadka	Delivered in the last year	Multi
M	23	4 grades	Khadka	Pregnant	Multi
N	22	10 grades	Shrestha	Pregnant	Multi
O	22	5 grades	Thami	Delivered in the last year	Multi
P	30	Literate	Khadka	Delivered in the last year	Multi
Q	30	Literate	Thami	Delivered in the last year	Multi
R	20	7 grades	Shrestha	Pregnant	Primi
S	24	4 grades	Thami	Pregnant	Multi
T	22	8 grades	Thapa	Pregnant	Primi
Total	20				

Annex III

Cover letter

Respected Madam,

Namaskar.

My name is Susma Thapa. I am a student of the MSc in Health and Society at the University of Wageningen, Netherlands. I'm working on an academic study as partial fulfilment of my MSc degree by topic "risk perception of women about pregnancy, childbirth and postpartum and its association to the delay in the decision to seek help." The study is being conducted in Dolakha district among the women who conceived during the last year. You are one of the targeted participants selected based on the inclusion criteria of the study. So I request you for your precious time to participate in this study. You will be asked your opinion regarding risk perception of pregnancy, childbirth and postpartum, and what factors (not) influence you in decision making for seeking care. It will take about 30 to 40 minutes to complete the interview. We will assure you that only those directly involved in this study will have access to the data and your personal information will be treated with high confidentiality. Although the study will not give you any direct benefit this research, but may help to understand the woman's perception that influence on decision-making and perhaps contribute to maternal morbidity and mortality your participation is voluntary and you may withdraw from this study at any time.

Do you want to participate in this study?
Can we precede the interview?
Thank you for taking part in this study.

Susma Thapa
MSc Health and Society
Wageningen University

Annex IV

Some snapshot of field visit

Interviewing with the women

interviewing with the women

Interviewing with the women

Interviewing with the women

Young mothers of the village with ANM

disadvantage group (Janajati Thami)

Landscape of the village

Hanging Bridge over the river

Yong mother of the age 18

Interviewing with an old age woman

ANM of Lapilang VDC

District headquarters of Dolakha, Charikot