

CHAPTER - ONE

1.1 Background of the Study

Women constitute more than half of the total population in the world. They have great responsibility in the society. Nature has gifted women a capacity of bearing children. This child bearing capacity is completely a biological process and depends on women's physical state.

Safe motherhood means creating the circumstances within which a women is able to choose whether she becomes pregnant and if she does, insuring that she receives care for prevention and treatment of pregnancy complications that she access to trained birth assistance, and if she needs it to emergency obstetric care, and after birth to prevent death or disability from complications of pregnancy and childbirth (MoH, 1998).

Safe motherhood is defined as the care of mother during pregnancy, delivery and after delivery and also the care of newborn. Safe motherhood aims to develop quality maternity care and to reduce maternal mortality and neonatal mortality. Maternal mortality and morbidity is one of the strong indexes of country's health level and achievement. The trouble tolerated by Nepalese mother is so painful. One of the causes of social injustice fertilized by our tradition, customs and other developmental factors is the issue of safe motherhood (Pokharel, 2003).

International conference on population and development held in Cairo in September 1994 focused global attention on reproductive health. Reproductive health in the ICPD document is defined as,

"A state of complete physical, mental and social well being and not merely the absence of disease or infirmity in all matters related to the reproductive system and its function and processes." Reproductive

health therefore, implies that people are able to have a satisfying safe sex life and that they have the capability to reproduce and the freedom to decide if when and how often to do so. In order to exercise that freedom, reproductive health requires access to both family planning as well as access to health care for safe pregnancy and childbirth (UN, 1994).

The global safe motherhood initiative was launched in 1987 in Nairobi to improve maternal health and cut the number of maternal deaths in half by the year 2000. The initiative seeks to reduce illness and death related to pregnancy by ensuring that women have the best chance of having a safe pregnancy and delivery and a healthy baby. The ingredients necessary for making motherhood safer include prenatal care, safe delivery, postnatal care, family planning and good nutrition. Also essential is information to raise awareness among pregnant mothers and their families about the importance of maternal health care and family planning services (Pathak, 2001).

Worldwide, nearly 600,000 women die between the ages of 15 and 49 every year as a result of complications arising from pregnancy and childbirth. The poor health and nutrition of women and the lack of care that contributes to their death in pregnancy and childbirth also have an impact on the health and survival of the infants and children they have behind. It is estimated that nearly two thirds of the 8 million infant deaths that occur each year result largely from poor maternal health and hygiene, inadequate care, inefficient management of delivery and lack of essential care of new born (WHO, 1999:1).

Every minute of every day at least one woman die from complication of pregnancy and childbirth, accounting more than 585,000 deaths every year. Every day more than 31,000 children under age five die in developing countries, more than 11 million children every year. Respiratory infection, diarrhoea, malaria, measles and malnutrition are the major causes of children's death of

developing countries, yet there some disease rarely kills children in more developed countries (UNFPA, 2000).

Maternal death and injury rates throw into sharp relief the impact of poverty and gender in equity on reproductive health. Every minute one woman dies needlessly of pregnancy-related causes. This adds up to more than a half million mothers lost each year-a figure that has hardly improved over the past few decades. Another eight million or more suffer lifelong health consequences from the complications of pregnancy. Every women, rich or poor, faces a 15 percent risk of complications around the time of delivery, but maternal death is practically nonexistent in developed regions. The lack of progress in reducing maternal mortality in many countries highlights the low value placed on the lives of women and testifies to their limited voice in setting public priorities. The lives of many women in developing countries could be saved with reproductive health interventions that people in rich countries take for granted. (UNFPA, 2005)

In Nepal safe motherhood programme was initiated since 1994 and has been extended in ten districts representing five development regions (MoH, 2000). Safe motherhood has been identified as a priority programme in the National Health policy. Nepal has its reproductive health components outlined in Cairo. However, the Family Health Division needs to determine which set of interventions it can realistically provide (Pathak, 2001:6).

Health is very important factor to measure the development of nation. In our country most of the people are living without minimum health care facilities in the rural areas. Although the national health policy has declared that one sub health post will be established for per VDC, integrated health post each Ilaka, one primary health care center for each electoral constituency level has and one district hospital in the every district the country, these health care facilities

are not being functioned appropriately because of the lack of health manpower, proper equipment and budget mechanism. So health status of the people of the country is going to decrease day by day.

Nepal is one of the least developed countries of the world with 85.8 percent rural population and still in the early expanding stage of demographic transition with a high birth rate and declining death rate. The CDR and CBR were 9.9 and 33.6 per 1000 population respectively. The estimated TFR was 403 and infant mortality was 64 per 1000 live births in 2000 (PEM, 2000). In 2002, the CBR and CDR were estimated 32.5 and 9.3 per 1000 population showing failure of population control. The TFR is estimated 4.1 per women, maternal mortality estimated is found to be 539 per 100,000 live births (CBS, 2002)

Maternal health is one of the major issues of reproductive health. Maternal mortality is the reflector of the socio-economic development of the country. Nepal has one of the highest maternal mortality rates in the world. Many of the mothers here die because they don't get basic treatment before, during and after delivery. The matter of male involvement in safe motherhood is the most crucial aspect for saving women's life. Many of the women are compelled to die because of late transportation to health facility when they are in delivery problem. Similarly, antenatal and postnatal visits are also comparatively lower in Nepal. Particularly, postnatal visit is lower than antenatal visit. Delivery care and care during pregnancy are other major aspects of maternal health. About 90 percent of births are delivered at home and very little of births are assisted by health professionals. Based on these all facts it is necessary of investigate the involvement of men in maternal health because husbands are the nearest supporter for wives and almost all the time they live together (Pokharel, 2003).

Safe motherhood initiative was developed globally as a result of unacceptably high maternal mortality in many developing countries. Women status is very poor in Nepal. Nepal women face discriminatory treatment in the family and society. They are passive and treated as unequal compared to male of the family and have almost no access to choice of food and nutrition diet, even during the time of pregnancy only 9 percent of women utilize institutional or modern health care facilities for delivery. The ministry of health's safe motherhood program is the HMG's main thrust to reduce maternal and neonatal mortality by addressing the issue of high rate of death and disability caused by the complications of pregnancy and childbirth MoH has celebrated the world Health Day 2005 April 11 by the Nara "Mothers and Child Important", "Aama ra Bacha ko Mahatto."

A commitment to reducing the death, illness and long term disability that occurs as a consequence of pregnancy, and to the promotion of good health for mothers and their babies, is an essential part of tackling the disparities between women and men. It is a prerequisite for achieving the rights of women that articulated at the Vienna, Cairo and Beijing conferences. International development means a firm commitment to safe motherhood.

1.2 Statement of the Problem

Health problem is the major problem of the world. Maternal health care problem is one of the burning issues in our country. Poverty, lack of education and poor health morbidity. Maternal health care practice is an important component which aims to save the mothers life and to improve the health status of women in Nepal, health status of women is lower than men. Nepal is a country with lower life expectancy of female than male. Various types of private and governmental health agencies have started to launch the programmes for improving the health status of mothers. But satisfactory results have not been achieved yet.

Maternal mortality is one of the major causes of women's death. Maternal mortality ratio is higher in developing countries than developed countries. Nepal's maternal mortality is highest in the world which is serious problem for our country. In Nepal per day 12 person women's death by complication of delivery. Every two hour 1 women death by pregnancy complication and 64 child death per 1000 live birth under 1 month (WHO, 2005).

Demographic and Health Survey (2001) reported the percentage of women receiving antenatal care services from health professionals in 28 and overall 50 percent pregnant women received antenatal care from health professionals health assistant (HA), Village Health Workers (VHWs) and trained birth attendances (TBAs). Nearly 90 percent of the births are delivered at home. Majority of deliveries (56%) are assisted by relatives and friends where as no one assisted 11 percent of the deliveries. A large proportion of mother (79%) who delivered outside the health facilities did not receive any postnatal check up. It is the problem why Nepalese women are not getting access to antenatal care, delivery care and postnatal care through it has been emphasizing on maternal health care.

Nepalese mothers have many traditional beliefs, habits, norms, values and customs regarding the maternal and child health care. Their practices are not safe because they do not go for regular antenatal check-up, they attend delivery at home without septic precaution, cut the cord with unsafe instrument and restrict certain food during the antenatal and postnatal period. The Nepalese mother has very low educational status and directly or indirectly it has adverse effect on colostrums feeding, immunization against communicable disease and the use of contraceptives.

1.3 Objectives of the Study

The present study is intended to accomplish the following specific objectives:

1. To identify the knowledge of currently married women of Khimti VDC towards safe motherhood.
2. To find out the attitude of currently married women of Khimti VDC towards safe motherhood.
3. To access the practice of safe motherhood of currently married women of Khimti VDC towards safe motherhood.

1.4 Significance of the Study

Maternal health is a burning issue in country, like Nepal. It is a social as well as economic problem. In our society the condition of maternal health is worst causing high maternal morbidity and mortality rate. The leading cause for this high MMR is lack of knowledge and practices of safe motherhood. This study after completion will be helpful because of the following reasons.

- i. This study will be useful to local people to develop awareness and knowledge towards maternal health care.
- ii. This study will help the national policy maker, researcher and other concerned person to consider in their work relating to safe motherhood.
- iii. This study will also proves to be fruitful for these who are desirous and interested in the situation of safe motherhood practices in Nepal.
- iv. The findings of this study will be useful for planners, policy makers to improve the health status of mothers and to reduce the maternal mortality rate in the study area.
- v. It can also be nourishing for those researcher who want to study the situation of knowledge, attitude and practice of safe motherhood in rural areas of Nepal.

1.5 Limitation of the Study

Due to the lack of sufficient time, financial constraints and the limited time schedule for the M.A. programme the researcher was compelled to limit this study in the following ways:

- i. This study was conducted in Khimti VDC of Ramechhap District.
- ii. This study consisted only women of age 15-49 years who had at least one child of age below 5 years.
- iii. This study was confined to 1 to 4 wards of Khimti VDC, Ramechhap District only, which may not cover the total national figure.

1.6 Organization of the Study

This study is divided into eight chapters. The first chapter comprises introduction of the study, containing statement of the problem, objectives of the study, significance of the study and limitation of the study. The second chapter deals with the review of the related literature and conceptual framework. The third chapter describes the methodology of the study. Similarly, chapter four presents socio-economic and demographic characteristics of the study population. Knowledge about safe motherhood is presented in chapter five. Chapter six includes attitude towards safe motherhood. Chapter seven includes information on practice of safe motherhood and chapter eight presents the summary, findings, conclusions and recommendations of the study, which is followed by appendices.

CHAPTER - TWO

LITERATURE REVIEW

Reviewing the literature is a continuous process. It begins before a research problem is finalized and continuous until the report is finished. During this latest decade many studies about reproductive health including safe motherhood have been done. Moreover, it is useful for exploring what areas of research are still left to be conducted. Some of the literature related to this study is mentioned below.

To ensure that every women has access to a full range of high quality, affordable sexual and reproductive health services especially maternal care and treatment of obstetric emergencies to reduce death and disability is the good of safe motherhood. This vital recognition is raised in different international conferences such as ICPD 1994, world summit on social development 1995, fourth world conference on women 1995 and in the convention on the Elimination of All Forms of Discrimination against women, 1995.

The global safe motherhood initiative was launched in 1987. It is led by a unique partnership of international organizations, including the UNICEF, the UNFPA, the World Bank, the WHO, the IPPF and the population council. These agencies work together to raise awareness, set prioritize, stimulate research, mobilize resources, provide technical assistance and share information according to each organization's mandate. Their corporation and commitment have enable governments, and nongovernmental partners from more than 100 countries to take their own actions to make motherhood safe (Family Health International, 1998).

Maternal mortality is still leading cause of death among women of reproductive age in most developing countries. The WHO estimates that world wide each year at least half a million women die as a result

of pregnancy and childbirth and almost 99 percent of these deaths occur in developing countries. The result is not only a tragedy for the untimely death of the women concerned, but also for their families (WHO, 1998).

Every year, 4 million babies are stillborn. Another 4 million newborn die before they reach the first month of life. As with maternal deaths, 98 percent of newborn deaths occur in developing countries. While there have been significant declines in infant and child mortality in the developing world in recent decades, there has been little progress in reducing the death rate for mothers and newborns. As a result, newborn deaths now represent 40 percent of all deaths among children under 5 years of age (PRB, 2002).

ICP has suggested all countries of the world to take actions on various aspects of population and development. Some of the suggestions related to reproductive health of women are reproduced here safe motherhood has been accepted as a principle strategy to reduce maternal mortality. The objective should strive to reduce the maternal mortality rate below 125 per 100,000 live births by 2005 and below 75 per 100,000 live births by 2015. In order to achieve that target they should try to receive the support of all services of international community in providing primary maternal health services, which include standard nutrition, adequate delivery and nursing assistance, postnatal care and family planning measures. Methods to prevent detect and manage high-risk pregnancies and birth especially among late parity women should be adopted. In no case, however, abortion should be viewed as a method of family planning and prevention of unwanted abortion should be given highest priority. In any case, all women, belonging to every section of society, rich or poor, privileged or unprivileged must have access to quality services for management of complication arising from abortion as well as post abortion counseling and family planning. Finally, high risk sexual behaviors must be stopped and all should recognize the

fact that men share responsibility for sexual and reproductive health including family planning and for preventing and controlling STD/HIV infection and AIDS (UN, 1994).

The estimated number of maternal deaths in 1995 for the world was 515,000 of those deaths, over half (273,000) occurred in Africa, about 42 percent (217,000) in Asia, about 4 percent (2,800) in the more developed regions of the world. In terms of the maternal mortality ratio (MMR), the world figure is estimated to be 400 per 100,000 live births. By region, the MMR was highest in Africa (1,000), followed by Asia (280), Oceania (260), Latin America and the Caribbean (190), Europe (28) and Northern America (21) (World population monitoring, 2002).

Complications related to pregnancy and childbirth are among the leading causes of mortality for women of reproductive age in many parts of the developing world. At the global level, it has been estimated that about half a million women die each year of pregnancy related causes, 99 percent of them in developing countries. The gap in maternal mortality between developed and developing regions is wide: in 1998, it ranged from more than 700 per 100,000 live births in the least developed countries to about 26 per 100,000 live births in the developed regions. Rates of 1,000 or more maternal death per 100,000 live births have been reported in several rural areas of Africa, giving women with many pregnancies a high life time risk of death during their reproductive years. According to the WHO, the lifetime risk of dying from pregnancy or childbirth related causes is 1 in 20 in some developing countries, compared to 1 in 10,000 in some developed countries. At present, approximately 90 percent of the countries of the world, representing 96 percent of the world population, have policies that permit abortion under varying legal conditions to save the life of a woman. Safe motherhood has been accepted in many countries as a strategy to reduce maternal morbidity and mortality (UN, 1994).

Maternal deaths and injury rates through into sharp relief the impact of poverty and gender inequality on reproductive. Every minute 1 woman dies needlessly of pregnancy related causes. This adds up to more than a half million mothers lost each year—a figure that has hardly improved over the past few decades. Another 8 million or more suffer lifelong health consequences from the complications of pregnancy. Every woman, rich or poor, faces 15 percent risk of complications around the time of delivery, but maternal death is practically non-existent in developed regions. In Sub-Saharan Africa, where high fertility multiplies the dangers mothers face over a lifetime, 1 in 16 women is likely to die as a consequence of pregnancy; in some of the poorest parts, as many as 1 in 6 face this risk. By comparison, in industrialized countries the lifetime risk is only 1 in 2,800. Ninety-nine percent of maternal deaths occur in developing countries, almost all 95 percent in Africa and Asia. Unsafe abortions are a leading cause of maternal mortality and result in permanent injuries. Lack of access to family planning results in some 76 million unintended pregnancies every year in the developing world alone. Each year 19 million abortions are carried out under unsanitary or medically unsound conditions. These result in some 68,000 deaths. Research suggests that 1 in 10 pregnancies will end in an unsafe abortion, with Asia and Latin America accounting for the highest numbers (UNFPA, 2005).

In the World Health Report 2005 WHO estimates that out of a total of 136 million births a year worldwide less than two thirds of women in less developed countries and only one third in the least developed countries have their babies delivered by a skilled attendant. The report says this can make the difference between life and death for mother and child if complications arise (WHO, 2005).

In the world 300 million women currently suffer from long term or short term illness by pregnancy or childbirth. The 529,000 annual maternal deaths including 68,000 deaths due to unsafe abortion are

even more unevenly spread than new born or child deaths: only 1 percent countries. There is a sense of progress backed by the tracking of indicators that show in uptake of care during pregnancy and childbirth in all regions except Sub-Saharan Africa (WHO Report, 2005).

The range of health care needs that can arise during pregnancy and the puerperium make the challenge of ensuring access to all women a complex one. In order to study patterns of maternal care utilization, WHO has been collecting data on the use of maternal health care services since 1985 and has built up a vast database on coverage of maternal health care and the barriers to appropriate utilization of services. The available data are derived from a wide variety of sources routine health service reports, special surveys and government estimates. The data currently available show vast discrepancies in coverage of care between the developing and the developed world, between rural and urban areas and between different socio-economic groups. The current global estimates show that in the developing world approximately 65 percent of pregnant women receive at least some care during pregnancy; 40 percent of deliveries take place in a health facility and slightly more than half of all deliveries are assisted by skilled personnel. This contrasts sharply with the situation in development countries where practically every woman receives regular care during pregnancy, delivery and the post-partum period.

The regional estimates show that countries in Latin America and the Caribbean have the highest coverage of maternity care coverage in the developing world. Almost 75 percent of women receive prenatal care and give birth in a hospital or other health facility, and 75 percent have a skilled person attending at lowest for Central America. In Asia, average coverage rates of prenatal care, deliveries in health facilities and deliveries attended by skilled personnel are estimated at 65 percent, 37 percent and 53 percent respectively. Extreme sub-regional variations exist. In Eastern Asia, for example

some 80 percent of women receive prenatal care, and nearly 90 percent have a skilled attendant at delivery while little more than half of all deliveries take place in health facilities. This contrasts sharply with South-Central Asia where 52 percent receive prenatal care, but only 1 woman in 3 has a skilled health attendant at delivery and only 1 in 4 deliveries take place in a health facility. In Western Asia, almost 70 percent of deliveries take with skilled health personnel, but prenatal care coverage is lower, at 61 percent. In South-Eastern Asia, there is generally high prenatal care coverage (79 percent) yet a relatively low rate of deliveries with skilled personnel (53 percent) and of deliveries in health facilities (33 percent). Similarly, there are sharp contrasts in Africa, the region with the lowest coverage for the three indicators. Sixty three percent prenatal care, 36 percent deliveries in health facilities and just over 40 percent with skilled attendant at delivery.

Post-partum care has been a relatively neglected dimension of maternity care. Less than one third of developing countries report national data, and levels of coverage are as low as 5 percent. The lack of reporting on post-partum care is an indication of its low priority and it does not feature in the goals of major international conferences. Estimates based on the limited data available indicate coverage of post-partum care below 30 percent for developing countries and global estimate of 35 percent (World Population monitoring, 1998).

An estimated 209,000 women die annually due to pregnancy and birth related complications in Bangladesh, India, Nepal and Pakistan. Most countries in this region failed to achieve the ICPD goal of MMR. To achieve the ICPD goal of MMR at 100 per 100,000 live births by 2005, all require its reduction from highest 8 percent, for Nepal to lowest 50 percent for the Maldives and averaging 71.7 Percent from rest of the SAARC countries. The maternal mortality ranges from 539 in Nepal to 440 in Bangladesh, 408 in India, 380 in

Bhutan, 340 in Pakistan 200 in Maldives and 23 in Sri Lanka (Chaudhary, 2000).

Two thirds of maternal deaths in 2000 occurred in 13 of the world's poorest countries, and one quarter of these were in India alone (UNFPA, 2005).

South Asian women generally suffer from chronic energy deficit due to an insufficient daily caloric intake, 500 to 700 calories less than recommended. Heavy work loads and energy spent to fight frequent infections increase the energy deficit. Eight or nine of every ten South Asian women are anemic during pregnancy. Diets poor in iron and vitamin C, but heavy in tea intake, prevent the absorption of iron. Anemia increases vulnerability to hemorrhage, a major cause of maternal mortality. Mothers over 35 who are already given birth four times or more have a particularly high risk of hemorrhage during childbirth. Although trained birth attendants are widely available in South Asia, use of their services is well below 50 percent in many areas South Asian women are often powerless to make use of existing maternal health services. Frequent delays in seeking help during childbirth reportedly are often due to the absence of the husband or other male relatives. Lack of knowledge of the complications of pregnancy and lack of access to proper transport also delay the use of maternal health services (UNICEF, 1996).

The maternal mortality is an effective index to the quality of maternity care services in any given country. A national survey conducted in 2001 estimated the MMR at 539 per 100,000 live births. However, small community based in some remote areas of Nepal have been shown MMR of over twice this figure. The most common direct causes of maternal deaths are hemorrhage, sepsis, toxemia, obstructed labor and consequences of abortion. Nepalese mothers have many traditional beliefs, habits, norms, values and customs regarding the maternal and child health care. Their practices are not

safe because they do not go for regular antenatal check-up, they attend delivery at home without septic precaution, cut the cord with unsafe instrument and certain food during the antenatal and postnatal period. The Nepalese mother has very low educational status and directly or indirectly it has adverse effect on colostrums feeding, immunization against communicable disease and the use of contraceptives (Acharya, 2004).

Abortion complication is a major health problem in Nepal because 20 percent of mothers deaths in the health facilities are due to complication of abortion. The maternal mortality and morbidity study 1998 showed that in the community 5 percent of the deaths are due to abortion (Annual Health Report, 2003/04).

Table 2.1: Cause of Maternal Death in Nepal

Pregnancy or delivery related women death per day (in person)	Deliveries related death per 2 hour	Under one year mortality per 1,000	Less than one month mortality per 1,000 live birth
12	1	64	63

Source: WHO, 2005.

In Nepal per day 12 person women death by the complication of delivery. Every two hour 1 women death by pregnancy complication in Nepal. In Nepal 64 child death per 1,000 live birth under one year and 63 child death per 1,000 live birth under 1 month.

Following services are included under safe motherhood

1. Antenatal Care

The maternal health care services that a mother receives during her pregnancy and at the time of delivery are important for the well being of the mother and her child. Overall, one in two pregnant women received ANC Twenty-eight percent of mothers received ANC either from a doctor (17 percent) or a nurse or auxiliary nurse midwife

(11 percent). Another 11 percent of mothers received ANC from a HA or AHW. VHWs provided antenatal care to 6 percent of women and MCHWs provided care to 9 percent of mothers. TBAs provided ANC to less than 1 percent of mothers (NDHS, 2001).

Comparison with the 1996 NFHS results shows that there were some improvements in the utilization of antenatal services during at last five years. The percentage of women receiving antenatal services from a doctor, nurse or ANM has increased from 24 percent in 1996 to 28 percent in 2001. At the same time, the percentage of mothers receiving ANC from a HA or AHW increased from 2 percent to 11 percent. The percentage of mothers who did not receive any ANC dropped from 56 percent to 51 percent over the same period. There are large differences in the use of ANC services between urban and rural women. Overall, 82 percent of women from urban areas utilize ANC services, compared with 47 percent of their rural counterparts (NDHS, 2001).

The utilization of ANC services is positively associated with mother's level of education. Ninety-five percent of women with an SLC and above received ANC services, compared with 39 percent of women with no education. Use of a doctor for ANC increases from 10 percent among uneducated women to 66 percent among women who have completed their SLC (NDHS, 2001).

2. Delivery Care

The objectives of providing safe delivery services is to protect the life and health of the mother and her child by ensuring the delivery of a baby safely. Traditionally, Nepalese children are delivered at home either without assistance or with the assistance of TBAs or relatives and friends. At the national level, only 9 percent of births are delivered in health facilities compared with 89 percent at home. This is a slight improvement since 1996, when 8 percent of births were delivered in

health facilities. A child born in an urban area is six times more likely (45 percent) to be delivered at a health facility than a child from a rural area (7 percent). Children living in the mountain ecological zone are less likely to be delivered in a health facility than children living in the hill and terai zones (NDHS, 2001).

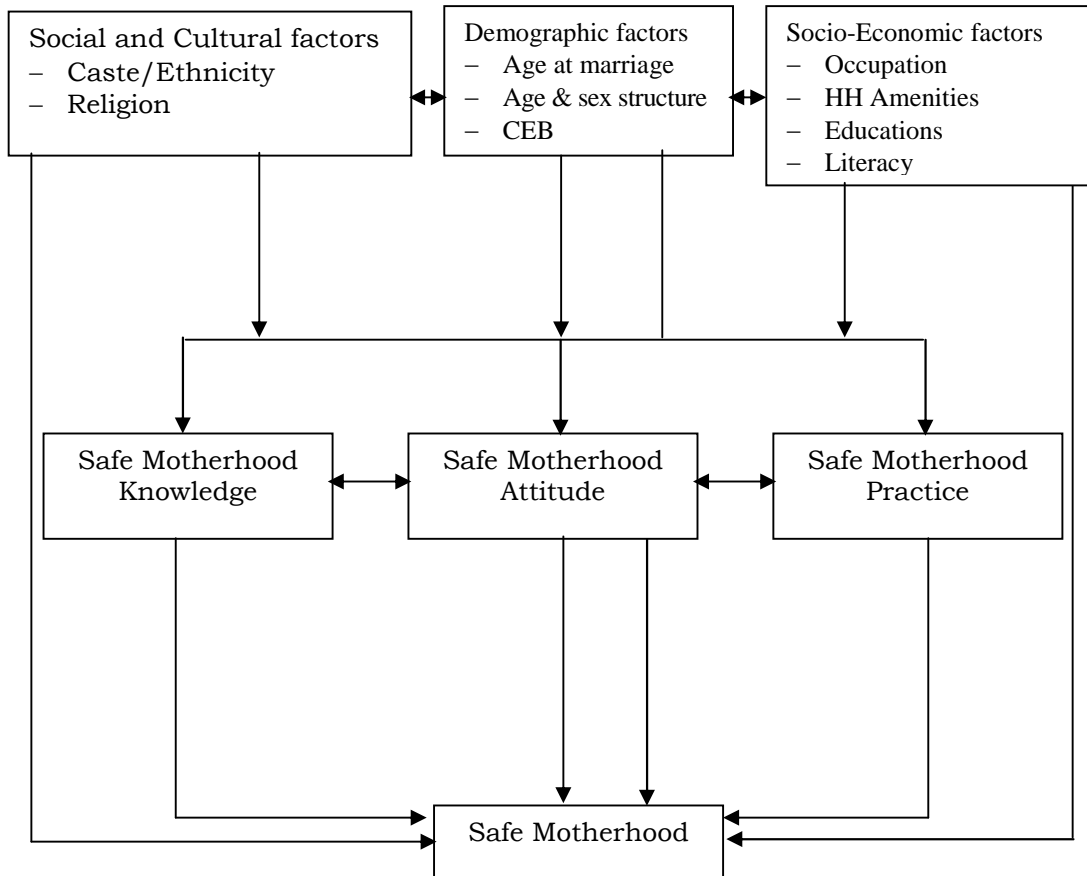
Use of a health facility for delivery increases sharply with maternal education from 4 percent of births among women with no education to 55 percent among children of women with an SLC or higher level of education (NDHS, 2001).

Although TBAs are considered to be less effective in reducing maternal deaths, TBAs continue to play a prominent role in assisting deliveries, especially in rural areas. The contribution of TBAs to providing delivery care remained almost the same over the last ten years at about 23 percent. More than half of births are assisted by relatives, friends and other non health personnel, while about one in ten births are delivered without any assistance at all (NDHS, 2001).

3. Postnatal Care

The National Safe Motherhood program recommends that mothers should have a postnatal checkup within two days of delivery. This recommendation is based on the fact that a large number of maternal and neonatal deaths occur during the 48 hours after delivery. PNC is uncommon in Nepal. Seventy-nine percent of mothers who delivered outside a health facility do not receive any post-natal checkup. Less than one in five mothers receive PNC within the first two days after delivery. PNC utilization varies by place of residence. Rural women are slightly more likely to receive PNC within two days of delivery, compared with urban women (17 percent and 13 percent respectively) (NDHS, 2001).

Figure 1: Conceptual Framework for the Study



CHAPTER – THREE

METHODOLOGY

3.1 Study Area

The study area is Khimti VDC of Ramechhap district. It is situated in North-East part of the central development region of Ramechhap headquarter. It is a hilly region and Pharpu, Dhobi, Nagdaha, Tilpung and Gelu are its neighbouring VDCs. Since large number of the population lived in the rural areas in Nepal who have insufficient access to health, education, transportation and communication facilities, large number of rural women suffers from permanent and/or temporary maternal morbidity and others die.

3.2 Population of the Study Area

The VDC had total of 910 households. Those households had total of 4422 population with 0.86 sex ratio. the major inhabitants of the VDC were Chhetri, Newar, Tamang, Magar, Brahmin (Hill) etc, which are shown in the below table.

Table 3.1: Distribution of Population by Caste/Ethnic Group

Caste/Ethnicity	Total population	Percent
Chhetri	1382	31.25
Newar	978	22.12
Tamang	507	11.47
Magar	425	9.61
Brahmin (Hill)	377	8.53
Sunuwar	184	4.16
Unidentified dalit	128	2.89
Kami	86	1.94
Majhi	84	1.9
Unidentified Caste	75	1.7
Gharti/Bhujel	55	1.24
Sarki	42	0.95
Damai/Dholi	38	0.86
Tharu	21	0.47
Sangyasi	20	0.45
Yadhav	6	0.14
Others	14	0.37
Total	4422	100.00

Source: VDC Reports, 2003.

The mother tongue of those people were found to be Nepali (79.1), Tamang (10.76), Sunuwar (4.0) other (1.79), Newar (1.76), Majhi (1.63) and Magar (0.36).

3.3 Research Design

Research design is the blueprint for any research study. Research design helps to the researcher to follow the certain plans and procedures of the study. This study followed the quantitative descriptive research design. The research design involves structured interview schedule with some open ended questions and modified likert opinnare scales were applied as the tool for collection of the required data in this study.

3.4 Sampling Procedure

Khimti VDC was selected by purposive sampling method for this study. Similarly, 29 respondents were selected from each ward of 1, 2 and 3 whereas 28 respondents were selected from ward 4. In this study 115 ever married women aged 15-49 and who had at least one child aged 5 years or below were selected as respondents.

3.5 Questionnaire Design

The questionnaire designed was the chief instrument in collecting both quantitative and qualitative information. The questionnaire designed consists of mainly two parts, which are household questionnaire and individual questionnaire.

i) Household Questionnaire:

The purpose of designing the household questionnaire is to obtain required household information. It is the chief instrument specially collecting quantitative data. To fill the household questionnaire, the heads of the households were interviewed and information about each member of the household was collected. The

data on number of household members, age, sex, education, occupation and marital status were collected about each member of the household. Information regarding household amenities such as source of drinking water, type of toilet facility, type of house, size of land holding, facilities used by household were also asked with the head of the household.

ii) Individual Questionnaire:

The purpose of the individual questionnaire is to obtain and collect detail information about KAP of safe motherhood from married women of reproductive age (15-49 years) with at least one child of age 5 years or below at the time of survey. In this questionnaire for collecting information on attitude a set of opinionnaire was developed. This part of the questionnaire was further resolved into three parts. These were safe motherhood knowledge, attitude towards safe motherhood and safe motherhood practice (ANC, DC and PNC).

3.6 Sources of Data

The required data for this study was collected from primary source data by applying questionnaires and opinionnaire. And the married women in reproductive age (15-49 years) who had at least one child of age below 5 years in Khimti VDC of Ramechhap district, were the sources of required information.

3.7 Data Processing and Analysis

The data were edited and pre-coded in the field. The collected information was processed with the help of computer using computer statistical package. DBASE IV and Excel were used to convert the data into SPSS/PC format, so that this software package can be used to analyzed the data as per the need of the study. SPSS/PC statistical package was used to examine the KAP of safe motherhood. In order to interpret the data, the researcher used Chi-square test and modified

Likert scale to determine the attitude of currently married women towards safe motherhood . This study also use ratio, frequency tables, cross tables and charts for the analysis which helps to make a systematic study of the problems and attain the objectives of the present study.

CHAPTER - FOUR

SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION

Socio-Economic and demographic characteristics play important role in the development of society. In this chapter, social, economic and demographic characteristics of households are discussed. Socio-economic characteristics include household composition, educational attainment, occupation, size of landholding, sources of drinking water etc. Demographic characteristics include age-sex structure of household population, marital status, family size and age at marriage of the respondents.

4.1 Socio-Economic Characteristics

Table 4.1: Distribution of Sample Population by Religion

Religion	No. of Population	Percent
Hindu	586	86.8
Buddhist	89	13.2
Total	675	100

Source: Field Survey, 2006.

The total sample population was 675. Among those respondents 86.8 percent were Hindu and 13.2 percent were Buddhist.

Table 4.2: Distribution of Household Population by Caste/Ethnicity Groups

Caste Groups	No. of Population	Percent
Chhetri	272	40.3
Tamang	113	16.7
Shrestha	60	8.9
Brahmin (Hill)	54	8
Damai	40	5.9
Sarki	36	5.3
Sunuwar	36	5.3
Majhi	26	3.9
Bishowkarma	26	3.9
Bhujel	12	1.8
Total	675	100

Source: Field Survey, 2006.

Among 675 sample population more than one third was found to be Chhetri which is 40.3 percent. About 16.7 percent are Tamang. Similarly, Majhi, Shrestha, Brahmin (Hill), Damai, Sarki, Sunuwar, Bishowkarma are 8.9 percent, 8 percent, 5.9 percent, 5.3 percent, 5.3 percent, 3.9 percent, 3.9 percent respectively and Bhujels are found to be less than two percent i.e. 1.78 percent which is the least population in the sample.

Table 4.3: Distribution of Household Population Aged 10 Years and Above by Major Occupation

Occupational Status	No. of Population	Percent
Household work	157	41.3
Agriculture	83	21.8
Daily wages	47	12.4
Service	35	9.2
Business	28	7.4
Students	20	5.3
Others	10	2.6
Total	380	100

Source: Field Survey, 2006.

The table shows that the largest population involved in household work which is unpaid as their major occupation. Out of 380 population aged 10 years and above 41.3 percent is engaged in household work, 22.8 percent are engaged in agriculture sector followed by 12.4 percent are earning their livings running business, 5.3 percent are students and 2.6 percent are others which includes social worker, driver, contractors, sewing clothes etc.

Table 4.4: Distribution of Sample Population Aged 5 Years and Above by Education and Sex

Literacy status	Male		Female		Total Percent
	No.	Percent	No.	Percent	
Illiterate	85	32.3	130	61	45.2
Literate	42	16	8	3.8	10.5
Primary	68	25.8	36	16.9	21.8
Lower secondary	16	6.1	16	7.5	6.7
Secondary	37	14.1	7	3.3	9.3
PCL	11	4.2	16	7.5	5.7
Bachelor	4	1.5	-	-	0.8
Total	263	100	213	100	100

Source: Field Survey, 2006.

Above table shows, among 476 population aged 5 years and above 45.2 percent was illiterate among those female were more illiterate than male which was 61 percent and 32.3 percent. About 11 percent population was only literate. Only 16 percent of male population was literate whereas 3.8 percent of female population got an opportunity to be literate. Similarly primary, lower secondary, secondary, PCL level completed 21.8 (25.8 percent of male and 16.9 percent of female) percent, 6.7 percent (6.1 percent of male and 7.5 percent of female), 9.3 percent (14.1 percent of male and 3.3 percent of female), 5.7 (4.2 percent of male and 7.5 percent of female) and less than one percent only male completed bachelor level 0.8 percent of that population (1.5 percent of total male population). Female were not attained bachelor level and this study shows female literacy level is very poor which directly effect on safe motherhood.

Table 4.5: Distribution of Household by Size of Landholding

Area of land	No. of Household	Percent
<2	10	8.7
2.1-4	30	26.1
4.1-6	34	29.6
6.1 and above	41	35.6
Total	115	100

Source: Field Survey, 2006.

The above data shows that 8.7 percent households have less than 2 ropani land followed by 26.1 percent who have 2.1-4 ropani land, 29.6 percent have 4.1-6 ropani and more than one third i.e. 35.6 percent have 6.1 ropani and above land. This study shows more sample population has low living standard due to lack of their own land.

Table 4.6: Distribution of Household by Type of House

Type of House	No. of Household	Percent
Stone with mud joint	84	73
Bamboo joint	20	17.4
Concrete	11	9.6
Total	115	100

Source: Field Survey, 2006.

The above data shows that nearly two third that is 73 percent of households have stone with mud joint home. Similarly, 17.4 percent have bamboo joint home and only 9.6 percent have concrete home among the sample households.

Table 4.7: Distribution of Household by Toilet Facility

Types of Toilet	No. of Household	Percent
Open toilet	71	61.7
Bush field	17	14.8
Flush toilet	15	13.1
Pit toilet	12	10.4
Total	115	100

Source: Field Survey, 2006.

The table shows that majority of households don't have their own toilet. They use open place such as jungle, bank of river etc. Among 115 household 61.7 percent use open toilet followed by bush field 14.8 percent. Similarly flush toilet is used 13.1 percent and pit toilet by 10.4 percent.

Table 4.8: Distribution of Household by Sources of Drinking Water

Source of drinking water	No. of household	Percent
Piped water	48	41.7
Surface/river	39	33.9
Pond/stone	28	24.4
Total	115	100

Source: Field Survey, 2006.

The table 4.8 shows that household's access to drinking water. Most of the households (41.7 percent) have drinking water facility from piped followed by 33.9 percent household who are using surface/river for drinking water and 24.4 percent household are using pond/stone tap for drinking water.

Table 4.9: Distribution of Household by Household Facilities

Type of facilities	Number of Household			
	Yes		No	
	No.	Percent	No.	Percent
Radio	85	73.9	30	26.1
Electricity/solar	28	24.3	87	75.7
Television	19	16.5	96	83.5
Biogas	5	4.3	110	95.7
Telephone	-	-	115	100

Source: Field Survey, 2006.

Among 115 households 73.9 percent households are using radio, 24.3 percent are using electricity/solar, 16.5 percent households are using television and only 4.3 percent households are using biogas. Cent percent households have not access of telephone facilities. This table clearly shows that people have poor life in the study area.

4.2 Demographic Characteristics of Household

Demographic characteristics include age-sex structure, marital status, family size and age at marriage of respondents.

4.2.1 Age-Sex Structure of Household Population

Age and sex composition plays an important role in determining the population distribution of the study area. Every individual has certain responsibilities towards their family and society according to their age. Development of a nation very much depends upon the age group of this population. So age and sex distribution of population plays vital role in planning economic and social development of the country.

Table 4. 10: Distribution of Household Population by Sex and 5 Year Age Group

Age group	Male		Female		Total		Sex ratio
	No.	Percent	No.	Percent	No.	Percent	
0-4	112	29.9	87	29	199	29.5	128.74
5-9	64	17.1	32	10.7	96	14.2	200
10-14	10	2.7	10	3.3	20	2.9	100
15-19	6	1.6	2	0.7	8	1.2	300
20-24	18	4.8	41	13.7	59	8.7	43.9
25-29	58	15.5	70	23.3	128	19	82.86
30-34	45	12	7	2.3	52	7.7	642.86
35-39	11	2.9	2	0.7	13	1.9	550
40-44	2	0.5	2	0.7	4	0.6	100
45-49	8	2.1	27	9	35	5.2	29.63
50-54	17	4.5	6	2	23	3.4	283.33
55-59	6	1.6	8	2.7	14	2.1	75
60-64	8	2.1	4	1.3	12	1.8	200
65+	10	2.7	2	0.7	12	1.8	500
Total	375	55.6	300	44.4	675	44.4	125

Source: Field Survey, 2006.

Distribution of population by sex and 5 year age groups has been presented in table 4.10. From the table it is clear that for both the sexes a higher proportion of population falls in early age groups. The total population of the research was 675. Among them 55.6 percent of the population was male and 44.4 percent was female. The sex ratio of the sample population was 125 which is very high than that of the national sex ratio. The table shows that the distribution of population according to age group and their sex indicates the highest of 29.9 percent of male population fall in age group 0-4 and the highest population of female i.e. 29 percent falls again in the same age group. The lowest percentage of population the male occupies the age interval population which is 0.7 percent of the total population.

4.2.2 Marital Status of the Household Population

In the study area, out of 380 people of aged 10 years and above, 336 people were married for both sex which is 88.4 percent. About 11.6 percent people were unmarried. About 3.7 percent people were found widows/widower of both sex.

Table 4.11: Distribution of Household Population Aged 10 Years and Above by Marital Status

Marital Status	No. of Population	Percent
Single/unmarried	44	11.6
Currently married	322	84.7
Widow/widower	14	3.7
Total	380	100

Source: Field Survey, 2006.

4.3 Characteristics of the Respondents

In this study, one respondent from each household was taken and the total numbers of respondents was 115. Those respondents were selected only to women of age 15-49 years who had at least one child of age below 5 years. This section presents the respondents caste/ethnicity groups, age structure, educational status, occupational status, age at marriage, age at first child birth and children ever born.

4.3.1 Caste/Ethnicity of the Respondents

Table 4.12: Distribution of Respondent by Caste/Ethnicity Groups

Caste groups	No. of Respondents	Percent
Chhetri	46	40
Tamang	19	16.5
Shreshta	12	10.4
Brahmin (Hill)	10	8.7
Sarki	6	5.2
Sunuwar	6	5.2
Damai	6	5.2
Majhi	4	3.5
Bishowkarma	4	3.5
Bhujel	2	1.8
Total	115	100

Source: Field Survey, 2006.

The above data shows that more than one third of the respondents are Chhetri. Among 115 respondents 40 percent respondents are Chhetri, followed by 10.4 percent Tamang, 8.7 percent Brahmin (Hill), 5.2 percent Sarki, 5.2 percent Sunuwar, 5.2

percent Damai, 3.5 percent Mahji, 3.5 percent Bishowkarma and 1.8 percents are Bhujel which clearly shows many caste/ethnic group of people are living in the study area.

4.3.2 Population Composition of Respondents by Age Group

This study is conducted mainly to analyze the knowledge, attitude and practice of safe motherhood services. Informants were married women of age 15-49 years who have at least one child of age below 5 years taken as sample population. Their age distribution is presented in given below table.

Table 4.13: Distribution of Respondent by 5 Year Age Group

Age group	No. of Respondent	Percent
15-19	6	5.2
20-24	74	64.4
25-29	33	28.7
30-34	2	1.7
Total	115	100

Source: Field Survey, 2006.

Table 4.13 shows that the largest number of respondents are in age group 20-24 years which is 64.4 percent followed by age 25-29 years which is 28.7 percent, 15-19 years 5.2 percent and 30-34 years 1.7 percent. It clearly shows all respondents are in fertile age groups and more than 90 percent respondents are in high fertile period which denotes the chance of high fertility.

4.3.3 Occupation of the Respondents

Occupation not only gives a social and economic identification but also determines the hierarchies of the people and the status they enjoy in their locality. It plays a vital role in the promotion and protection of individual as well as community health. A mother, who has engaged in better occupation, has a better chance of utilization of

safe motherhood practice. The occupational status of respondents given below.

Table 4.14: Distribution of Respondents by Occupational Status

Occupation Status	No. of Respondent	Percent
Household work	103	89.6
Service	6	5.2
Business	4	3.5
Others	2	1.7
Total	115	100

Source: Field Survey, 2006.

The above data shows the majority of respondents are engaged in domestic or household work. Among 115 respondents nearly 90 percent (89.6 percent) are limited to household work. Similarly 5.2 percent are engaged in service, 3.5 percent are engaged in Business and only 1.7 percent are engaged in other occupation which includes sewing clothes and social worker etc. This study clarifies that only a few respondents are engaged in non-agriculture occupation and majority of respondents are in lower socio-economic status which directly influences safe motherhood practice.

4.3.4 Educational Status of the Respondents

Education is considered as an instrument to change the traditional attitude of an individual towards the modernization. It is one of the most important factors which affects all aspects of human life. Educated people are more aware of their family as well as their communities health. However, this study found that a large number of female were uneducated. The table shows the educational status of the respondents and also of their husbands.

Table 4.15: Distribution of Respondents and Their Husband by Education Attainments

Literacy status	Respondent		Respondent's Husband	
	No.	Percent	No.	Percent
Illiterate	73	63.5	37	32.2
Literate	8	6.9	30	26.1
Primary	4	3.5	2	1.7
Lower secondary	14	12.2	14	12.2
Secondary	5	4.3	25	21.7
PCL	11	9.6	5	4.4
Bachelor	-	-	2	1.7
Total	115	100	115	100

Source: Field Survey, 2006.

The table 4.15 shows that among 115 respondents 63.5 percent of female and 32.2 percent of their husband were illiterate which indicates lower social status of female than male. Only literate who didn't attain any school were 6.9 percent of female and 26.1 percent male. Secondary level completed 4.3 percent of female and 21.7 percent of male. Only 9.6 percent of female and 4.4 percent of male were completed PCL level. The least percent (1.7) of male completed Bachelor level. So, we conclude that respondents husband's educational level is better than their female partner.

4.3.5 Age at Marriage

Marriage is a main component of population dynamics. Marriage is universal and still early marriage practice can be observed in Nepal. Age at marriage is another important factor which determines safe motherhood practices. The age at marriage of women in this study area was very low. This low age at marriage is determined by the social, cultural and economic background of the community. This table shows the age at marriage of women.

Table 4.16: Distribution of Respondents by Age at Marriage

Age at Marriage	No. of Respondent	Percent
<15 years	2	1.7
15-19 years	75	65.2
20 years and above	38	33.1
Total	115	100

Source: Field Survey, 2006.

Table 4.16 shows the distribution of respondents by their age at marriage. Out of 115 respondents, 1.7 percent were married before the age of 15 years, 65.2 percent were married within 15-19 years and 33.1 percent were married at the age of 20 years and above. Among those women average age at marriage is 18.8 years. The table clearly shows the majority of women in study area got married under the age 20 years which indicates that there is still practice early marriage and also indicate high fertility.

4.3.6 Age at First Child Birth

The women of rural area have low mean age at marriage and given birth to first child in very early age, which is given in this table.

Table 4.17: Distribution of Respondent by Age at First Birth

Age at first birth	No. of Respondent	Percent
15-19 years	60	52.2
20 years and above	55	47.8
Total	115	100

Source: Field Survey, 2006.

Table 4.17 shows that high percent (52.2) of the respondents gave birth to their first child at the age of 15-19 years. Similarly, 47.8 percent respondents gave birth at the age of 20 years and above. The average age at first child birth of those respondents were 19.6 year. Pregnancy and child birth under 20 carries many health risk which causes maternal and child death. In the study area, maternal and child health is not very good because early marriage and early child bearing is still prevalent in the study area.

Table 4.18: Distribution of the Respondent by Number of Children Ever Born

No. of CEB	No. of Respondent	Percent
1	10	8.7
2	26	22.6
3	46	40
4	23	20
5	10	8.7
Total	115	100

Source: Field Survey, 2006.

The above table shows that the larger number of women has given birth to 3 and 2 which is 40 and 22.6 respectively followed by 4 and 5 child which is 20 and 8.7 percent. Similarly lower number of women has given birth to only one child which is 8.7 percent.

CHAPTER - FIVE

KNOWLEDGE OF RESPONDENTS ON SAFE MOTHERHOOD

5.1 Knowledge about Safe Motherhood

This study was conducted to find out the knowledge and perception about safe motherhood among reproductive aged women in rural area of Ramechhap district. A total number of 115 respondents were selected and asked whether they had heard or not about safe motherhood. The study results shows that only 45.2 percent had heard about safe motherhood and 54.8 percent had not heard about it. Among the 52 respondents who had heard about safe motherhood in age group 15-19, out of 6 respondents 66.67 percent had knowledge and other 33.33 percent had not any knowledge of safe motherhood. Similarly out of 74 respondents in age group 20-24 33.78 percent had knowledge about safe motherhood and nearly two third that is 66.22 had not any knowledge. Among 33 respondents in age group 25-29, 63.64 percent had knowledge about safe motherhood and other 36.36 percent had not any knowledge and 2 respondents in age group 30-34, cent percent had knowledge about safe motherhood. This table clearly shows in age group wise data higher the age group of respondent higher the level of knowledge also it shows that majority of respondents had lack of knowledge on safe motherhood. The table given below:

Table 5.1: Distribution of Respondents by Knowledge about Safe Motherhood

Knowledge	No. of Respondent		Percent		
Yes	52		45.2		
No	63		54.8		
Total	115		100.0		
Knowledge by age group					
	Yes		No		Total
	No.	Percent	No.	Percent	
15-19	4	66.67	2	33.33	6
20-24	25	33.78	49	66.22	74
25-29	21	63.64	12	36.36	33
30-34	2	100	-	-	2
Total	52	45.2	63	54.8	115

Source: Field Survey, 2006.

Table 5.2: Distribution of Respondents According to Knowledge Include on in Safe Motherhood by Education

Level of education	Regular check up during pregnancy		Receiving TT vaccination		Delivery assistance by trained medical personnel		Use of home delivery kits		Advice counselling service		All of above		Total	
	N	P	N	P	N	P	N	P	N	P	N	P	N	P
Illiterate	2	20	-	-	2	20	4	40	2	20	-	-	10	100
Literate	4	50	4	50	-	-	-	-	-	-	-	-	8	100
Primary	-	-	2	50	-	-	2	50	-	-	-	-	4	100
Lower secondary	10	71.42	2	14.29	-	-	-	-	2	14.29	-	-	14	100
Secondary	5	71.00	-	-	-	-	-	-	-	-	-	-	5	100
PCL	6	54.55	-	-	-	-	-	-	-	-	5	45.45	11	100
Total	27	51.92	8	15.38	2	3.85	6	11.54	4	7.69	5	9.62	52	100

Source: Field Survey, 2006.

Table 5.2 shows the knowledge of respondents regarding safe motherhood by level of education. Fifty two respondents have the knowledge among them 51.92 percent said safe motherhood includes regular checkup during pregnancy. Followed by 15.38 percent who said receiving TT vaccination, 3.85 percent said delivery assistance by trained to medical personnel, 11.54 percent said use of home delivery kits, 7.69 percent said advice counselling services and 9.62 percent said all of above services.

By observing the level of education of the respondents 10 illiterate respondents had the knowledge about safe motherhood among them 20 percent said regular checkup during pregnancy, another 20 percent said delivery assistance by trained medial personnel, 40 percent said use of home delivery kits and remaining 20 percent said advice counseling service. Similarly the respondents who are only literate are 8, among those 50 percent said regular checkup during pregnancy and remaining 50 percent said receiving TT vaccination. Only 4 respondents have attained primary level, among those 50 percent said receiving TT vaccination and another 50 percent

said use of home delivery kits. 14 respondents had attained lower secondary level, among those 71.42 percent asked safe motherhood includes regular checkup during pregnancy, 14.29 percent asked, receiving TT vaccination and remaining 14.29 percent asked advice counselling service, 5 respondents had completed secondary level of education, among those cent percent replied safe motherhood service includes regular checkup during pregnancy. Remaining 11 respondents had completed PCL level among those 54.55 percent said regular checkup during pregnancy and 45.45 percent said safe motherhood service includes all of above service.

This table clearly shows that respondents who were literate had good knowledge about on safe motherhood then illiterate respondents. Higher the level of education higher percent respondents have knowledge about safe motherhood.

Table 5.3: Distribution of Respondents by Source of Information About Safe Motherhood

Media	No. of respondents	Percent
Radio	23	44.2
Health workers	14	26.9
Family	12	23.1
Television	3	5.8
Total	52	100

Source: Field Survey, 2006.

The above data shows the source of information of respondents about safe motherhood. Among 52 respondents who had acquired knowledge about safe motherhood, 44.2 percent had heard through radio, followed by 26.9 percent by health worker, 23.1 by family and 5.8 by television. The table clearly shows that the main source of information about safe motherhood is radio.

5.2 Knowledge by Level of Education

Educated women are more aware about the necessarily of health care than non-educated women. However, more people in the rural are not educated in Nepal as well as in Khimti VDC.

Table 5.4: Distribution of Respondents According to Knowledge of Safe Motherhood by Education

Literacy status	Knowledge				
	Yes		No		
Illiterate	10	13.7	63	86.3	73
Literate	42	100	-	-	42
Total	52	45.2	63	54.8	115
Level of Education					
Literate	8	100	-	-	8
Primary	4	100	-	-	4
Lower secondary	14	100	-	-	14
Secondary	5	100	-	-	5
PCL	11	100	-	-	11
Total	42	100	-	-	42

Source: Field Survey, 2006.

The table clearly shows that cent percent literate and 13.7 percent illiterate respondents have knowledge about safe motherhood. It also shows that increase in level of education automatically increases the level of knowledge and safe delivery practice.

5.3 Perception of Safe Motherhood

Perception refers to the understanding of respondents towards the utilization of safe motherhood service whether or not they think it is necessary to utilize the safe motherhood services by mothers. Table 5.5. shows that 58.3 percent of the total respondents answered that it is necessary for a pregnant women to utilize the safe motherhood services. But in actual practice only 36.5 percent were found to have utilized these services. This difference appeared mainly due to lack of health facilities, cultural, social superstitions belief and family force or it may be due to negligence of the person concerned. The number of respondents giving negative response was 10.4 percent and the

percent of respondent who had not idea about the issue was 31.3 percent.

Table 5.5: Distribution of Respondents by Perception Towards Safe Motherhood

Perception	No. of Respondents	Percent
Necessary	67	58.3
No necessary	12	10.4
Don't know	36	31.3
Total	115	100.0

Source: Field Survey, 2006.

The table clearly shows nearly 60 percent were able to give the reason for the need of utilization these services but still more respondents have lack of knowledge of safe motherhood.

5.4 Perception of Safe Motherhood by Education Status of Respondents

Educated people are more aware of safe motherhood services than non educated people. Larger numbers of educated respondents were in favour of utilizing the safe motherhood services. The table shows perception on safe motherhood by educational status of respondent.

Table 5.6: Distribution of Respondents According to Perception on Safe Motherhood by Educational Status

Educational status	Necessary		Not necessary		Don't know		Total
	No.	Percent	No.	Percent	No.	Percent	
Illiterate	25	34.3	12	16.4	36	49.3	73
Literate	42	100	-	-	-	-	42
Total	67	58.3	12	10.4	36	31.3	115
Level of Education							
Literate	8	100	-	-	-	-	-
Primary	4	100	-	-	-	-	-
Lower secondary	14	100	-	-	-	-	-
Secondary	5	100	-	-	-	-	-
PLC	11	100	-	-	-	-	-
Total	42	100	-	-	-	-	-

Source: Field Survey, 2006.

The table shows that cent percent literate respondents were in favour of utilizing safe motherhood services as compared to illiterate respondent who comprised only 34.3 percent. 16.4 percent respondents were ignorant of ANC care and remaining 49.3 percent had decided whether ANC service is needed or not. Respondent in all level of education have felt it necessary which clearly shows that higher the level of education, higher percent respondent were in favour of utilizing safe motherhood services.

Table 5.7: Distribution of Respondents Knowledge by ANC Service Provider

ANC service provider	No. of Respondents	Percent
Doctor/Nurse/MCHW	65	97.0
TBA	2	3.0
Total	67	100.0

Source: Field Survey, 2006.

Table 5.7 shows the knowledge of respondents by ANC service provider. Among 67 respondents 97 percent said ANC service should be provided by doctor/nurse/MCHW and remaining 3 percent said it can be provided by TBA.

Table 5.8: Distribution of Respondents by knowledge Times Need of ANC Device

Times	No. of Respondents	Percent
1	2	3.0
2	8	11.9
3	17	25.4
4	40	59.7
Total	67	100.0

Source: Field Survey, 2006.

Table 5.8 shows the distribution of respondents by knowledge that how often a pregnant woman needs ANC service before delivery. Among 67 respondents 59.7 percent were said ANC service needed 4times before delivery followed by 25.4 percent who said 3 times, 11.9 percent said 2 times and remaining 3 percent said only 1 times before delivery which clearly shows still more respondents have lack of knowledge about ANC service.

Table 5.9: Distribution of Respondents Knowledge by Purpose to Take ANC Service

Purpose to take ANC service	No. of Respondents	Percent
To get advice	26	38.8
All of above	24	35.8
To know the position and increasement of foetus	4	6.0
Don't know	13	19.4
Total	67	100

Source: Field Survey, 2006.

Above table shows the knowledge of respondents purpose to take ANC service. Among ANC favoured respondents 38.8 percent said their purpose to get ANC service is to get advice followed by 35.8 percent said all of above, 6 percent said to know the position and increasement of foetus and remaining 19.4 percent hadn't known about the purpose to take ANC service.

5.5 Knowledge about TT Vaccine

Tetanus toxoid injection, an important component of antenatal care, is given during pregnancy primarily for the prevention of neonatal tetanus. For full protection, it is recommended that a pregnant women should receive at least two doses of tetanus toxoid during her first pregnancy. Five doses of tetanus toxoid injections are considered to provide life time protection.

Table 5.10: Distribution of Respondents by Knowledge about TT Vaccine

Knowledge	No. of respondents	Percent
Yes	63	54.8
No	52	45.2
Total	115	100
Who should take TT		
Adolescents	11	17.5
Pregnant women	20	31.7
Both of above	32	50.8
Total	63	100.0
Dose necessary before delivery		
1 dose	12	19.0
2 dose	43	68.3
Don't know	8	12.7
Total	63	100.0

Source: Field Survey, 2006.

The above table shows the knowledge of respondents about TT vaccination. Among 115 respondents 54.8 percent had already favoured about TT vaccine and remaining 45.2 percent had not any knowledge. Respondents who had knowledge about TT, cent percent told it was an injection.

Similarly, the researcher asked another question who should take TT? Respondents who favoured about TT, 17.5 percent answered only adolescents should take TT followed by 31.7 percent who told pregnant women should take TT. Similarly 50.8 percent told both of the above need to take it.

The knowledge of respondents by dose necessary before delivery. Moreover, the above data shows 19 percent respondents told only one dose is enough before delivery, 68.3 percent replied two doses are necessary before delivery and remaining 12.7 percent told that they didn't know how many dose of it is necessary before delivery. This table clearly shows that more respondents have lack of knowledge about TT vaccine.

5.6 Knowledge about Food to Prevent Anemia

Anemia is a disease which it is caused due to iron of hemoglobin and Red Blood Cells (RBC) in blood causes anemia. Lack of iron in food is the main cause of anemia. Small children and pregnant women are the main victims of this disease. For the prevention of anemia, iron containing food stuffs such as liver, fish, meat, egg, green etc. are needed. The following table shows the knowledge of respondents of food to prevent anemia.

Table 5.11: Distribution of Respondents on Food to Prevent Anemia

Type of food	No. of Respondents	Percent
Veg/fruits/beans	4	3.5
Meat/fish/egg	32	27.8
Both of above	47	40.9
Don't know	32	27.8
Total	115	100

Source: Field Survey, 2006.

Table 5.11 shows the distribution of respondents on food to prevent anemia. Among the 115 respondents 3.5 percent replied veg/fruits/beans should be needed to prevent anemia followed by 27.8 percent answered meat/fish/egg, 40.9 percent hold both of above and remaining 27.8 percent didn't know about what types of food is needed prevent anemia. The table clearly shows that majority of respondents haven't proper knowledge about the food to prevent anemia.

Table 5.12: Distribution of Respondents who have Knowledge about Symptom of Anemia

Symptom	No. of Respondents	Percent
Yellowish eyes	4	3.5
Giddiness	5	4.3
Both of above	21	18.3
Don't know	85	73.9
Total	115	100

Source: Field Survey, 2006.

The table shows that majority of the respondents have not any knowledge about the symptom of anemia. Among the 115 respondents 73.9 percent didn't know about the symptom of anemia followed by 3.5 percent both asked the symptom of anemia is yellowish eyes, 4.3 percent said giddiness and remaining 18.3 percent told both of above.

5.7 Knowledge about Safe Delivery Kit

Safe delivery kit is a small medical box used at the time of delivery. The following table shows the knowledge of respondents about safe delivery kit. Among the total 115 respondents 70.4 percent

had knowledge about safe delivery kit but only 53 percent used it practically at the time of delivery. Remaining 29.6 percent had not knowledge about this which is clearly shown in the following table.

Table 5.13: Distribution of Respondents Knowledge about Safe Delivery Kit

Knowledge	No. of Respondents	Percent
Yes	81	70.4
No	34	29.6
Total	115	100
Is it surgical appliances?		
Yes	59	72.8
No	10	12.4
Don't know	12	14.8
Total	81	100
Is clean/hygienic apparatus used in delivery		
Yes	89	77.4
No	-	-
Don't know	26	22.6
Total	115	100

Source: Field Survey, 2006.

Above table shows majority of respondents have already known about safe delivery kit. Among those 81 respondents 72.8 percent asked safe delivery kit is a surgical appliances. Similarly 12.4 percent asked it is not a surgical appliances and remaining 14.8 percent asked they didn't know either it is surgical appliances or not. It clearly shows that majority of respondents have positive knowledge but still more have not access to knowledge about safe delivery kit.

Clean/hygienic apparatus is necessary to prevent from other infection of mother and child health during delivery. Among the total 115 respondents 77.4 have positive knowledge about apparatus used in delivery but 22.6 didn't know what type of apparatus is necessary during delivery. Majority of respondents have positive idea towards clean/hygienic apparatus used in delivery.

5.8 Knowledge about Foetus May Develop in another Place than Uterus

Normally foetus develops in the endometrium layer of womb but because of biological or physiological mistake it may develop in another place. The following table clearly shows the knowledge of respondents about foetus may develop another place than uterus.

Table 5.14: Distribution of Respondents by Knowledge about Foetus may develop in Another Place than Uterus

Knowledge	No. of Respondents	Percent
Yes	10	8.7
No	63	54.8
Don't know	42	36.5
Total	115	100

Source: Field Survey, 2006.

The above table shows a few respondents have knowledge about the chances of foetus may develop in another place than uterus. Among total 115 respondents only 8.7 percent answered it may develop in another place than uterus. Cent percent of those were asked it might be develop in fallopian tube. Similarly, 54.8 percent replied it might not develop in another place than uterus and remaining 36.5 percent haven't any knowledge whether it may be develop in uterus or another place than uterus. This clearly shows that the majority of respondents have lack of knowledge about the place of development of foetus.

CHAPTER - SIX

ATTITUDE OF CURRENTLY MARRIED WOMEN TOWARDS SAFE MOTHERHOOD

Attitude is the pre-stage of implementing the task (practice). So, positive attitude of people intends towards the expected practice whereas negative attitude leads towards the against of expected practice.

Attitude is considered as hypothetical construct being unobservable; it must be inferred from measurable responses that reflect positive or negative evaluations of the attitude. It is an unobservable, hypothetical construct that must be inferred from measurable responses to the object.

Technically an attitude is tendency of predisposition towards certain type of reaction. Closely and popularly it has been used as an actual term for the whole body of owns opinions, beliefs, sentiments and predispositions (Encyclopedia Britannica, 1960 A.D.)

Attitude is mental and neural state or readiness organized through experience, exerting directive or dynamic influence upon individual's response to all objects and situations with which it is related (All Port, 1935 A.D.).

Now, we can conclude that the attitude is very important behaviour which plays vital role in directing actions of human being. It is a neural and mental state which makes a person ready toward certain types of reaction. Attitude can also be described as a set of belief, feeling and tendency towards any object and situation. It determines behaviour of human being towards any object or situation. Sometimes it has been used as the opinions and sentiments.

Among the attitude measurement techniques, Likert scale is considered to be as best one. Likert sales bypass the use of judgement

and present to respondents a pool of favourable and unfavourable statements. Respondents indicate for each statement whether they strongly agree, agree, undecided, disagree or strongly disagree with the sentiment expressed by the statement. The response category to each statement is weighted to yield higher scores for agreement to favourable statement. Additional procedures are followed to identify and delete statements that reduce the internal consistency of the scale. The summated score of the final set of items provides the measures of the respondent's attitude.

The likert scale has been minimized in to 3 categories to determine the attitude score of respondents for the convenience of this study. Which is presented below with their scores.

Table 6.1: Likert Scale to Determine Attitude Score of Respondents

S.N.	Category of Rating	Favourable Rating Sale	Unfavourable Rating Sale
1.	Agree	5	1
2.	Undecided	3	3
3.	Disagree	1	5

Identifying the attitude of currently married women towards safe motherhood is second objective of this study. In order to achieve this objective the researcher calculated $H^2 \chi^2$ test. The calculate χ^2 attitude score has been presented in the below given table with their decision.

Table 6.2: χ^2 - Attitude Scores of Currently Married Women

S.N.	Statements	χ^2 - value	Decision
1.	Knowledge of safe motherhood is essential in our day to day life	135.99	S
2.	Safe motherhood is useful, practicable and behavioural in our life	25.27	S
3.	Safe motherhood content should be included in the school level curriculum	164.38	S

4.	In Nepal, most of the Nepalese people lack access to the knowledge of safe motherhood	63.79	S
5.	Pregnant women must take ANC service	3.77	NS
6.	Women should be pregnant above the age of 20 years	12.54	S
7.	Safe delivery kit is essential to the women during the labour	47.5	S
8.	Any tool (equipments) can be used to cut the umbilical cord	15.46	S
9.	Exclusive breast feeding is good to the infant	30.28	S
10.	Supplementary food should be managed to the infancy after 2-6 month of birth	67.28	S
11.	First milk of mother should be given to the infant	9.93	S
12.	Delivery place should be very neat and tidy	113.76	S
13.	Pregnant mother should more emphasize on balance diet than others	43.12	S
14.	Pregnant should participate in light exercise as well as light domestic work.	23.28	S
15.	Delivery women should be kept in such place where there is provision of sunlight and ventilation.	12.15	S
16.	Regular medical check-up is essential to all the pregnancy during their pregnancy	79.96	S
17.	Infant should be vaccinated on time against infections diseases	35.09	S
18.	Mother should avoid taking tobacco, alcohol, drugs, excess labour during pregnancy	6.27	S

Note:

S = Significant

NS = Not Significant

Degree of freedom (df) = (r-1) (c-1)

χ^2 critical value for 2 df = 5.99

Level of significance (α) = 0.05

The above given 18 statements relating attitude of currently married women towards safe motherhood were given to the currently married women of Khimti VDC, Ramechhap. 17 statements were favourable and rest only was unfavourable among the 18 statements. Despite of these, most the statements i.e. 17 out of 18 are found to be significant at 0.04 (α) level. And rest i.e. only one is not significant. Now, we come to know from this result is that the majority of currently married women had positive attitude towards safe motherhood. The χ^2 - value of the table no. 6.2 is present with highest χ^2 - value in the table no. 6.3.

Table 6.3: χ^2 -Attitude Scores of Currently Married Women in Descending Order

S.N.	Statements	χ^2 - value	Decision
3.	Safe motherhood content should be included in the school level curriculum	164.38	S
1.	Knowledge of safe motherhood is essential in our day to day life	135.99	S
12.	Delivery place should be very neat and tidy	113.76	S
16.	Regular medical check-up is essential to all the pregnancy during their pregnancy	79.96	S
10.	Supplementary food should be managed to the infancy after 2-6 month of birth	67.28	S
4.	In Nepal, most of the Nepalese people lack access to the knowledge of safe motherhood	63.79	S
7.	Safe delivery kit is essential to the women during the labour	47.5	S
13.	Pregnant mother should more emphasize on balance diet than others	43.12	S

17.	Infant should be vaccinated on time against infections diseases	35.09	S
9.	Exclusive breast feeding is good to the infant	30.28	S
2.	Safe motherhood is useful, practicable and behavioural in our life	25.27	S
14.	Pregnant should participate in light exercise as well as light domestic work.	23.28	S
8.	Any tool (equipments) can be used to cut the umbilical cord	15.46	S
6.	Women should be pregnant above the age of 20 years	12.54	S
15.	Delivery women should be kept in such place where there is provision of sunlight and ventilation.	12.15	S
11.	First milk of mother should be given to the infant	9.93	S
18.	Mother should avoid taking tobacco, alcohol, drugs, excess labour during pregnancy	6.27	S
5.	Pregnant women must take ANC service	3.77	NS

Among all statements, the statement no. 3 "safe motherhood content should be included in the school level curriculum" is highly significant with χ^2 - value 164.38 at 0.05 level of significance. Most of the currently married women about 90 percent were found to be in favour of this statement. It indicates that safe motherhood content has to be implemented in school curricula. Since, safe motherhood content has been teaching in secondary level school curriculum through EPH subject in grade 10.

Similarly, the statement no. 1 is second highly significant statement i.e. "knowledge of safe motherhood is essential in our day to day life" with χ^2 - value 135.99 at 0.05 level of significance. The third significant statement is 'Delivery place should be very neat and tidy'

with its χ^2 - value 113.76 at 0.05 level of significance. Furthermore, the statement no. 9 i.e. 'Exclusive breast feeding is good to the infant' is significant favourable statement placed in tenth rank with 30.28 its χ^2 - value. This clearly shows that currently married women will definitely take part in exclusive breast feeding when they will get their children and forward message to others regarding this useful information.

The statement 'any tool (equipments) can be used to cut the umbilical cord' is considered to be as unfavourable statement but result has been shown that this statement has been significant. About 50 percent women were in favour of disagrees and 23 percent were found to be in favour of undecided and only 27 percent were agreed on this statement. Now what we can conclude that they were ready to use any tool to cut the umbilical cord of the infancy after the delivery. In fact, this is the wrong attitude and perception of those women towards the selection of tool (equipments) used to cut the umbilical cord.

The fifth statement i.e. 'Pregnant women must take ANC service' is quite favourable statement relating the attitude of currently married women towards safe motherhood. In fact, in order to be healthy and to give healthy baby, mother must take ANC service from the nearest health institution. But this study has found unexpected result relating this statement. The χ^2 - value of this statement was found to be only 3.77 at 0.05 critical region of 2 degree of freedom. So, this statement is not considered to be as significant. Moreover we can guess that due to lack of knowledge, believing upon superstition, ignorant, poverty might be the possible causes for finding such negative attitude towards ANC service.

Table 6.4: Likert Method to Interpret the Attitude of Currently Married Women

No. of women	No. of statement	Purposed Attitude Score			Obtained Attitude Score	Decision	Remarks
		M.F.A.S.	N.A.S.	M.U.A.S.			
115	18	90	54	18	68	68>54	Positive attitude

Source: J.W. Best and J.V. Kahn, Research in Education, (pp. 250)

Note:

M.F.A.S. = Most Favourable Attitude Score

N.A.S. = Neutral Attitude Score

M.U.A.S. = Most Unfavourable Attitude Score

Above mentioned table 6.4 shows that this study included 115 currently married women to find out their attitude towards safe motherhood and 18 statements were administrated among them. According to likert opinionnaire of rating scale; if there is 90 score it shows the most favourable response among 115 respondents and with 18 statements. Similarly if obtained attitude score is 54 then it shows neutral attitude of respondent that means neither positive nor negative but if there is 18 or less then it shows negative attitude of respondents but in this study obtained attitude score was found to be 68 which is more than 54. Now we come to know that the attitude of currently married women of Khimti VDC, Ramechhap towards safe motherhood is significantly positive.

CHAPTER - SEVEN

PRACTICE OF SAFE MOTHERHOOD

7.1 Availability and Accessibility of Health Facility

Availability and accessibility play vital role, in determining the utilization of safe motherhood services. It is necessary to mention here that generally availability of the safe motherhood services refers to whether there is a presence of any health services or not and accessibility is also related to the ability of people reaching to the service facility. Accessibility to services is determined on the basis of time required, distance and cost. Table that 100 percent of respondent replied that there was a health facilities. There are facility of respondent replied that there was a health facilities. There are facility of maternal care in the study area. So the study shows that there are health facility for every respondent in their village.

Table 7.1: Percentage Distribution of Respondents by Availability of Health Facility

Availability	Number	Percent
Yes	115	100
Total	115	100
Types of Available Health Facility		
Health Post/sub health post	115	100
Private clinic	30	26.1
TBA	22	19.1
FCHV	18	15.7

Source: Field Survey, 2006

Note: Total percent may exceed 100 due to multiple responses.

Table 7.1 shows that cent percent respondents answered that there was health post or sub-health post in their locality. In the study 26.1 percent respondents said there was facility of private clinic. Similarly 19.1 percent of respondent answered there was facility of TBA and 15.7 percent of respondents answered there was facility of FCHV.

Table 7.2: Type of Safe Motherhood Services Provided by the Health Facility

Types of Service Provided	No. of Respondent	Percent
Regular check up during pregnancy	115	100
TT Vaccination	100	87
Vitamin A and iron tablets	50	43.5
Deliver assistance by trained medical personnel	43	37.4

Source: Field Survey, 2006

Note: Total percent may exceed 100 due to multiple response.

Table 7.2 shows that large number of respondents reported that there were different kinds of health service in their village but actually they did not provide them all kinds of safe motherhood related services. Most of the facilities provided are the services like regular check up during pregnancy, providing TT vaccine, availability of vitamin A and iron tablets etc. The above table shows that cent percent respondent reported the health centers provided regular check up during pregnancy, 87 percent reported TT vaccination, 43.5 percent reported availability of vitamin A and iron tablets and 37.4 percent said deliver assistance by trained medical personnel.

Table 7.3: Distribution of Respondents by Time Taken to Reach the Health Facility

Time	No. of Respondent	Percent
Half an hour	50	43.5
One hour	30	26.1
One and half hour	18	15.6
2 hour	17	14.8
Total	115	100

Source: Field Survey, 2006

Table 7.3 shows that 43.5 percent expressed that they could reach the health facility within half an hour and 26.1 percent could reach within one hour. Similarly 15.6 percent of the respondents expressed that they could reach the health facility within one and half hour and 14.8 could reach within two hours.

7.2 Antenatal Care Practice

Antenatal care includes all the services which are related to pregnancy and health of mother after the date of conception and before date of delivery. Antenatal check up plays important role to the health of mother and newly born baby. In this survey, 115 married women of aged 15-49 years who have at least one child of age below 5 years at the time of survey were respondents and individual questionnaire were asked about practice of safe motherhood.

Table 6.4 shows that 36.5 percent have received antenatal care during their pregnancy period. Remaining 63.3 percent had not received antenatal care during their pregnancy period. Utilization of ANC among respondents in the study area is very low as compared to national figure (49% NDHS, 2001)

Table 7.4: Distribution of Respondent by Antenatal Care Received During Pregnancy

Antenatal care received	No. of Respondents	Percent
Yes	42	36.5
No	73	63.5
Total	115	100

Source: Field Survey, 2006

7.3 Utilization of Antenatal Care by Age

The utilization of ANC varies by age group. The table shows ANC Care by age group.

Table 7.5: Distribution of Respondents According to Utilization of ANC by Age Group

Age group	ANC Care Received				Total Number
	Yes		No		
	No	Percent	No	Percent	
15-19	2	33.3	4	66.7	6
20-24	17	23	57	77	74
25-29	21	63.6	12	36.4	33
30-34	2	100			2
Total	42	36.5	73	63.5	115

Source: Field Survey, 2006

Table 6.5 shows the highest percentage of respondents (100) received ANC in the age group 30-34 and lowest percentage of

respondents (23) received ANC in the age group 20-24 years. In age group 25-29, 63.6 percent of respondents received ANC and 36.4 percent did not receive ANC during pregnancy and in the age group 15-19, 33.3 percent respondents received ANC and 66.7 percent respondents did not receive ANC during pregnancy. This table clearly shows that more respondents have lack of knowledge to receive ANC service during pregnancy.

7.4 Utilization of Antenatal Care by Education

Education is one of the most vital factors which determines the utilization of ANC. This study has shown the positive relationship between these two variables. It was found that an increase in the level of education, the level of utilization of ANC service also increases. The table shows the relation between education and utilization of safe motherhood.

Table 7.6: Distribution of Respondents According to ANC Services Received by Education

Educational status	Utilization of ANC				Total
	Yes		No		
	No	Percent	No	Percent	
Illiterate	6	8.2	67	91.8	73
Literate	36	85.7	6	14.3	42
Total	42	36.5	73	63.5	115
Level of Education					
Literate	4	50	4	50	8
Primary	2	50	2	50	4
Lower Secondary	14	100	-		14
Secondary	5	100	-		5
PCL	11	100	-	-	11
Total	36		6		42
Husband's education					
Literacy of Husband	Yes		No		total
	No	Percent	No	Percent	
Illiterate	2	7.1	26	92.9	28
Literate	1	11.1	8	88.9	9
Primary	3	13.6	19	86.4	22
Lower Secondary	6	25	18	75	24
Secondary	15	88.2	2	11.8	17
PCL	11	100	-	-	11
Bachelor	4	100	-	-	4
Total	42	36.5	73	63.5	115

Source: Field Survey, 2006

The table shows that among total illiterate, 8.2 percent respondent were found to have utilized ANC services and 91.8 percent respondents have not utilized ANC services. Similarly, 85.7 percent literate respondents used ANC services and only 14.3 percent literate respondent did not utilize ANC services. The table also shows the level of education of the respondent and utilization of ANC; where the level of education is high utilization of ANC service is also high.

The table also shows husbands' educational level and utilization of ANC services. Where, educated husband are in favour of utilization of ANC and higher the level of education, higher percent utilize ANC care. The table clearly shows that positive relation between education and utilization of ANC services. Educated people are more aware of ANC service than uneducated people.

7.5 Utilization of ANC by Age at Marriage

Marriage is universal in Nepal. Women who marry in their early, age on a average, have a longer exposure to the risk of becoming pregnant therefore, early age at marriage often implies early age at child bearing. Early pregnancy and child birth carry many health risks of women and children. The table shows age at marriage and utilization of ANK services.

Table 7.7: Distribution of Respondents by Utilization of ANC and Age at Marriage

Age at Marriage	Utilization Of ANC Services				Total
	Yes		No		
	No	Percent	No	Percent	
Less than 15 years	1	50	1	50	2
15-19 years	16	21.3	59	78.7	75
20 years +	25	65.8	13	34.2	38
Total	42	100	73	100	115

Source: Field Survey, 2006

According to the study results, the age at marriage of the respondents were categorized into different age groups. Their utilization of ANC was observed according to their age at marriage.

The table shows that higher percent (65.8) of respondents have utilized ANC, who had married in the age group 20 years and above and lower percent (21.3) of respondents 15-19 years. Similarly, 50 percent respondents have received ANC services, who had married in less than 15 years of age. This study clearly shows that higher the age at marriage, higher the utilization of ANC services.

Table 7.8: Distribution of Respondents by Frequency of Utilization of ANC

Times during pregnancy	No. of respondent	Percent
2	11	26.2
3	9	21.4
4	22	52.4
Total	42	100

Source: Field Survey, 2006

At least four visit to ANC should be necessary during pregnancy. The table 7.8 shows that only 52.4 percent respondent completed all visit during pregnancy. Similarly 26.2 percent visited two times during pregnancy and remaining 21.4 percent visited three times during pregnancy. Which clearly shows, majority of respondents who received ANC didn't complete all visit.

7.6 Visit for ANC

Table 7.9: Distribution of respondents by type of Health Services from where they received Antenatal Care

Health Centers	Number	Percent
Health post/sub Health post	37	88.1
Private Clinic	3	7.1
FCHV	2	4.8
Total	42	100

Source: Field Survey, 2006

Table 7.9 shows that higher percent (88.1) of the respondents went to the health post sub-health post to receive ANC followed by 7.21 percent who went to private clinics to receive ANC and 4.8 percent of respondents received ANC services from FCHV.

7.7 Persons who Recommended the Respondents to Utilize the ANC Service

The women in rural area had low socio-economic status therefore personal suggestion for utilization of ANC also play important role in real utilization. The result of the study shows that most of the women who had utilized ANC were suggested by their husbands HW/Nurse/Doctor, FCHV etc. for the utilization of this service.

Table 7.10: Distribution of Respondents by person who Suggested to Utilized the Antenatal Care

Person who suggested	Number	Percent
Husband	32	76.1
HA/Nurse/Doctor	4	9.5
FCHV	2	4.8
Mother-in-law	2	4.8
Friends/Neighbour	2	4.8
Total	42	100

Source: Field Survey, 2006

The above table shows that higher percent (76.1) of respondents were suggested by their husband to utilize ANC service. Followed by 9.5 percent were suggested by HA/Nurse/Doctor, FCHV, Mother-in-law and 4.8 percent were suggested to utilize ANC services by their friends and neighbour.

7.8 Coverage of Vitamin 'A'

Vitamin A is essential for pregnant and delivered women which protect them from night blindness. The study shows that most of the respondents did not received vitamin 'A' because they did not go to post natal check up. Table 7.11: Distribution of Respondents by Vitamin 'A' Intake

Table 7.11: Distribution of Respondents by Vitamin A Intake

Received Vitamin A	Number of Respondent	Percent
Yes	11	9.6
No	80	69.6
Don't Know	24	20.8
Total	115	100

Source: Field Survey, 2006

The table 7.11 shows that higher percent (69.6) of respondents reported they did not received vitamin A and lower percent (9.6) of respondent reported that they received vitamin A during pregnancy. Remaining 20.8 percent respondent reported that they did not know about receiving vitamin A. the table clearly shows majority of the respondent did not receive vitamin 'A'. Only those respondent who completed PCL level were found is have taken vitamin 'A' and remaining other did not take.

7.9 Coverage of TT Vaccination

TT vaccine, an important component of ANC, is given during pregnancy primarily for the prevention of neonatal Tetanus. For full protection, it is recommended that a pregnant women should receive at least two doses of it during her first pregnancy, administered one month apart, and a booster shot during each subsequent pregnancy. Five doses of TT injection are considered to provide lifetime protection.

Table 7.12: Distribution of Respondents by Coverage of TT Vaccination

Received TT-Vaccination	No. of Respondent	Percent
Yes	63	54.8
No	52	45.2
Total	115	100
Number of times to get TT Vaccination		
One time	18	28.6
Two times	40	63.5
More than two times	5	7.9
Total	63	100

Source: Field Survey, 2006

The table 7.12 shows that 54.8 percent respondents received TT vaccination and 45.2 percent respondent did not receive TT vaccination during pregnancy which clearly shows still more people do not receive TT vaccination during pregnancy. The table also shows that higher percent (63.5%) of respondents received TT vaccine two times during pregnancy. Similarly 28.6 percent received TT vaccine

once during pregnancy and 7.9 percent received more than two times during the pregnancy.

7.10 TT Vaccination and Educational Status

In the study the educational status of respondent was first divided into two different group; literate and illiterate. On the other hand the literate were further categorized into the literate, primary, lower secondary, secondary and PCL level. The following table shows the coverage of TT vaccine by educational status.

Table 7.13: Distribution of Respondent by Educational Status and TT-Vaccination

Literacy Status	Received TT				Total Number
	Yes		NO		
	No	Percent	No	Percent	
Illiterate	25	34.2	48	65.8	73
Literate	38	90.5	4	9.5	42
Total	63	54.8	52	45.2	115
Level of education					
Literate	6	75	2	25	8
Primary	4	66.7	2	33.3	6
Lower secondary	12	100	-		12
Secondary	5	100	-		5
PCL	11	100	-		11
Total	38	90.5	4	9.5	42

Source: Field Survey, 2006

Table 7.13 attempt has been made to show comparison between literate and illiterate respondents who received TT injection during pregnancy where 34.2 illiterate and 90.5 percent literate respondents received TT injection during pregnancy and 65.8 percent illiterate respondents and 9.5 percent literate respondent did not received TT injection during pregnancy. The table also shows that cent percent of the respondents received TT-injection during pregnancy who have lower secondary level of education and above. The table clearly shown that educated people are more likely to received TT-vaccine and higher the level of education, higher the percent of TT-vaccine received. So, there is positive relationship between TT-vaccine and education.

7.11 Coverage of Iron Tablets

The pregnant women need iron tablets for the proper and healthy growth of fetus and this also prevents mother from disease like anemia and malnutrition. Women in pregnancy and even after the delivery of child need iron tablets for their good health.

Table 7.14: Distribution of Respondents by Iron Tablets Intake

Received Iron Tablets	No. of Respondents	Percent
Yes	16	13.9
No	95	82.6
Don't know	4	3.5
Total	115	100

Source: Field Survey, 2006

The above table shows only (13.9) percent respondents reported that they had received iron tablets or foliate tablets during pregnancy. The highest percent (82.6) of respondents did not received iron tablets and about 3.5 percent respondents replied that they did not know about receiving iron tablets.

7.12 Iron Tablets by Education

The Iron tablets acceptance has positive relation with the education status of respondents. In the study area, higher percentage of educated respondents have higher level of Iron acceptance than uneducated respondents.

Table 7.15: Distribution of Respondents who Received Iron Tablets by Education Status of Women

Literacy Status	Iron Tablets						Total Number
	Yes		No		Don't know		
	No	Percent	No	Percent	No	percent	
Illiterate			69	94.5	4	5.5	73
Literate	16	38.1	26	61.9	-	-	42
Total	16		95		4		115
Level of education							
Literate	-		8	100	-		8
Primary	-		4	100	-		4
Lower secondary	2	14.3	12	85.7	-		14
Secondary	5	100	-		-		5
PCL	9	81.8	2	18.2	-		11
Total	16	38.1	26	61.9	-		42

Source: Field Survey, 2006

In the table, comparison between illiterate and literate respondents has been shown regarding their reception of iron tablets. 94.5 percent of illiterate respondents did not receive iron tablets and 5.5 percent did not know either they took or not. Similarly, 38.1 percent of literate respondents received iron tablets during pregnancy and 61.9 percent did not receive iron tablets during pregnancy.

This table also shows that, among the life rate respondents, 94.5 percent did not receive iron tablets. They are only literate and attained primary level. Similarly, 38.1 percent of respondents received iron tablets, who completed secondary level and 61.9 percent received iron tablets, who completed PCL level. The least percent (14.3) received iron tablet who completed lower secondary level. The table clearly shows that educated people are more likely to receive iron tablets and there is a positive relationship between the level of education and iron tablet intake.

7.13 Delivery Practices

The objective of providing safe delivery services is to protect the life and health of the mother and her child ensuring the delivery of a baby safely. This section presents the information on practice of the safe place of delivery, person who assisted at the time of delivery and utilization of safe delivery kit.

7.14 Place of Delivery

The place where the delivery takes place is one of the most important aspects of the safe motherhood practice. Many maternal and infants deaths are occurred due to lack of proper safe place of delivery. In Nepal, home is common as a place of delivery. The home deliveries take place in extremely unhygienic condition which is a dangerous procedure for both the mother and her newly born baby. The following table shows the place of delivery of the respondents.

Table 7.16: Distribution of Respondents by place of Delivery

Place of Delivery	No. of Respondent	Percent
Home	106	92.2
Hospital	5	4.4
Health Center	2	1.7
Health Post	2	1.7
Total	115	100

Source: Field Survey, 2006

The table shows that higher percent (92.2) of respondents have given birth to her child at home. Similarly 4.4 percent have given birth to her child at hospital. In the Health Center and Health Post 1.7/1.7 percent have given birth to her child respectively.

7.15 Person who assisted at the Time of delivery

Assistance by skilled health personnel during delivery is considered to be effective in the reproductive of maternal and neonatal mortality. Births delivered at home are usually more likely to be delivered without assistance from a health professional, whereas births delivered at health facilities are more likely to be delivered by health personnel with at least minimal training in the provision of normal delivery services.

Table 7.17: Distribution of Respondents by Providing Assistance During Delivery

Person's Who Assisted	No. of Respondent	Percent
Household member	66	57.4
TBA (Trained/Untrained	31	27.0
AHW/HA/Nurse	11	9.5
Doctors	7	6.1
Total	115	100

Source: Field Survey, 2006

The table 7.17 shows, out of 115 respondents 57.4 percent deliveries are assisted by household members during their delivery period. Followed 27 percent are assisted by TBA (Trained/Untrained), 9.5 percent are assisted by AHW/HA/Nurse and lower percent (6.1) of deliveries are assisted by doctors during their delivery period. The

study clearly shows that there is a high chance of maternal and child mortality and morbidity occurrence.

7.16 Utilization of Safe Delivery Kit at the Time of Delivery

Clean delivery kit is another component for safe and effective to save life of mother and newly born baby from other infections. Safe delivery kit contains a new razor blade, clean threads, hand soap, a plastic sheet, a plastic disc and pictorial instructions assembled by maternal and child health product Pvt. Ltd. for safe delivery practices.

Table 7.18: Distribution of Respondents by Use of Safe Delivery Kit

Use of Delivery Kit	No. of Respondent	Percent
Yes	61	53
No	54	47
Total	115	100

Source: Field Survey, 2006

The table shows higher percent (53) of respondent used safe delivery kit during their pregnancy and remaining 47 percent did not used during their pregnancy which indicate that still more respondents don't have knowledge of usage of safe delivery kit at the time of delivery.

7.17 Utilization of Safe Delivery kit by Literacy

Education is one of the important factors for the women empowerment and to protect the health of women safely. So the education plays the vital role for using delivery kits. The study shows higher the level of education higher the utilization of safe delivery kit.

In the comparison of Literate and illiterate respondents, literate respondents were found to have used higher percent (90.5) compared to illiterate (31.5%) respondents. Similarly 68.5 percent illiterate respondents did not use safe delivery kit as compared to 9.5 percent literate respondents did not during delivery. The table also shows cent percent respondents used safe delivery kit, who were completed Lower

Secondary and PCL level respectively. Similarly, among only literate respondents 75 percent used safe delivery kit and 50 percent respondents used safe delivery kit who have completed primary level. This table clearly shows that higher the level of education, higher the utilization of safe delivery kit. So, there is positive relationship between education and safe delivery kit.

Table 7.19: Distribution of Respondent by Level of Education and Use of Safe Delivery Kit

Literacy Status	Utilization of safe delivery kit				Total
	Yes		NO		
	No	Percent	No	Percent	
Illiterate	23	31.5	50	68.5	73
Literate	38	90.5	4	9.5	42
Total	61	53	54	47	115
Level of education					
Literate	6	75	2	25	8
Primary	2	50	2	50	4
Lower secondary	14	100	-		14
Secondary	5	100	-		5
PCL	11	100	-		11
Total	38	90.5	4	9.5	42

Source: Field Survey, 2006

7.18 Instrument Used to Cut the Cord

Instrument used to cut the cord is one of the most important factors for determining the health of mother and new born baby use of instruments play an important role to the neonatal death.

Table 7.20: Distribution of Respondents by Instrument Used to Cut the Cord

Instruments used	No. of Respondent	Percent
Sterilized blade	71	61.7
Non-Sterilized blade	44	38.3
Total	115	100

Source: Field Survey, 2006

The table 7.20 shows, 61.7 percent respondent used the sterilized blade to cut the cord of new born baby and 38.3 percent

respondent used non-sterilized blade to cut the cord or new born baby. It clearly shows that more respondents were aware about sterilized instrument.

Table 7.21: Distribution of respondents by Instrument used to Cut the Cord and Education

Educational Status	Name of Instrument				Total
	Sterilized Blade		Non-Sterilized Blade		
	No	Percent	No	Percent	
Illiterate	27	38	44	62	71
Literate	44	100	-	-	44
Total	71	61.7	44	38.3	115

Source: Field Survey, 2006

The above table shows that cent percent literate respondent used sterilized blade to cut the cord of new born baby and 38 percent illiterate respondents were found to have used sterilized blade. Among the illiterate respondents majority of respondents (62%) did not use sterilized blade to cut the cord. The table clearly shows that educated respondents are more aware than uneducated and there is positive relationship between education and the instrument used to cut the cord.

7.19 Problem faced at the time of Delivery

Home is the common place of delivery in Nepal. The national figure shows that 89 percent women are delivered at home (NDHS, 2001). In the study area 92.2 percent women were delivered at home. Home delivery is common in Nepal which causes high maternal and child mortality. The following table shows the types of problems face at the time of delivery.

The above table shows 57.4 percent respondents faced problem during delivery and 42.6 percent respondents did not face any problem during delivery period. Among problem faced respondents 45.5 percent respondents faced the problem of excessive bleeding at the time of delivery. Another 30.3 percent respondent face the problem

bad smelling of vaginal discharge and 24.2 percent faced the problem of fever. The table clearly shows the majority of respondents faced the problem of Excessive bleeding which is dangerous and higher chance of maternal mortality and morbidity.

Table 7.22: Distribution of Respondent who Face the problem at the Time of Delivery and Type of Problem

Faced Problem	No. of Respondent	percent
Yes	66	57.4
No	49	42.6
Total	115	100
Types of Problem		
Excessive bleeding	30	45.5
Bad smelling of vaginal discharge	20	30.3
Fever	16	24.2
Total	66	100

Source: Field Survey, 2006

7.20 Postnatal Care Practice

Health Care Services, received by women the delivery of a child is known as postnatal care. It is another determining factor for the safe motherhood practice. Postnatal Care indicated all the health services after delivery for the care of mother and new born baby. Postnatal care is uncommon in Nepal. The postnatal care is very low in Nepal as well as in the study area. Out of 115 respondents, only 38.3 percent respondent have received postnatal care and more than sixty percent (61.7) respondents have not received postnatal care. The table shows the utilization of PNC in the study area.

Table 7.23: Distribution of Respondents by Utilization of PNC

PNC Utilization	No. of respondents	Percent
Yes	44	38.3
No	71	61.7
Total	115	100

Source: Field Survey, 2006

7.21 Postal Care by Literacy

There is positive relationship between education and utilization of postnatal care. Educated respondents are more aware than uneducated respondents to utilize postnatal checkup. The study shows postnatal care is higher among literate respondents than illiterate respondents.

Table 7.24: Distribution of Respondents by Utilization of PNC and Education

Literacy Status	Utilization of PNC				Total
	Yes		No		
	No	Percent	No	Percent	
Illiterate	14	19.2	59	80.8	73
Literate	30	71.4	12	28.6	42
Total	44	38.3	71	61.7	115
Level of education					
Literate	4	50	4	50	8
Primary	2	50	2	50	4
Lower secondary	8	57.1	6	42.9	14
Secondary	5	100			5
PCL	11	100			11
Total	30		12		42

Source: Field Survey, 2006

Table 7.24 shows only 19.2 percent illiterate respondents have received PNC checkup and 71.4 percent respondents have received PNC checkup. It also shows cent percent of respondent who completed secondary and PCL level have received postnatal checkup. Similarly 50 percent literate and primary level completed respondent have received PNC checkup. Those respondents who completed Lower Secondary Level, 57.1 percent have received PNC checkup. So we conclude that higher the level of education, higher the utilization of PNC services.

7.22 Place of Postnatal Checkup

Postnatal checkup is uncommon very low percent age of respondents have received from only two health centers Health Post

and private clinics. Among those 93.2 percent have received PNC checkup from health post and remaining 6.8 percent have received PNC checkup from private clinic. Which is shown in the following table.

Table 7.25: Distribution of Respondents by Place of PNC Checkup

Health Centers	No. of Respondents	Percent
Health Post	41	93.2
Private clinics	3	6.8
Total	44	100

Source: Field Survey, 2006

Table 7.26: Distribution of Respondents who Face the problem After Delivery

Problem	No. of Respondents	Percent
Excessive bleeding	26	59.1
Prolonged labour	10	22.7
Retained Placenta	8	18.2
Total	44	100

Source: Field Survey, 2006

The table shows that 59.1 percent respondents faced the problem of excessive bleeding after delivery followed by prolonged labour and retained placements 22.7 and 18.2 respectively. Which are the dangerous sign of maternal mortality and morbidity. The table clearly shows majority of respondents were faced the problem of excessive bleeding.

CHAPTER - EIGHT

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

8.1 Summary

Safe motherhood is the care of mother during pregnancy, delivery and after delivery, it also includes the care newborn child. Maternal health problem, lack of education and poor health status are the major causes of maternal mortality and morbidity. Maternal health care practice is an important component which aims to save mother's life. Health status of women is lower as compared to men. Maternal mortality is one of the major causes of women's death. In our case, Nepalese mothers have many traditional beliefs, habits, norms, values and customs regarding to maternal and child health. Which are unsafe and hazardous for safe motherhood.

This study is conducted from field survey based on topic "knowledge, Attitude and practice of safe motherhood" towards women in khimti VDC of Ramechhap district. This study covers selected (1, 2,3, and 4) wards under the purposive sampling method. Similarly, 115 households and the same number of married women of age 15-49 years who have at least one child of age below 5 years were selected at the time of survey. The objective of this study is to find out the knowledge, attitude and practice of women living in Khimti VDC of Ramechhap district towards safe motherhood.

To fulfill the objectives of the study, household and individual questionnaire and opinionnaire were administered to find out the attitude of respondents towards safe motherhood. The information from respondents is analyzed from simple and crom descriptive analysis. For the analysis of attitude χ^2 -test and modified likert scaling method were used. χ^2 -test was tested at 0.05 α level of significance.

8.2 Findings

After the analysis and interpretation of data, the following findings have been made:

- It was found that 86.8 percent of total population were Hindu and remaining 13.2 percent were Buddhist.
- It was found that the highest percent (40.3) of total population chhetri and the lowest percent (1.8) is Bhujel.
- The highest percent (41.3) of total population is engaged in Household work and the lowest percent (2.6) is others. Similarly Agriculture, daily wages, services, business, students 21.8, 12.4, 9.2, 7.4 and 5.3 respectively.
- Among the total population (675) 54.8 percent are literate, in those population only 0.8 percent completed bachelor level.
- It was found that 35.6 household have more than 6 Ropani land and 8.7 percent have less than 2 Ropani land.
- Majority of household (73 percent) have stone with mud joint house and the least percent (9.6) have concrete house.
- The higher percent (61.7) of household haven't their own toilet.
- It was found that 41.7 percent household were using piped water, 33.9 percent using surface/river and 24.4 percent using pond/stone tap for drinking water.
- Majority of households (73.9 percent) were using radio, followed by 24.3 percent using Electricity/solar 16.5 percent using TV and 4.3 percent using biogas of the total household cent percent household have not telephone facility.
- Among the total population (380) 10 years and above 84.7 percent are currently married, 11.6 percent are single/unmarried and 3.7 percent are widow/widower.
- Among the total (115) respondent the highest percent (40) are Chhetri and the least percent (1.8) are Bhujel.
- Among the total respondent higher percent (64.4) are in age group 20-24 and the least (1.7) percent in age group 30-34.

- It was found that highest percent (89.6) of respondents are engaged in household work followed by service, business and others 5.2, 3.5 and 1.7 respectively.
- Among the total respondents 36.5 percent are literate. Only 9.6 percent completed PCL level and 67.8 percent of their husband are literate.
- It was found that mean age at marriage of respondents is 18.8. Among them only 1.7 percent married less than 15 years of age.
- It was found that mean age at first child birth of respondent is 19.6 year.
- The highest percent (40) have CEB 3 and the least percent (8.7) have CEB 1 and 5 respectively.
- It was found that 45.2 percent have knowledge about safe motherhood. Among them cent percent respondents have knowledge in age group 30-34.
- The highest percent (51.2) respondents reported safe motherhood includes regular checkup during pregnancy and the lowest percent (3.85) reported delivery assistance by trained medical personnel.
- The highest (44.2) percent respondents have known about safe motherhood by radio and the lowest percent (5.8) by television.
- Cent percent literate respondent have knowledge about safe motherhood.
- Higher percent (58.3) of respondent's perception in safe motherhood service is necessary, similarly 10.4 percent reported it is not necessary and remaining 31.3 percent have not any knowledge about it. Cent percent literate have positive perception.
- Among the safe motherhood familiar respondent 97 percent reported that ANC service is provided by Doctor/Nurse/MCHW.
- Majority of respondents (59.7 percent) told 4 times ANC visit is needed and the least percent (3) told only one visit for is needed for ANC care.

- Majority of respondent (38.8 percent) told purpose of ANC service is to get advice and the least percent (6) told to know the position and increasement of foetus. 19.4 percent of respondents haven't any knowledge about it.
- It was found that 54.8 percent respondents have knowledge about TT vaccine among them 50.8 percent told it is necessary both adolescents and pregnant women. Also the highest percent (68.3) reported 2 doses is necessary before delivery.
- Majority of respondent (40.9 percent) reported both veg/fruits/beans and meat/fish/egg are needed to prevent anemia, followed by 27.8 percent reported meat/fish/egg is needed to prevent anemia, 3.5 percent reported veg/fruit/beans is needed to prevent anemia and 27.8 percent haven't any knowledge about it.
- The highest percent (73.9) of respondents have not any knowledge about the symptom of anemia. Yellowish eyes is the symptom of anemia reported by 3.5 percent, another 4.3 percent reported the symptom of anemia is giddiness and remaining 18.3 percent reported both of above are the symptom of anemia.
- Majority of respondents (70.4 percent) have knowledge of safe delivery kit. Among the total respondent 77.4 percent have positive knowledge about the use of clean/hygienic apparatus in delivery.
- Only 8.7 percent respondent have knowledge about probability of foetus may develop in another place than uterus.
- It was found that majority of currently married women had positive attitude towards safe motherhood.
- It was found that safe motherhood content should be included in the school level curriculum is highly significant.
- It was found that an unfavourable statement any tool (equipments) can be used to cut the umbilical cord, but the attitude of women is significant.

- It was found that there is lack of knowledge of respondents in pregnant women must take ANC services.
- It was found that cent percent respondents reported health facility is available.
- It was found 43.5 percent respondent reach to health facility within half an hour and lower percent (14.8) reach to health facility 2 hour.
- Only 36.5 perception respondents received ANC service. Among those respondents aged 20 years and above received ANC service higher.
- Higher the utilization of ANC service by literate and cent percent of the respondent who completed lower secondary level and above take ANC service.
- Among the ANC utilizer 52.4 percent fully took ANC service.
- Majority of respondents (88.1 percent) took ANC service from health post/sub health post.
- Majority of respondents (76.1 percent) were suggested to utilize ANC service by husband.
- Only 9.6 percent who have completed PCL level received vitamin 'A'.
- More than fifty percent (54.8) respondent received TT vaccine. Among them 63.5 percent received TT vaccine two times.
- 90.5 percent of literate and 34.2 percent of illiterate respondents received TT vaccine. Cent percent respondent who have completed lower secondary level and above received TT vaccine.
- Only 13.9 percent respondents have received iron tablets. Among the iron tablet receiver 38.1 percent of literate respondent received.
- More than ninety percent i.e. 92.2 percent were delivery at home.

- Majority of respondent's (57.4 percent) household member were assisted during delivery and the least percent (6.1) were assisted doctors during delivery.
- Among the total respondent 53 percent used safe delivery kit during delivery. Among them 90.5 percent of literate respondents used safe delivery kit and cent percent of respondents who completed lower secondary and above used safe delivery kit during delivery.
- Majority of respondent (61.7 percent) used sterilized blade to cut the cord of newly born baby. Among those cent percent literate and 38 percent of illiterate respondent used sterilized blade to cut the cord of newly born baby.
- Among the total respondent 57.4 percent faced the problem during delivery. Among those problem faced respondents 45.5 percent faced the problem of excessive bleeding, 30.3 faced the problem of bad smelling of vaginal discharge and 24.2 percent faced the problem of fever.
- It was found that 38.3 percent of total respondents received postnatal care. Among those PNC receiver, 71.4 percent of literate and 19.2 percent of illiterate respondents received PNC checkup.
- Among the PNC checkup receiver 93.2 percent received from health post and 6.8 percent received from private clinics. Among those 59.1 percent faced the problem of excessive bleeding, 22.7 percent faced the problem of prolonged labour and 18.2 percent faced the problem of retained placenta.

8.3 Conclusions

This study was conducted to find out the knowledge, attitude and practice of safe motherhood towards women in Khimti VDC of Ramechhap district. The questionnaire including some opinionnaire were used to collect the information to 115 women aged 15-49 years who had at least one child below 5 years of age at the time of survey.

The survey indicates that occupation, educational status and social composition play important role to utilize the safe motherhood services.

The study found that the respondents socio-economic status was poor and measurable. According to the study results, respondent's age at marriage and age at first child birth was lower. Similarly educational status of female was lower as compared to male. Less than average respondents had knowledge about safe motherhood services and it's utilization. Perception towards safe motherhood and practice was also lower in the study area. Educational status played vital role to utilized safe motherhood services in the study area. Family members, radio, health workers, television are the major source to obtain knowledge about safe motherhood. Majority of respondents have knowledge about safe delivery kit and TT vaccination.

It is found that majority of respondents have positive attitude towards safe motherhood and less than average respondents have positive attitude of ANC service must take pregnant women. Cent percent respondents have health facility available but located far from the community and do not provide all the safe motherhood services as their need.

The study result shows that the higher percent of women in Khimti VDC have not received ANC, DC and PNC services, which is determined by their education and economic status in the society. The level of postnatal care checkup is very low and it is highly depend on educational status and other socio-economic and demographic factors on the other hand husband's educational status also played important role in the utilization of safe motherhood services.

The result shows that more than ninety percent respondents were delivered at home without the assistance of trained medical

personal. More than fifty percent were used safe delivery kit and sterilized blade to cut the cord of newly born baby. Lower percent of respondent received postnatal checkup and the utilization of PNC services is depend on respondent's and her husband's education.

On the basis of major findings we can generalize that knowledge and practice of safe motherhood is not satisfactory but their attitude towards safe motherhood is satisfactory.

8.4 Recommendations

According to study result following points are recommended for policy implementation

1. Population of the study area is surviving under poor socio-economic status. Women are discriminated in society. Therefore different awareness programmes have to be launched to raise their social status and they should be provided free health services for their maternal health care.
2. It has been realized that further increasement in the knowledge of women with respect to maternal health care services is essential. So different information, Education and Extra communication program should be launched effectively and efficiently.
3. Most of the people in study area were engaged in household work, Agriculture as their main occupation. So to raise their social and economic status, so they should be provided with different services and opportunities in the different sectors by the policy makers and Government of Nepal.
4. Safe motherhood practices are highly influenced by educational level Socio-economic status, age at marriage and role of media. These all indicators are used at low level. So different programmes related to safe motherhood like training, seminar

and pictorial demonstrative programmes should be carried out by responsible authorities.

5. the availability and accessibility of safe motherhood services strongly affects the utilization of safe motherhood services. Therefore organization of mobile camps and clinical services right at the vicinity of their residence should be carried out to give knowledge so that they could be of maternal and child health.
6. The NGO, INGOs and Governmental organizations are working in that district. They should also be mobilized for the implementation of safe motherhood program in the study area.

8.4 Area for Further Research

Due to the lack of sufficient time, financial constrains and the limit time the researcher could not include all the areas of the study. This study has been limited to knowledge, attitude and practice of safe motherhood towards women in Khimti VDC of Ramechhap district only 1, 2, 3 and 4 wards were selected for the study. Further study can be carried out of whole VDC. Similarly, the comparative study between Dalit and Non-Dalit can be done. This study has examined only a few selected socio-economic variables, thus further studies might be done including other variables like income expenditure, migration, cultural and modern amenities of household. Furthermore, further study can be carried out to examine other aspects of reproductive health such as STDS, HIV/AIDS. So I recommend further researchers to carry out their research study to find out other problems identifying the respective variable. So that further planning could be done to implement different policies.

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APPENDICES

Knowledge Attitude and Practice of Safe Motherhood

A Case Study in Khimti VDC of Ramechhap District

Village/Tole: Ward No.:

Household No.: Religion.:

Name of Household Head:

Type of Household: Joint 1 Nuclear 2 ☐

Household Information

S.N.	Name	Relation to HH/H	Sex	Age	Marital status	Occupation	Education	For the last five years she had given birth or not

Code:

Relation to HH/H

Head 01
01

Husband/wife 02
02

Parents 03

Son/Daughter 04

Grand Father/Mother 05

Uncle/Aunt 06

Other 07

Don't know 08

Education

Illiterate 01

Literate 02

Primary 03

Lower Secondary 04

Secondary 05

PCL 06

Bachelor 07

Marital Status

Single/Unmarried 01

Currently married 02

Separate 03

Widow 04

Divorces 05

Occupation

Agriculture 01

Service 02

Business 03

Household 04

Daily wages 05

Students 06

Other 07

Sex

Male

Female

S.N.	Question	Description	Remarks
1.	What are the main sources of drinking water for your household?	Piped water 01 Pond/stone tap 02 Surface/river 03 Other 04	
2.	What type of toilet does your family use? (toilet facility: yes/no) if yes	Pit toilet 01 Open toilet 02 Bush/field 03 Flush toilet 04 Others 05	
3.	What type of house do you have?	Concrete 01 Stone with mud joint 02 Bamboo joint 03 Others 04	

4.	How much land does your household have?	Ropani	01	
		Anna	02	
		Bighaha	03	
		Paisha	04	
5.	Does your household have such facilities?	Electricity (Solar)	01	
		Biogas	02	
		Telephone	03	
		Radio	04	
		Television	05	
		Others	06	

Individual Questionnaire

These questions will be asked only to women of age 15-49 years who have at least one child of age below 5 years.

Respondent's Name: Ward No.:

S.N.	Question	Description	Remarks
1.	Age at marriage (completed year)	.....
2.	How old were you at your first birthday? (Age in completed years)	.....
3.	No. of living born children	.....
4.	Still births	.....
5.	How old is your the youngest child now?	.....
6.	Are you breast feeding now?	.....

Appendix 'A'

Questionnaire for Knowledge on Safe Motherhood

S.N.	Question	Description	Remarks
1.	Have you ever heard about safe motherhood?	Yes No	01 02
2.	What services does it includes?	Regular checkup during pregnancy Receiving TT vaccination Receiving vitamin A and iron tablets Delivery assistance by trained medical personnel Use of home delivery kits Advice counseling services All of above	01 02 03 04 05 06 07
3.	What is the source of your knowledge?	Radio Television Health workers Private clinics/ doctors Family Others	01 02 03 04 05 06

4.	Do the pregnant need to ANC?	Yes No Don't know	01 02 03	Go to 7 Go to 7
	If yes with whom should ANC service be taken?	Doctor/Nurse/MCHW TBA Witch Others	01 02 03 04	
5.	At least, how many times do the pregnant need to ANC?	No necessary times Don't know	01 02 03	
6.	What is the purpose to meet them?	To know the position and increasement of foetus To get advice All of above Don't know	01 02 03 04	
7.	Do you know about TT?	Yes No	01 02	Go to 10
	If yes, what is this?	Tablet Syrup Injection Others	01 02 03 04	
8.	Who should take TT?	Adolescents Pregnant women Both of above Don't know	01 02 03 04	
9.	Do you know how many of it is necessary before delivery?	1 dose 2 doses 5 doses Don't know	01 02 03 04	
10.	What type of food should a pregnant take to prevent anemia?	Veg/fruits/beans Meat/fish/egg Both of above Don't know	01 02 03 04	
11.	What is the symptom of anemia?	Yellowish eyes Giddiness Both of them Don't know	01 02 03 04	
12.	Have you ever heard about the safe delivery kit?	Yes No	01 02	Go to 15
13.	Is it surgical appliances?	Yes No Don't know	01 02 03	
14.	Is clean/hygienic apparatus used in delivery?	Yes No Don't know	01 02 03	
15.	Do you think that foetus may develop in another place than uterus?	Yes No Don't know	01 02 03	
	If yes, name that part?	.....	

Appendix 'B'

Opinionnaire of Attitude of Safe Motherhood

S.N.	Statements	Agree	Undecided	Disagree
1.	Knowledge of safe motherhood is essential in our day to day life			
2.	Safe motherhood is useful, practicable and behavioural in our life			
3.	Safe motherhood content should be included in the school level curriculum			
4.	In Nepal, most of the Nepalese people lack access to the knowledge of safe motherhood			
5.	Pregnant women must take ANC service			
6.	Women should be pregnant above the age of 20 years			
7.	Safe delivery kit is essential to the women during the labour			
8.	Any tool (equipments) can be used to cut the umbilical cord			
9.	Exclusive breast feeding is good to the infant			
10.	Supplementary food should be managed to the infancy after 2-6 month of birth			
11.	First milk of mother should be given to the infant			
12.	Delivery place should be very neat and tidy			
13.	Pregnant mother should more emphasize on balance diet than others			
14.	Pregnant should participate in light exercise as well as light domestic work.			
15.	Delivery women should be kept in such place where there is provision of sunlight and ventilation.			
16.	Regular medical check-up is essential to all the pregnancy during their pregnancy			
17.	Infant should be vaccinated on time against infections diseases			
18.	Mother should avoid taking tobacco, alcohol, drugs, excess labour during pregnancy			

Appendix 'C'

Practice of Safe Motherhood

1) Available and accessible of safe motherhood services				
S.N.	Question	Description		Remarks
1.	Are there any health facilities in your locality?	Yes No	01 02	Go to 4
2.	What type of health facility is available?	Hospital Health post/sub health post Private clinic TBA (Sudeni) FCHV Dhami/Jhakri Other (Specify)	01 02 03 04 05 06 07	
3.	What type of safe motherhood service are provided in that health facility?	Regular check up during pregnancy TT vaccination Availability of vitamin 'A' and iron tablets Deliver assistance by trained medical personnel Others	01 02 03 04 05	
4.	Distance from house to health centre?	.....	
5.	How much walking time in taken to reach the health centre?	Hrs.: Minutes:.....	01 02	
6.	What type of transportation is available here?	On foot Animal back Vehicles Others	01 02 03 04	
2) Antenatal Care Practice				
1.	When was your last pregnancy?	Year Month Ago		
2.	Did you visit for antenatal care?	Yes No	01 02	Go to 6
3.	How many times during pregnancy?	..... times	01	
4.	Where were the visits to?	Health center/Health Post Hospital Clinics Others	01 02 03 04	
5.	Who suggested you to get there services?	HW/Nurse/Doctor FCHV Husband Mother in law Other family member Friends/Neighbour Other	01 02 03 04 05 06 07	

6.	Did you receive vitamin 'A' during pregnancy?	Yes No Don't know	01 02 03	
7.	Have you received TT during pregnancy?	Yes No	01 02	
	If yes how many times?	.....	
8.	Did you take iron/folate tablets?	Yes No	01 02	
	If yes, how many months?	During pregnancy After Pregnancy	01 02	
9.	Have you taken calcium or vitamin during pregnancy?	Yes No Don't know	01 02 03	
10.	How long did you continue working during your pregnancy?	..... Months		
3) Safe Delivery Practice				
1.	Where did you deliver your baby?	Home Health center Hospital Health post Private clinic Others	01 02 03 04 05 06	
2.	Who had assisted with the birth of the baby?	TBA (Trained/Untratiend) Household member AHW/HA/Nurse Doctors Others	01 02 03 04 05	
3.	Did you use a safe delivery kit for the birth?	Yes No	01 02	
4.	Which instrument was used to cut the cord?	Sterilized blade Non sterilized blade Others Don't know	01 02 03 04	
5.	How long was the labour?	..... Days Hours	01 02	
6.	Did you bg help during labour?	Yes No	01 02	
7.	Where did you seek?	Starting place		
8.	Around the time of birth of child, did you have any problems?	Yes No	01 02	
	If yes, what was the problems?	Excessive bleeding Fever Bad smelling of vaginal discharge Others	01 02 03 04	

4) Postnatal Care Praticice				
1.	Did you receive a check up within 6 weeks following delivery of your last child?	Yes No	01 02	
2.	If yes, where did you receive the check up?	Hospital Health Post Sub Health Post Private Clinics TBA FCHV Others	01 02 03 04 05 06 07	
3.	Did you get any health problem after the delivery of your last child?	Yes No	01 02	Go to 5
4.	If yes, what were the problems?	Prolonged labour Retained placenta Obstructed labour Excessive bleeding Others	01 02 03 04 05	
5.	Did you visit any health facility for check up?	Yes No	01 02	End
6.	If yes, where did you go for check up?	Hospital Health Post Sub Health Post Private Clinics TBA FCHV Others	01 02 03 04 05 06 07	

*** The End ***