

CHAPTER- ONE

INTRODUCTION

1.1 Background of the study

Reproductive health is the crucial part of the overall health and safe motherhood is one of the most important component by which mostly related to the health of women and newly born child. Women (females) are the coincided pillars of all kinds of development. They have great responsibility in the society but their status like social, economical, educational, political etc. has been seemed poor. Because of their poor status, they have been facing complicated motherhood problems even death. The trends of complications and deaths of female (women between reproductive age (15-49) has found highly in underdeveloped or developing country like Nepal. Nearly six lakh women die every year as a result of complication arising from pregnancy and childbirth worldwide and 539 per lakhs women die every year in Nepal. The Nepalese MMR is found high among other developing countries i.e 539/lakh. But it has been found decreased upto 281 per lakhs by sisterhood method till the year 2011 based on NDHS 2006. This ratio is also highest in the world indicting that the large number of mothers die due to causes related to child birth. This trend may lead, due to poor knowledge, attitude and practices of Nepalese women on safe motherhood services provided by government and non-governmental institutions which is affected by culture, tradition, norm and values as well as geo-diversity in the context of Nepal. They have not appropriate health knowledge to face these types of reproductive health problems particularly on during the antenatal, delivery and post natal in the remote area of our country. so we should have good understanding about safe motherhood and definition of reproductive health and its related matters.

International Conference on Population and Development held in Cairo in September 1994, focused global attention on reproductive health which is defined as in its (ICDP) documents as "A state of complete physical, mental and social well being and not merely an absence of diseases or infirmity in all matters related to the reproductive system and its functions and processes". Reproductive health therefore implies that people are able to have a satisfying safe sex life and that they have 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 the safe pregnancy and childbirth (UN, 1994).

Worldwide nearly 6 lakh women die between the ages of 15-49 years every year. As a result complications are arising from pregnancy and childbirth. The poor health and nutritional status of women and the lack of care that contribute to their death in pregnancy and child birth also have an impact on the health and survival of the infants and children have behind. It is estimated that nearly 2/3 of 8 million infants death 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).

At least, one woman dies per minute due to puerperal causes or complications of pregnancy and child birth, accounting more than 585000 deaths per year in the world. More than 31000 children under age 5 year per day and 11 million per year die in developing countries. Respiratory disease, diarrhea, malaria, measles and malnutrition as well as communicable diseases are the major causes of children death yet. There some disease rarely kills children in more developed countries (UNFPA, 2000).

Safe motherhood is defined as "increasing the circumstances where in a woman is enabled to choose whether she will become pregnant, and if she does ensuring she receives care for prevention and treatment of obstructive care if she needs it and care after birth. So that she can avoid death and or disability from complication of pregnancy and child birth" (Feueirstein, 1993).

The global safe motherhood initiatives were launched in 1987 in Nairobi to improve maternal health and cut the number of maternal deaths in half by the year 2000. The initiatives seek to reduce illness and death related to pregnancy by ensuring that women have the best chance of having a safe pregnancy and delivery with a healthy baby. The ingredients necessary for making motherhood safer include prenatal care, safe delivery postnatal care, and 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).

In Nepal, safe motherhood programme was initiated since 1994 and has been extended in ten districts representing five-development region (MOH, 2000) safe mother hood has been identified as a priority programme in the national health policy. Nepal has it's 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).

Out of total population (23151423, national Census of 2058), it's 50.05 percent is covered by female. This is greater than the number of male but less in literacy attainment, official work and decision making level as well as on the behavior of knowledge, attitude and practice of their own health. Large families are common in rural communities (85.8%). Among them the greatest percentage of female are depend on agriculture and household work. Total fertility rate of Nepal is still high i.e. 4.1 per woman. Maternal mortality ratio is shown problematic and more poor (539/lakh) than other developing countries. The practices on delivery conduction with attending skilled birth attendants as well as institutional deliveries are so poor (13% only). Mountainous and hilly female population is the greatest victims of that situation. High MMR and high neonatal deaths are the result of that ignorance. Nowadays, indirect cause that is determined as "Three delays" are the most considerable factors, which emphasize to increase MMR and neonatal deaths or failure of safe motherhood services. Family planning, antenatal care clean and safe delivery including child immunization (EPI) as well as new born care and management are determined as safe motherhood services. Which helps to reduce MMR, neonatal mortality rates, IMR and U5CMR. Three delays includes, delay in seeking care, delay in reaching care and delay in receiving care. Delay in seeking care occurs at home belongs to decision for care, delay in reaching care occurs at road due to lack of vehicle or lack of adequate money or difficulty by geographical distance and the last third delay occurs at hospital or health institution to get service where service have been provided.

Likewise the nation, the Taplejung district, which is situated in far north eastern part of the country with geographical diversity, multilingual, religious and

ethnic group residing mostly the great number of Limbu, Rai, Sherpa, Tamang, Brahmin, Chhetri and the lower of Newars, Bhujel, Biswakarma (Kami), Damai, Sarki, Sunwar etc. They live at 50 divided VDCs of two electoral regions with primary health care center, 43 sub health posts, 8 health post and one district hospital. Altogether 54 health institution has provided health services currently with the help of one doctor, 11 HA, 5 staff nurse, 13 ANM, 43 MCHWs other AHWs and VHWs. Lack of maternity hospital, required equipments, skilled manpowers and transportation facilities, people of the district are facing different RH and Safe motherhood related problems and they are doing different types of traditional practices to solve them.

Among the resided ethnic group of Taplejung district, Newars is a one backward society that can be found living at 23 VDCs out of total 50 VDCs. Among total population of the census of 2058 (i.e. 134698) of this district, 2507 or 1.86 percent are Newars. Among them 820 Newars including 401 male and 419 female are living in Phungling, Dhungesanghu and Change within 110 household, has been selected to this research, where 20107 peoples including all caste have been lived. In compare with total population of the three CDCs 4.08 percent are Newars or 820 has been living in the selected area but for the purpose of research, the total Newars women population (419) only with reproductive age (15-49) of all 110 household where they found will have chosen. This will be its first attempt to study about KAP of safe motherhood in Newars community of that area which can identify real status of safe motherhood of the Newars community peoples of the remote area.

1.2 Statements of the Problem

Every woman of developed countries looks forward in every sector like education, economic employment etc. as well as actively participation on decision making for their own welfare. But in developing country like Nepal have been moving around in its opposite characterized by backward in education, economic, employment etc and passive in decision-making as well as male dominated patriarchal society, which leads high percentage of premature age at marriage in compare with 22.9 years for female to 19.5 years for male. Total fertility rate (4.1/woman) is high and the trend of maternal mortality ratio (539 per lakh) is also higher than other developing countries. They have been found gradually decreasing till the year 2006

up to 3.1/women and 281 per lakh by the data of NDHS 2006 respectively. Out of 47 percent female population aged 15-49 years (reproductive ages), 17.5 percent woman are being pregnant every year. Among the total pregnant, 40percent are identified dangerous and its 10 percent suffered by forceful unsafe abortion. Data has shown that one woman in every two hour dying due to puerperal causes mainly after delivery due to PPH. Other causes are identified as sepsis, eclampsia, obstructed labour and unsafe abortion.

In Nepalese context, 90 percent pregnant women are delivered at home and only 10 percent in health institution. Among them 9 percent delivered under health facility compared with 89 percent by TBA, 56 percent by neighbors (relatives), 11 percent without helper (alone). Only 2 percent of them use clean home delivery kit in home delivery. Maternal mortality seemed high (67%) at home in Nepal. Among all, 11 percent died in health facility, 43.7 percent received antenatal care in total (nationwide). Among them 32.3 percent in mountain, 46.7 percent in hill and 43.1 percent has found in Terai. Women have received ANC 86.6 percent in urban and 37.5 percent in rural as well as 28.5 percent of no schooling and 89.7 percent of SLC and above women are benefited. In another, 50.6 percent in urban, 14.3 percent rural, 7.1 percent in mountain, 22.7 percent in hill and 17.5 percent in Terai characterized by 8.2 percent without education and 71.1 percent with SLC and above women received post natal care. 18.7 percent of all women received PNC according to the national situation (NFHS, 1996).

Despite an approach to improve maternal health, it is still out of improvement. The lack of accessibility and availability of health services may causes not to achieve such improvements. In Nepal, there are estimated 89 hospitals, 5310 hospital bed in government sectors, 3161 sub health posts, 205 primary health centers, 5415 doctors, 8966 health assistants and auxiliary health workers, 3921 nurses, 62546 TBAS and FCHVs (MOH, 1999).

District progress on ANC first visit as percent of expected pregnancy is found as 46.8 percent in 2002 to 2003 with average no of 1.8 visits per woman among them 47 percent respondents used to come four times to take ANC visit, 16 percent of delivery are delivered by health workers. Only 16.3 percent women have taken PNC services at first visit in Taplejung. These facts have been found increased by the year

2065/66 to 2067/68 gradually from 53.47 percent to 70 percent on the 1st visit of ANC. Similarly, 57 percent of 4th visit have been increased found up to 54.40 percent. Delivery that is conducted by health worker at home and institutional including both has been found increased up to 29 percent by the year 2067/68. PNC 1st visit has found increased up to 41 percent by the year 2067/68 than previous rate of 16.3 percent (District health profile and annual report, F/Y 2067-68).

The above evidences clarified that the availability of above health services is extremely poor. Only one hospital bed is available for 4360 persons and more than 4275 persons have one doctor. The proportion of women who didn't receive antenatal check-up, (56.5%) and 79 percent of delivered mother outside the health facilities did not receive any postnatal care. It is the problem of our nation why Nepalese women are not getting access to ANC, during delivery care and postnatal care though it has been emphasizing on maternal health care. In hilly and mountainous area like Taplejung 21 percent of pregnant women and 70.2 percent of delivered woman has not accessed. Similarly the maternal mortality rate is still high.

Religious communities are distinct in any society (Gubhaju-1983) studied fertility differential by caste/ethnicity using the 1976 Nepal Fertility survey data found that the standardized mean number of CEB varied from 2.9 children for Brahmins to 3.8 children for Newars (Niraula and Shrestha, 1997).

High fertility is found in Newars community mostly the higher in the rural (4.83 %) than in urban (2.85 %) for women aged 15-49 (MOH, 1995).

The main cause of prevailing high fertility in Newars is almost universal cultural marriage and their demand for children in social and cultural lives. Newars from Nepal Bhasa speaking community marriage with same cast people. Higher fertility is found in this community compared to other cast and ethnic group of Nepal. For example in 1996, total fertility rate for Brahmins has 5.75 percent, Chhetri has 6.07, Tamang has 7.03 and Newars has 4.89 (Niroula and Shrestha ,1997:13-40).

The main source of income of the Newars community is agriculture and a few of them are doing different types of small business. Majorities of Newars women are engaged in household work. Literary status is poor, officially employment and the

decision-making level is found weak, low age at marriage is found commonly due to traditional values, which leads to become a mother before maturity. Consequently the maternal mortality and fertility is found high. Hence there living standard is low which leads to high fertility in this community, likewise in Taplejung found backward for every aspects.

The study on Bageswory among Newars community in fertility behavior has found that illiteracy rate is still high (55.04%), low age at marriage is also high (69%) with mean age (17.9 years) at first marriage. The mean CEB is found also high (6.4 per women) on illiterate women (Ambika Nyaichyai, 2005).

Likewise in Bageswory, the Newars women of Taplejung is not remained far from that condition because that tradition, culture and blind belief on traditional healer is usually practiced more in those community than other neighbouring caste. Different three VDC s among 23 VDCs where residence of Newars has found densely, selected as a sample characterized by facilitated VDCs (Phungling, the district headquarter of Taplejung) and under privileged remote VDCs (more than 5 hours far from district headquarter) like Dhungesanghu and Change. By adjoining these types of VDCs, the average value will be found and that is considered as useful sample-data for whole Newars community on KAP of safe motherhood as well as in entire district.

1.3 Objective of the study

The general objective of the study is to determine the knowledge attitude and practices of safe motherhood in Newars community of Taplejung on the basis of designed questionnaire using interview schedule. The objectives are enlisted below.

To identify the demographic and socio-economic characteristics of current married Newars women aged 15-49 years.

To examine the relationship between knowledge, attitude and practice (KAP) of safe motherhood to their educational status of Newars community.

To examine the relationship between safe motherhood behavior and cultural setting of Newars.

1.4 Research Questions

Safe motherhood is the great problem of Nepal and other developing countries of the world. There is still high infant and maternal mortality rate. Only healthy, safe and responsible mother can built healthy, educated, active and responsible citizen and by which we can build good, strong and civilized nation. This study aims at answering the following research questions.

-) What is the present condition of the safe motherhood in Newars community?
-) What are the affecting factors that are responsible for safe motherhood practice?
-) What are the main problems of safe motherhood practice?

1.5 Significance of the study

Although there have been studies on safe motherhood, the study on KAP of safe motherhood hardly be found. This study fulfills the lack and it will help to enhance the effectiveness of safe motherhood. Safe motherhood practice is one of the crucial factors for improvements of the maternal and child health. A country can't progress without healthy people. So we are always careful about safe motherhood because safe motherhood practice brings healthy and safe child. Therefore, this study gives contribute to fill up the gap regarding the problem mentioned above. It exposes the problem of the society and suggests the measures to solve these problems. In our society, the condition of maternal health is worst causing high maternal mortality rate. The leading cause for this high MMR is lack of knowledge, attitude perception and utilization of safe motherhood services.

Therefore, this survey helps to collect the information about the knowledge, attitude and utilization of safe motherhood service. This study has provided base-line information about the recent health condition of mother. So, this will undoubtedly helps researcher, policy maker, program's planner, NGOs & INGOs and other person who are interested in this field, moreover, the significance of study are:

-) Result of this study is useful to the local people of study area to develop awareness about the risk of early marriage, early and frequently pregnancy etc.

-) It is useful to the research workers, specialist and health workers to construct maternal and child health program in study area.
-) It will be useful as guide for interested person in further study on safe motherhood practice.
-) It is helpful to educate the women to care their own health during pregnancy, delivery and post natal and family planning.
-) It can also be helpful for that researcher who wants to study the situation of KAP of safe motherhood in rural area of hilly region like taplejung.
-) Findings of this study are helpful for government agencies, local NGOs and INGOs who are working in the field to raise status of women and to promote the standard of villagers.

1.6 Limitation of the study

-) The study on KAP of Newars women on safe motherhood was conducted at Phungling, Dhungesanghu and Change VDC.
-) The respondents were only women aged between 15 to 49 years having at least one child during the time of research.
-) Data obtained this study was based on primary source available relevant information has matched to compare with findings.
-) One respondent from each household of the selected VDC wherever they found at that selected VDCs was taken in this research.
-) The research was conducted by the active participation of researchers self and with the assistance of trained colleagues with structured interview schedule and questionnaire in the selected area.

1.7. Organization of the study

This study has been divided into six chapters. The first chapter consists of introduction, statement of the problem, objectives of the study, research question, significance of the study, Delimitation of the study, Organization of the study and definition term used. The second chapter deals with review of literature and conceptual framework. The third chapter includes about the population of study area, sources of data, research design, data collection procedure and method of data

processing and analysis. The fourth chapter deals about socio-economic and demographic characteristics of household population. The fifth chapter describes about socio-economic and demographic characteristics of the respondent. The sixth chapter deals about knowledge, attitude and practice of safe motherhood with socio-economic and demographic variables. The last seventh chapter consists of summary, conclusion, recommendation and future research issues.

1.8. Definition of the used term

Abortion: Abortion refers to the termination of pregnancy from whatever cause before the fetus is capable of life outside the uterus. The lowest of potentially viable fetus new is considered to be about 500 gms.

Antenatal care: It refers to care of the mothers and her fetus during pregnancy.

Postnatal care: It refers to care of the mother and her newborn baby after delivery within 45 days.

Delivery Care: It refers to care of mother and her baby during delivery time.

Birth Space: It is time interval between two successive deliveries.

Maternal Mortality: The death of women while she is pregnant or within 42 days after delivery, from any causes related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

Age at marriage: The age at which female marriage and enters the reproductive period of life.

Contraceptive method: It is a preventive method which helps couple in avoiding unwanted pregnancy and to control family size.

Pregnancy: It is defined as a physiological condition of women during reproductive period (15-49) in which development of fertilized ovum occur within the maternal body.

Health: Health is complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.

Fertility: Ability to do reproduction of human beings.

Family planning: Way to plan a family and using contraceptives.

Unwanted pregnancy: A condition that a woman got pregnant without need, desire and plan.

Puerperal: A condition of the enlargement of uterus size due to fertilize growth and development of fetus and goes to normal in size after expulsion of baby with placenta.

Women: Women mean age between 15-49 years (reproductive age) for this study.

Safe motherhood: Safe motherhood is the term used to refer to a woman's ability to have a safe and healthy pregnancy and child birth up to 42 days after delivery.

Placenta: A mass of muscles which helps to fetus to relay nutrients and lies with it into uterus.

CHAPTER TWO

LITERATURE REVIEW

This chapter deals with previous studies that we are relevant to this study is mentioned below.

The global safe motherhood initiative was launched in 1987. It is led by unique partnership of international organization including the UNICEF, IPPF (International Planned Parenthood Federation) and population council. These agencies work together to raise aware set priorities, stimulate research and mobilize share information according to each and commitment have enabled governments. Than100 countries to take their own action to make motherhood safer. "Safe motherhood" is the term used to refer to a woman's ability to have a safe and healthy pregnancy and child birth. The safe motherhood initiative was launched by a coalition of international agencies and non- governmental organization to improve the services available to woman during pregnancy and child birth, to develop model programmed and to conduct research on strategies to maternal care in a wide range of safe motherhood initiatives is to meet the target agreed to at ICPD reducing the number of maternal deaths by half by the year 2000, and by half again by the year 2015 (UN, 2000).

At the ICPD held at Cairo in 1994, 179 government area that everyone has the right to enjoyment of the highest attainable standard of physical and mental health. The concept of "Reproductive Health" refers to social well-being and not merely the absence of disease or infirmity in all matters relating to the reproductive system and to its function and process. All the persons are to have access to a broad range of reproductive health service as well as the freedom to exercise informed choice in determining the number and spacing of their children and the services needed to go safely through pregnant and child birth (UN, 2000). At the 1994, ICPD in Cairo, government agreed to out the number of maternal death by half of the year 2000 and half again by 2015. In 1995 the fourth world conference on women (FWCW) in Beijing gave substantial attention to maternal mortality and reiterated the commitment made at ICPD. The ingredients necessary for making motherhood safer include prenatal care, safe delivery, postnatal care, family planning and good nutrition. It is

also essential to inform to raise awareness among pregnant mothers and their families about the importance of maternal health care and family planning services. It is also determined that the most five major causes of maternal mortality are APH, infections, unsafe abortions and its complications, complain obstructed labor.

UNFPA (2004) revealed that one third of all pregnant women worldwide receive no health care during pregnancy and 60 percent of all deliveries take place outside the health facilities the life time risk of a woman dying in pregnant or child birth in developed countries is 1 in 2800. However, in sub-Saharan Africa it is 1 in 16 and in Nepal it as 1 in 185 (UNFPA , 2004).

Since the fourth world conference of women held in Beijing 1995, women's health issues are increasingly being included in development agencies. In south Asia region, women's health programmnes promote the integration of gender perspective in both WHO and national programmes. They also promote the development of health policies, a technical unit for women's health was established in the regional officer in 1997(WHO, 2000).

WHO reports says: the resulting death to all could be sharply reduced through wider use of key intervention and a "continnum of care" Approach for mother and child that begin before pregnancy and extend through child birth and in to the baby's childhood (WHO, 2005).

MOH, 1998 revealed that in south central Asia, the high rates of maternal mortality ratio (MMR) estimated for Afghanistan (990), Nepal (740) and India (540) where as the ratio for Japan is 10 (UNFPA, 2004: 103). In the contest of Nepal, significant proportion 18 percent of maternal death occurs in adolescent girls. Most of teenager mother die due to the cause of child birth (MOH, 1998).

In Nepal, about 89 percent of all women deliver babies at homes and a nurse or doctor attends only 11 percent. The childbearing age (15-49) constituted 23 percent of the total population. Nepalese women suffering from pregnancy complications at very high and consequently this risk increases as these women under go multiple pregnancies, during their reproductive age. Twelve women's death occurs by the

complication of delivery every day. Every two hour 1 woman's death occurs by complication of pregnancy in Nepal (MOH, New ERA, and ORC Macro, 2006).

One in two pregnant women receive antenatal care in Nepal; with 28 percent receiving are from a doctor or nurse, mid wife or auxiliary nurse mid wife. Most Nepalese women who receive antenatal care get it at a relatively late stage in their pregnancy and do not make the minimum recommended number of antenatal visits. Only one in seven women (14%) makes four or more. Visits during their entire, while 16 percent of women report that their first visit occurred at less than four month of pregnancy. Forty-five percent of women receive two or more doses of tetanus-toxoid injection during their most recent pregnancy. A medical professional attended 13 percent of births at delivery. With only 8 percent of births attended by a doctor and 3 percent attended by a nurse, mid wife or auxiliary nurse midwife. Nearly a TBA attended a one in four birth. Safe delivery kits (CHDKs) were used in 9 percent of birth delivery at home. Only 17 percent of mothers receive postnatal care within the first two days after delivery. Given more troubling is that nearly four in five mothers did not receive postnatal care at all (NDHS, 2006).

In fact, while complications of pregnancy and the related death can occur any time during entire period of gestation. Childbirth related complications could lead to death long after childbirth. Thus, the time reference for maternal death and the problem of cause health classification, render the estimation of maternal mortality difficult especially in rural areas developing countries. Hence, reproductive health including antenatal care health is determined by social and economic development levels health life styles, women's first position in society and the quality and availability of health care.

The maternal mortality is an effective index to the quality of maternity care services in any given country. A national survey conducted in 2006 estimated the MMR at 281 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).

The safe motherhood program in Nepal has adopted two major strategies to improve maternal health provide around the clock essential obstetric services and ensure the presence of skilled attendants at deliveries (MOH, 2001). In recognizing that the majority of women do not have access to maternal health care services due to social economic and political reasons, the MOH is emphasizing a multi-sectored approach that encompasses medical interventions and non-health programs that promote access to and utilization of services (NDHS, 2001). Abortion complication is a major health problem in Nepal because 20 percent of mother's 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).

Cause of Maternal Death in Nepal

Pregnancy or delivery related women's 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 have been dead by the complication of delivery. Every two hour 1 woman has been dead 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 births less than 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%) or a nurse or auxiliary nurse midwife (11%). 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 form 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 who have completed their SLC (NDHS, 2001).

2. Delivery Care

The objectives of providing safe delivery services are 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%) to be delivered at a health facility than a child from a rural area (7%). 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

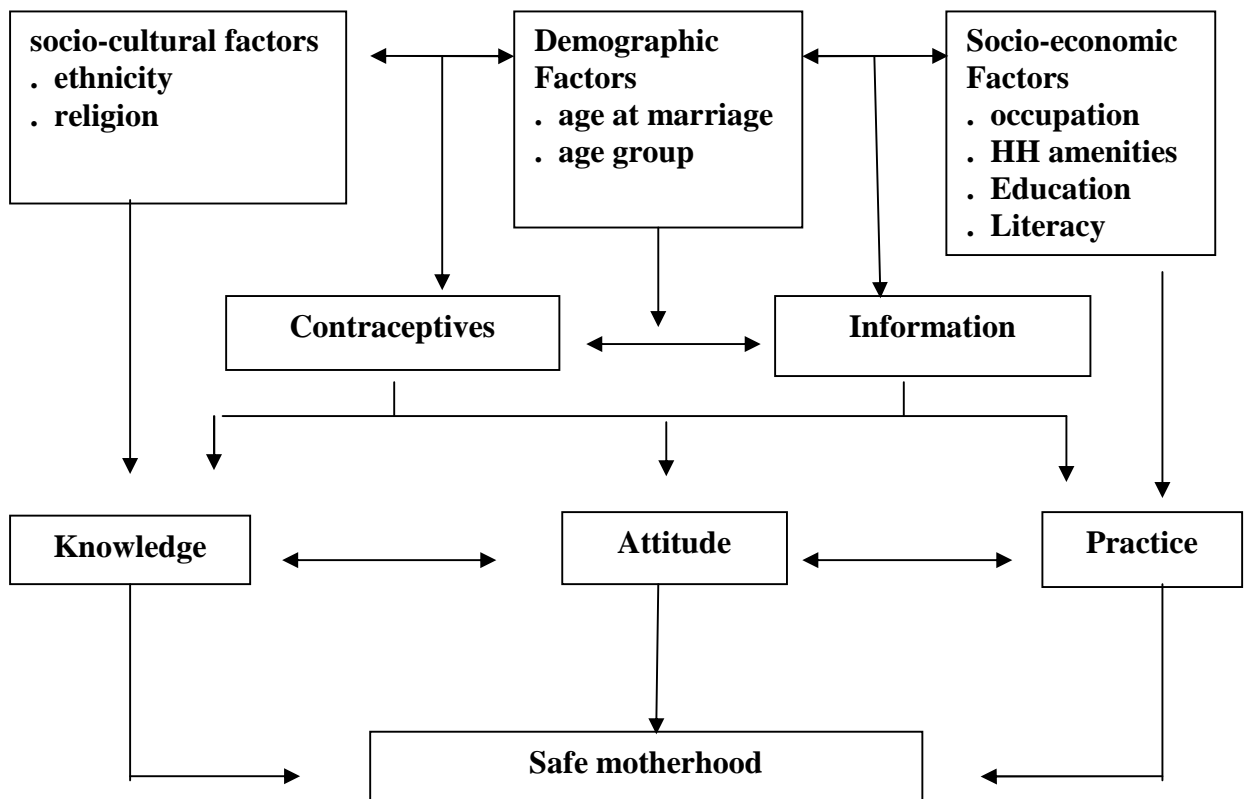
The National Safe Motherhood program recommends that mothers should have a postnatal checkup within two days of delivery. This recommendation is based on the fact that a large number of maternal and neonatal deaths occur during the 48 hours after delivery. PNC is uncommon in Nepal. Seventy-nine percent 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% and 13% respectively) (NDHS, 2001).

Conceptual Framework

A conceptual framework is a clear theoretical structure of a study. This shows relations and interrelations among the dependent intermediate and independent variables which are taken into the criteria of the study.

Safe motherhood KAP is the result of the number of affecting factors which may affect it directly or indirectly and those factors are called independent variables. In this study cultural and social, socio-economic, demographic factors are supposed to be independent factors. Each independent variable has numbers of indicators. There are different variables which directly and indirectly related to safe motherhood situations because there are many factors interconnected such as age, sex, religion, culture, tradition, social norms and values, occupation etc. Household amenities and the use of contraceptive help to change women's KAP on safe motherhood. We can see different factors in the following conceptual framework.

Figure: Conceptual Framework



Source: Based upon literature

CHAPTER- THREE

RESEARCH METHODOLOGY

3.1. Population of study area

The study area was Newars community of remote village: Dhungesanghu, and Change and headquarter of Taplejung District and Phungling VDC which are situated in north-western part of the district. Out of total (134,698) population of Taplejung, 2,507 are Newars. They have been living in different 23 VDCs, but 830 Newars of those 3 VDCs (out of total 2,507 Newars), including both sexes were taken for this study who have insufficient access of basic needs like education, health, transportation and communication facilities and great number of women suffer from maternal morbidity and high mortality. Due to traditional culture and belief they treat in traditional healer for their illness in remote VDCs. In those three VDCs, 105 married women who were in reproductive age (15-49 years) were included for this study.

3.2 Sources of data

The main source of data for this study was primary collected on field study of only selected age group of Newars women with at least one child who were living within selected VDCs and selected households. Furthermore district profile, VDC profile as well as some relevant articles, thesis reports, magazines were used as secondary sources of data for this study.

3.3 Research design

Research design is the main part and frame work of the study. There are many designs in the field of research. Among them a cross -sectional sample survey was used in this study.

3.4 Sampling procedure

This research has used non-probability purposive sampling for all the women aged between 15-49 years that were married and resided only in selected VDCs. One

respondent of each household was chosen for interview. For this purpose all the households of Newars community are eligible for interview if the respondent falls under the category of this study. Thinking that, this sample not only represents for these selected VDCs but it covers whole Newars community of Taplejung district also.

3.5 Tools of data

To meet the objectives it is necessary to use suitable tools, so the research had involved structured interview schedule with some open ended question, multiple choice questions and modified likert's attitude scale were applied as the tool for collection of required data about KAP of safe motherhood among selected group. Some important questionnaires as a guideline for interview were designed. It consisted mainly two parts as household and individual questionnaire.

In household questionnaire, questions were included as name of household members as well as their age, sex, marital status with number of live births, abortion, death of mother during this year with relevant causes, occupation, education, using facilities like electricity, biogas, telephone, radio, TV etc.

Another questionnaire belongs to depict individual information on KAP of safe motherhood on married women of reproductive age (15-49 years). For this purpose, questionnaires were set up into 3 parts: ANC, delivery and PNC. In this questionnaire design, all kinds of services provided by government (i.e. vaccination, nutrition, family planning and newborn care etc.) were included.

3.6 Data collection procedure

Data were collected purposively upon selected communities around 110 households head for demographic characteristics and only 105 women (only women) from 110 households were selected purposively for Safe motherhood who were eligible for this survey with the help of interview method by designed questionnaire based on safe motherhood issues. Two ongoing bachelor's degree third year's students from Pathivara Campus Taplejung, one social worker from Change VDC and one student from Maiwakhola Higher Secondary School Dhungesanghu were used in this

survey in both household and individual questionnaire. Firstly, household survey was conducted at selected VDCs and main respondent (women aged between 15-49 years who have at least one child during time of survey) have been chosen for this survey from the whole family with the help of household data. Secondly, all of the prepared questions were asked for selected women who were eligible to this survey. Data were collected purposively by visiting their house one by one and it was completed within 2 months (1st Mansir 2068 to the end of Paush 2068). In this data collection procedure, the four basic ethical principles: respect for the dignity of respondent, beneficence, justice and respect for the environment, denoted in "National Ethical Guidance for Health Research in Nepal" which is published by NHRC Nepal was strictly adopted and followed.

3.7 Analysis and interpretation of data

After completing data collection they were tabulated and kept in sequential order according to the purpose of the study. The collected data were analyzed and interpreted in suitable form like table, charts, graphs etc wherever possible. Some simple statistical method was used to interpret the findings. The interpreted data were based on empirical finding of previous studies, established theories and observations. In this research: graphs, charts were made with the help of computer program which were shown in chapter- IV thoroughly.

CHAPTER- FOUR

SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLD

4.1 Age sex structure

Two characteristics of the population that receive the most attention in demographic analysis are age and sex. Although, the sex is a personal character of a person, information on sex can normally be obtained without difficulty.

Table 1: Distribution of population by age-sex structure

Age group	Male		Female		Total Population	
	No.	%	No.	%	No	%
0-4	15	5.58	17	5.84	32	5.71
5-9	24	8.92	31	10.65	55	9.82
10-14	32	11.90	27	9.28	59	10.54
15-19	20	7.43	32	11.00	52	9.29
20-24	26	9.67	37	12.71	63	11.25
25-29	28	10.41	35	12.03	63	11.25
30-34	28	10.41	19	6.53	47	8.39
35-39	20	7.43	19	6.53	39	6.96
40-44	17	6.32	16	5.50	33	5.89
45-49	14	5.20	17	5.84	31	5.54
50-54	12	4.46	11	3.78	23	4.11
55-59	9	3.35	11	3.78	20	3.57
60+	24	8.92	19	6.53	43	7.78
Total	269	100.00	291	100.00	560	100.00

Source: Field Survey 2011.

In this survey, among 560 population from 110 households of Newars community of Phungling, Dhungesanghu and Change VDCs, the age-sex structure had found with more females (51.96%) than males (48.04%) same as in the preliminary data of National Census 2011. According to the age wise distribution,

more people were found at the age group between 20 to 29 years as 11.25 percent and the second largest age group had found in school aged teenager children as 10.54 percent between 10-14 years age group. And above age group of 30-34 population had found gradually decreasing in percentage.

4.2 Religion

Nepal is the multilingual and multi-religious country. Newars community have adopted the following 3 kinds of religion which are existing in the whole nation likewise Hindu, Christian and Buddhist.

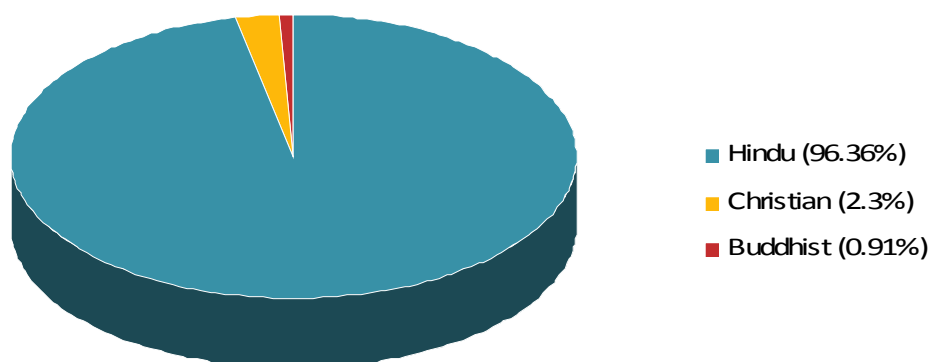
Table 2: Distribution of population by religion

Religion	Households	
	No.	%
Hindu	106	96.36
Christian	3	2.3
Buddhist	1	0.91
Total	110	100.00

Source: Field Survey 2011.

Among 110 households, 96.36 percent of households had adopted Hindu religion, the greatest in number and the second, 2.3 percent of them had adopted the Christian and the last one, 0.91 percent had adopted the Buddhist religion in this society which are shown in the above table 2 and figure 1 following.

Figure 1: Percentage distribution of population by religion.



4.3. Marital status

Marital status is an important determinant of fertility behavior particularly in a non-contraception society and where most of the birth takes place within marital union as in Nepal.

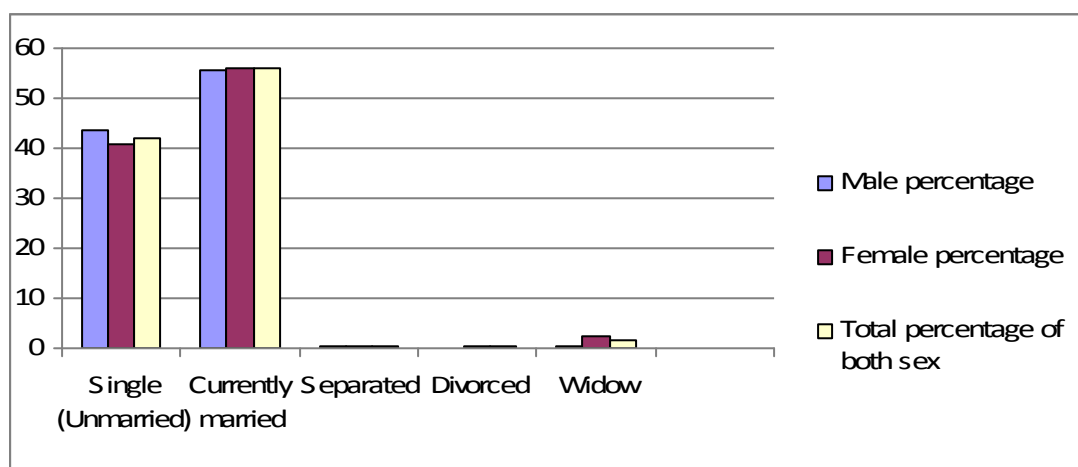
Table 3: Distribution of population by marital status

Characteristics	Males		Females		Total population	
	No.	%	No.	%	No	%
Single (Unmarried)	100	43.48	99	40.74	199	42.07
Currently married	128	55.65	136	55.97	264	55.81
Separated	1	0.43	1	0.41	2	0.42
Divorced	0	0	1	0.41	1	0.21
Widowed	1	0.43	6	2.47	7	1.48
Total	230	100.00	243	100.00	473	100.00

Source: Field Survey 2011.

In this survey, among Newars community of Phungling, Dhungesanghu and Change VDCs, excluding population under 10 years, more than 42.07 percent of population were found unmarried and 55.81 percent were currently married. Out of 473 populations, 1.48 percent was found widowed including both sexes. Comparatively, the percentage of widowed was found greater in females (2.47%) than in males (0.43%).

Figure 2: *Distribution of population by marital status*



4.4. Occupational status.

Occupation affects the real status of the people in community as well as it can be change the pattern of fertility behavior. Occupation and the fertility behavior correlate with each other by indirectly. If someone has agricultural occupation, they may have more children to born and if someone has non agricultural occupation, their fertility level can be found lower. The data presented in table three can depict the real picture of community. Mostly the agriculture, official work, business, household work, daily wages, student and unemployed as well as can't work group especially for the child and physically disabled person were the categories of occupation for this study.

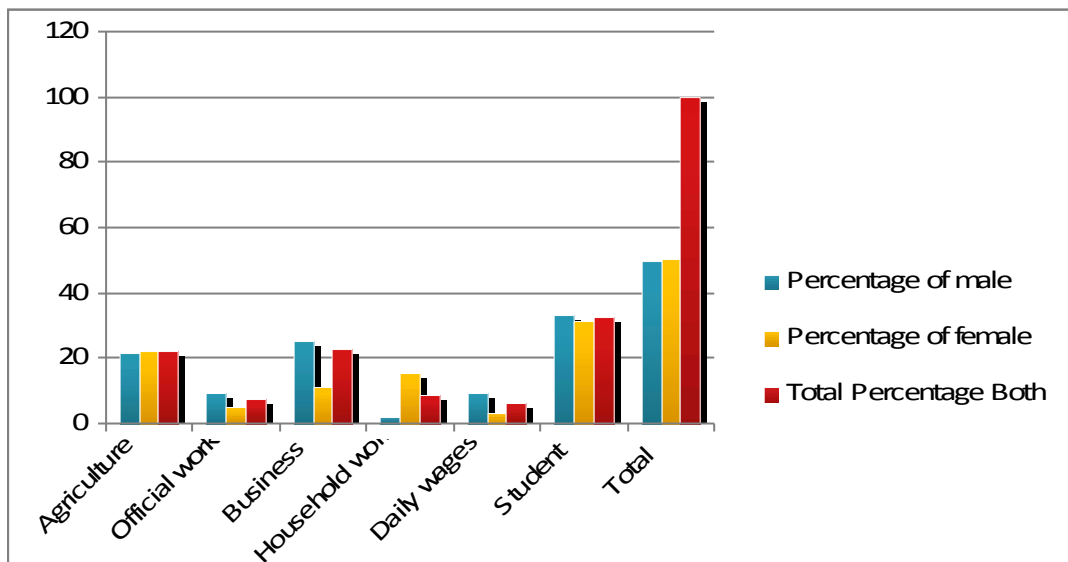
Table 4: *Distribution of population by occupational status*

Characteristics	Males		Females		Total	
	No	%	No	%	No.	%
Agriculture	55	21.65	60	21.90	115	21.78
Official work	24	9.45	14	5.11	38	7.2
Business	63	24.80	63	22.99	126	23.86
Household work	4	1.57	42	15.33	46	8.71
Daily wages	24	9.45	9	3.28	33	6.25
Student	84	33.07	86	31.39	170	32.20
Total	254	100.00	274	100.00	528	100.00

Source: *Field Survey 2011.*

In this survey, it was found that highest percentage of people are student (32.95%) followed by those involved in business sector (23.86%). Among 528 people of 110 households excluding population less than 5 years of Phungling, Dhungesanghu and Change VDCs, 21.78 percent of people were still found working in the agricultural sector. According to the sex wise distribution, the higher number of females (21.90%) was found in agriculture than males (21.65%). Similarly higher numbers of females (15.33%) were engaged in household work than males (1.57%). Female had been found working in business sector as (22.99%) which is less than male's percentage (24.80%).

Figure 3: *Distribution of population by occupational status*



4.4.1 Main income sources of Respondent

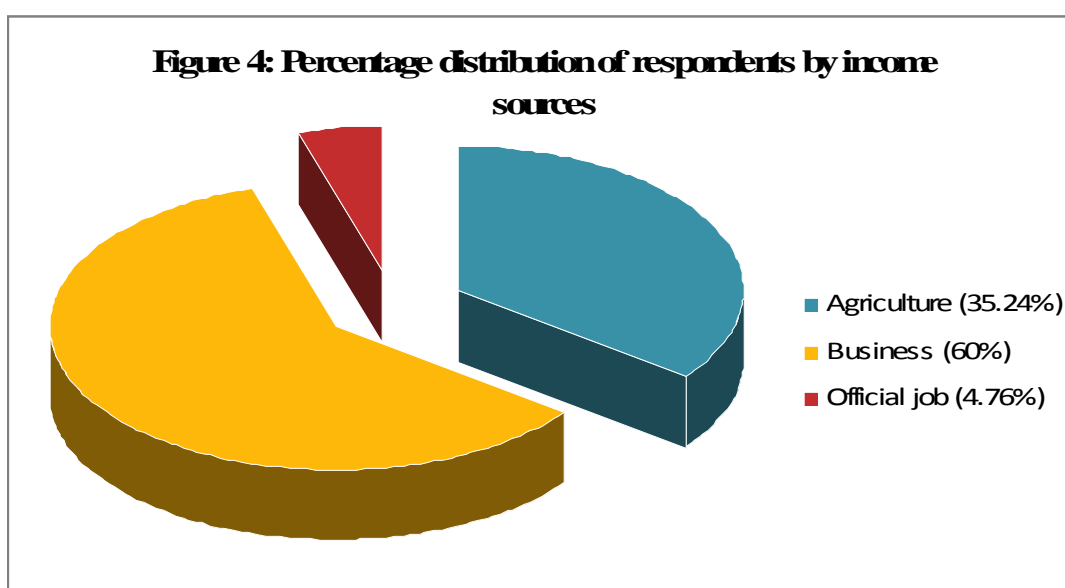
All kinds of development and the status of family depend on their economical status and it (economical status) depends upon the main income sources. In this survey, main source of income of Newars community had been seeking into agriculture, business and official job. They had been found as following table and it had been shown into following pie chart also as:

Table 5: Distribution of respondents by the income sources

Sources	Total no.	Percentage
Agriculture	37	35.24
Business	63	60.00
Official job	5	4.76
Total	105	100.00

Source: Field Survey 2011.

In this survey, it had tried to be divided the main sources of the respondent, had found largest number of respondent (the female) were in business (60 %) and least in official job (4.76%). Among 105 of them, 35.24 percent of respondents were still remained in agriculture. This may affects the fertility behavior of respondents indirectly.



4.5. Educational status.

Education is the one of the fundamental means for alleviating poverty and bringing environment in the standard of living through socio-economic activities. So, it is the most important single means of attaining socio-economic development and of opening for the individual the door to innovative ideas and actions. It enhances access to information that may be necessary to conduct various essential activities in daily

life and work. It enables a person to improve his knowledge base and make progress in life.

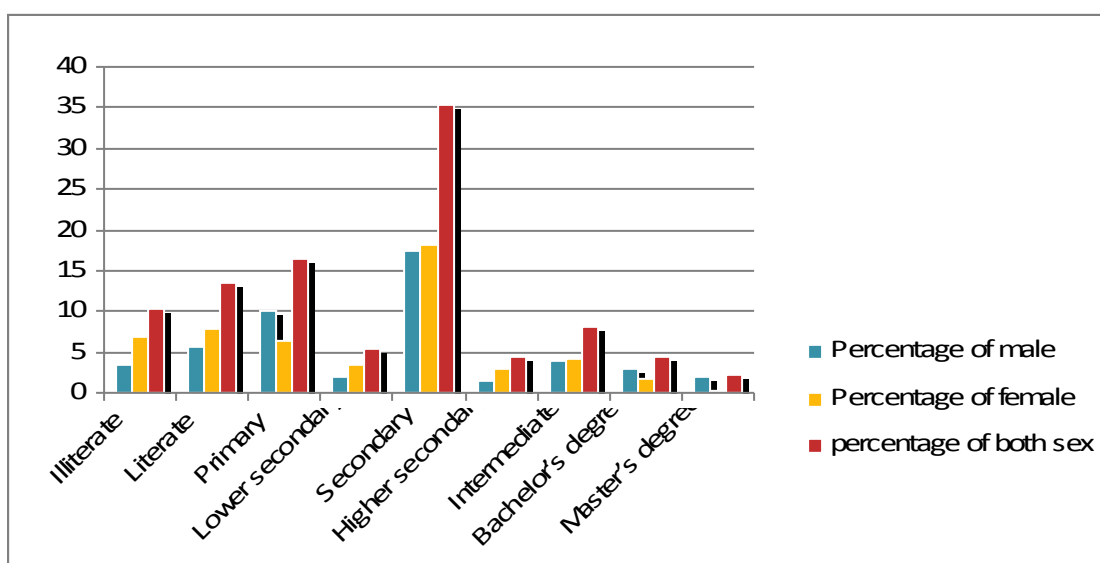
Table 6: Distribution of population by educational status

Characteristics	Males		Females		Total	
	No.	%	No.	%	No.	%
Illiterate	4	1.57	22	8.03	26	4.92
Literate	31	12.20	44	16.06	75	14.20
Primary	54	21.26	36	13.14	90	17.05
Lower secondary	11	4.33	19	6.93	30	5.68
Secondary	97	38.19	101	36.86	198	37.50
Higher secondary	8	3.15	17	6.20	25	4.73
Intermediate	22	8.66	23	8.39	45	8.52
Bachelor's degree	16	6.30	11	4.01	27	5.11
Master's degree	11	4.33	1	0.36	12	2.27
Total	254	100.00	274	100.00	528	100.00

Source: Field Survey 2011.

In table 6, among 528 populations of 110 households excluding less than 5 years population, the highest group of peoples (37.50%) had studied secondary level and 4.92 percent of people are still illiterate. This meant they had to empower in further education by the related sector to uplift the educational status in near future. These data also have been shown into following diagram:

Figure 5: Percentage distribution of population by educational status



CHAPTER- FIVE

SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENT

5.1. Main sources of drinking water

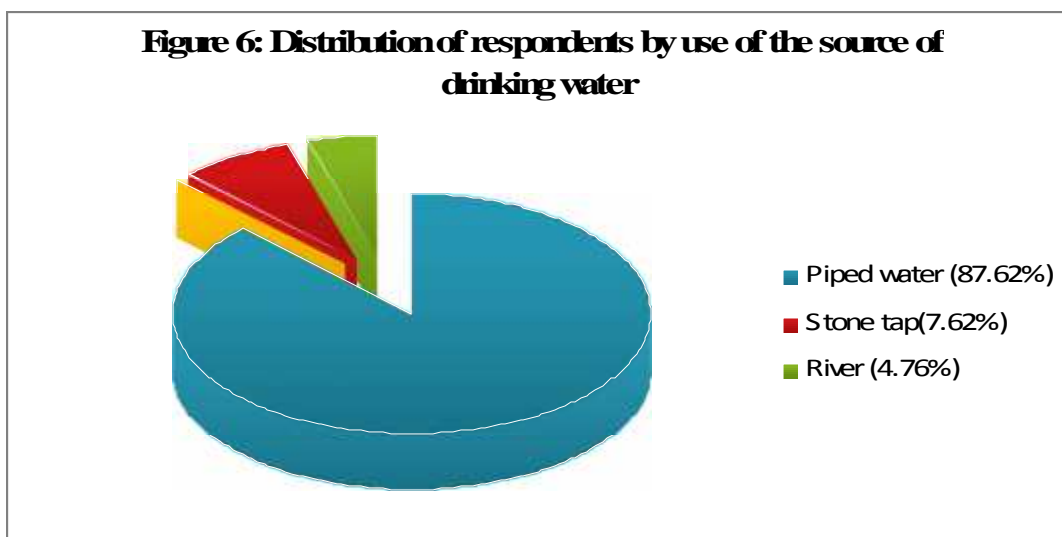
It refers to the place from which household draw water for drinking and cooking foods for household members. Water source may differ from place to place and by season. However, information was collected on the basis of water source from where most of the time water was collected. Water source may or may not be in their own premise and it may be private or public. The various sources of water as reported in this research are given as following:

Table 7: Distribution of respondents by use of the source of drinking water

Sources of water	Total no. of user	Percentage
Piped water	92	87.62
Stone tap	8	7.62
River	5	4.76
Total	105	100.00

Source: Field Survey 2011.

By this survey, it was found that 87.62 percent of respondents out of 105, had used piped water for their daily household purpose. 7.62 had been found still using traditional water source like stone tap and the rest of 4.76 had found using river where they have been living near Tamor River. It have been shown into pie chart as follows:



5.2. Maternal deaths within 5 years

Maternal deaths are defined as any deaths that occurred during pregnancy, childbirth or within six weeks after the birth or termination of pregnancy. Maternal mortality is defined as the ratio of maternal death and number of live births during the same period multiplied by 100000. Respondents in Nepal face the highest risk of maternal death in South Asia. While efforts have been made to improve maternal health in Nepal, the maternal mortality ratio still stands at 281 deaths per 100,000 live births. This value is found still high in Nepal among SAARC countries.

Key challenges include the limited number of health workers in Nepal, as well as the inadequacy of emergency obstetric care services. Respondents also face barriers due to costs, lack of transportation and long distances to health facilities. So, this research has been seeking for these facts as follows:

Table 8: Distribution of respondents by response on maternal deaths within 5 years

Response	No. of respondents	Percentage
Yes	5	4.76
No	100	95.24
Total	105	100.00

Source: Field Survey 2011.

By the above data, 4.76 percent out of 105 households had been found as maternal deaths in this study area. This is seemed still high for the developed 21st century.

5.3. Decision making power of females for own health

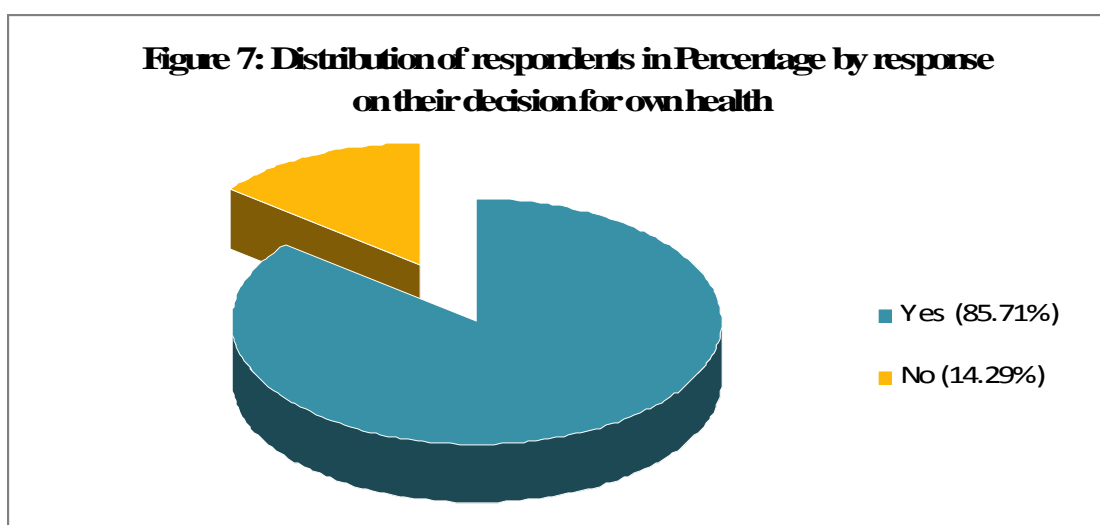
Most of the Nepalese respondents couldn't decide themselves. They had been depending on their spousal decision due to the cause of patriarchal society. But, in this survey, the following facts had found in such issues.

Table 9: Distribution of respondents by response on their decision for own health

Response	No. of respondents	Percentage
Yes	90	85.71
No	15	14.29
Total	105	100.00

Source: Field Survey 2011.

Table 6 shows that, 85.71 percent of respondents could decide themselves that is seemed remarkable and challenges to existing society. Among the respondents 14.29 percent were still remained as dependent that meant they couldn't decide for their own health. This might be the greatest cause of death in future. They have been also shown into following pie charts:



5.4 Need of male's help on pregnancy stage

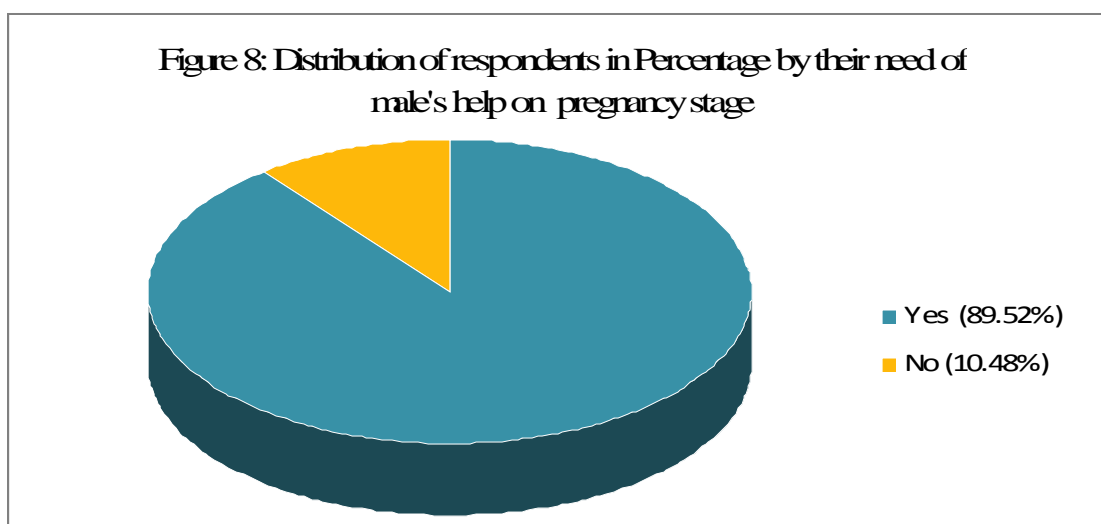
No one could remain without the help or co-operation in daily life. Male's support mostly on pregnancy, during labor and after the stage of delivery is always essential which could be helpful to diminish possible hazards. For this reason, respondents were asked such question and had found the following facts:

Table 10: Distribution of respondents by response on need of male's help on pregnancy stage

Response	No. of respondents	Percentage
Yes	94	89.52
No	11	10.48
Total	105	100.00

Source: Field Survey 2011.

The table had shown that 89.52 percent of respondents out of 105, had got male's support (Spousal support) and only 10.48 percent of them were found without support at that stage. This might be the cause of maternal death at home highly.



5.5. First age at marriage

Marriage is the determinant of changing demographic characteristics. Low age at marriage affects the maternal and neonatal health as well as increase in

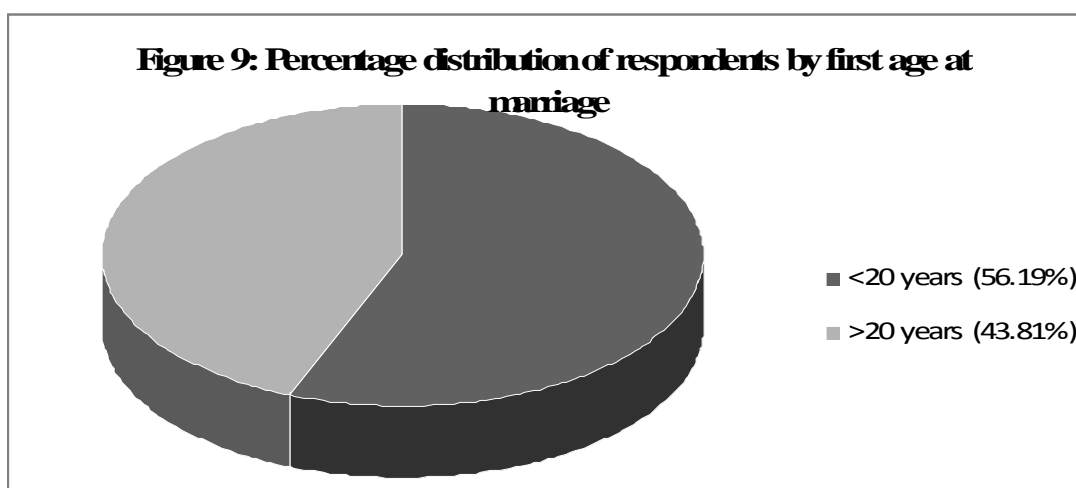
mortality. It also affects in fertility differential. So, the first age at marriage dividing age into two sectors like less than 20 years and more than 20 years of respondents had been found as following:

Table 11: Distribution of respondents by first age at marriage

Age at marriage	No. of respondents	Percentage
below 20 years	59	56.19
20 years and above	46	43.81
Total	105	100.00

Source: Field Survey 2011.

In this survey, most of the respondents found married before the age of twenty (56.19%) and least of them (43.81%) got married after the age of twenty. This may also affects the fertility pattern of respondents and the fertility rate might be increased. In this issue, the educational status of the respondent might have affected indirectly due to highest percentage of illiteracy of respondents (21.90%), and largest percentage of respondents found in under secondary education (68.58%) and the least percentage of them found in higher secondary education (9.92%). And it also might have affected by occupation of the respondents who were found mostly engaged in business and agriculture and less of them had engaged in official work. It is thought really that higher the level of educational level reflects lower the number of early marriage and lower the level of education may increase the number of early marriage. The distribution of respondents by first age at marriage has shown in the given pie chart.



5.6. Children ever born

Child ever born had been collected in this survey ranging from 1 child to 9 children where they had born by the respondents until survey period. And they have mentioned in the following table with number of CEB and the number of their mother by whom they had born.

Table 12: Distribution of respondents by CEB

No. of CEB	Respondents		Total CEB
	No.	%	
1	22	20.95	22
2	39	37.14	78
3	23	21.90	46
4	11	10.48	44
5	2	1.90	10
6	2	1.90	12
7	3	2.86	21
8	2	1.90	16
9	1	0.95	9
Total	105	100.00	258
Average no. of CEB			2.46

Source: Field Survey 2011.

In table 12, data had shown that most of the respondents had born 2 children and the 3 children in next. In this survey, the largest number of CEB, 9 children had born, had been found. The respondents with number of 4 CEB, had still found greatly in this community. Over all it had counted in average 2.46 children per respondents. That meant 3 children have borne by the respondents in this community instead of existing norms and values of the government i.e. not more than 2 children per respondents.

5.7 Reason for desire of child

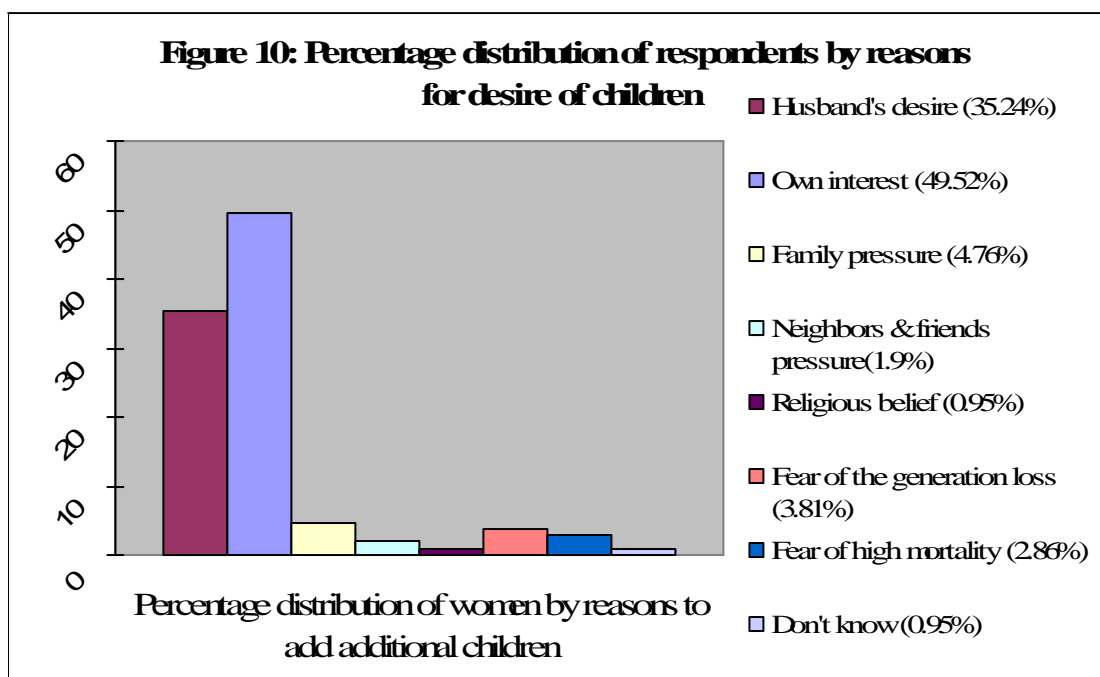
By the help of this survey, it had been seeking for the main reason to desire children for respondents in their reproductive life because of binding into traditional culture and norms and less educational status of the respondents. The following facts had been found which were given in table and diagrams as:

Table 13: Distribution of respondents by reason for desire of child

Causes	No. of Respondents	Percent
Husband's desire	37	35.24
Own interest	52	49.52
Family pressure	5	4.76
Neighbors & friends pressure	2	1.90
Religious belief	1	0.95
Fear of the generation loss	4	3.81
Fear of high mortality	3	2.86
Don't know	1	0.95
Total	105	100.00

Source: Field Survey 2011.

In the table 13, it had shown that the most respondents had added additional children due to their own interest in 49.52 percent in figure. Among the 105 respondents, 35.24 percent had added children due to the cause of their husband's desire, 4.76 percent by family pressure, 5 percent by neighbors' and friends' pressure and rest of others including 4 percent by fear of the generation loss as well as 3 percent of respondents had added additional children by the fear of high mortality. Least percentage of respondents had added additional children due to religious belief and 0.95 percent respondents had added additional children unknowingly.



5.8 Main responsibility on economic decision among family

In this survey, it had been seeking for the responsibility of respondents on economical decision among family. The Nepalese respondents had kept in dominance for all aspects including economic factor. Some of the Newars respondents couldn't have staying far from this stage. But, following data had found for this issue as given in table and pie charts:

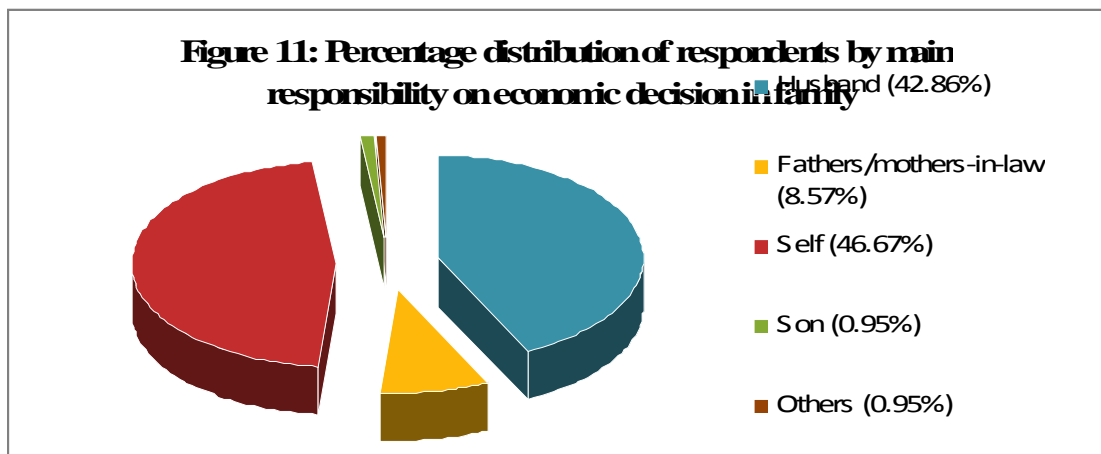
Table 14: Distribution of respondents by main responsibility on economic decision

Responsible person	No. of Respondents	Percentage
Husband	45	42.86
Fathers/mothers-in-law	9	8.57
Self	49	46.67
Son	1	0.95
Others	1	0.95
Total	105	100.00

Source: Field Survey 2011.

By the table 14, about 46.67 percent of respondents had found self decided in economic status of family and 42.86 percent of respondents couldn't decide

themselves, they had to decide by their husband. That meant they had depended on their husbands' economic decision. Among 105 respondents, 8.57 percent of respondents had still found under the decision of their father/mother-in-law. By adding all findings except the percentage of self decision of them, had been found as the greatest one. Thus, we can clearly advocate that, the Newars respondents still have found remaining in under responsibility for economic decision for their family.



5.9 Educational status of the respondents

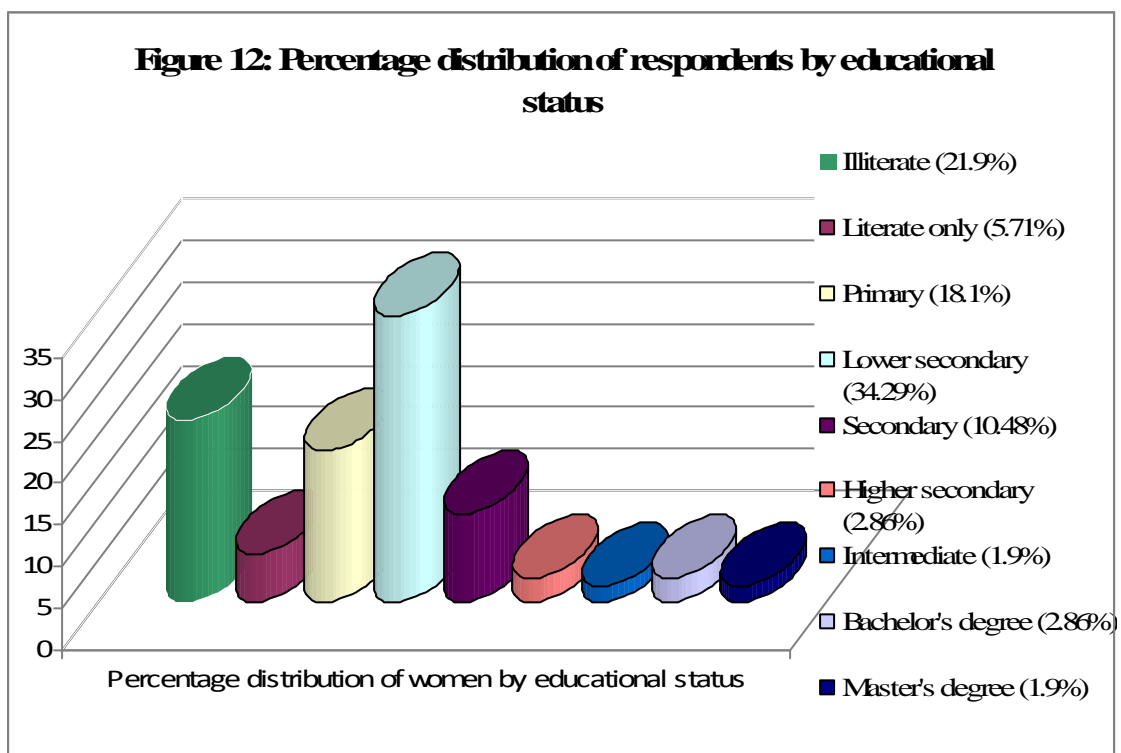
Education is the main pillar of the peoples to upgrade life. Educational status also affects to change the knowledge and behavior of the person. It also affect in their safe motherhood practice like in fertility differential. So, educational status had been seeking for the respondent in this survey which had found as following:

Table 15: Distribution of respondents by educational status

Levels of education	No. of Respondents	Percentage
Illiterate	23	21.90
Literate only	6	5.71
Primary	19	18.10
Lower secondary	36	34.29
Secondary	11	10.48
Higher secondary	3	2.86
Intermediate	2	1.90
Bachelor's degree	3	2.86
Master's degree	2	1.90
Total	105	100.00

Source: Field Survey 2011.

In the table 15, educational status of the respondents had found as the highest, 34.29 percent in lower secondary level. Among the 105 respondent, 23 respondents or 21.90 percent had still found illiterate, this is the greatest challenges for the development of the Newars society and the entire population. 18.10 percent of respondents had studied only on primary level and 10.48 percent of them were found in secondary level. Only one third of the respondents had found studied above the higher secondary level up to master's degree. So, in respondents of Newars community, educational status had been found poor. They have been shown into given comparative bar diagram as figure 12:



5.10 Educational status of spouse (Husband)

Fertility behavior also depends on their educational status of the husband (spouse). The lower the level of education of husband may increase the fertility in family and higher status may minimize the size of family. So, it is essential to find out the educational status of spouse which was asked with their respondents. Then the following facts had been found as in table 16:

Table 16: Distribution of respondents by educational status of spouse

Levels of education	No. of husbands	Percentage
Illiterate	17	16.19
Literate only	4	3.81
Primary	3	2.86
Lower secondary	43	40.95
Secondary	22	20.95
Higher secondary	5	4.76
Intermediate	4	3.81
Bachelor's degree	5	4.76
Master's degree	2	1.90
Total	105	100.00

Source: Field Survey 2011.

By the table 16, in this survey it had found that 16.19 percent of husbands were illiterate. This means that the illiteracy rate of husbands has found lower than women's educational status. Most of the husbands were found passed only secondary school level as 20.95 in percent.

5.11 Fundamental accessories at household

In this survey, the essential accessories had been seeking for their household. They had answered as following wherever the thing have been found in their house at least one of them. These things have been focused mostly on availability of modernized material like electricity, telephone services, radio and TV for their home. They have been mentioned in table as follows:

Table 17: Distribution of respondents by the use of the fundamental accessories

Facilities	Total no. of user	Percentage
Electricity	22	20.95
Telephone	27	25.71
Radio	33	31.43
T.V.	23	21.90
Total	105	100.00

Source: Field Survey 2011.

In the survey by table 17, fundamental accessories like electricity, telephone, radio and T.V. were recorded which were only belonged to respondent had found as highest in radio, the audio IEC material and lowest in electrical facility but 25.71 percent of respondents out of 105 had had availability of telephone services which is the best media of communication at home.

5.12 Access to toilet facilities

There is a wide difference in households having toilet facilities by place of residence, literacy of all members in household and social structure. Mainly the 4 category of the toilets had been studied in the study area as pit latrine, flush latrine, jungle/ bush latrine, and other mentioned whether it was found in field survey. So as to depict the real status of the Newars community, the survey had been conducted and had found the following data which were mentioned below:

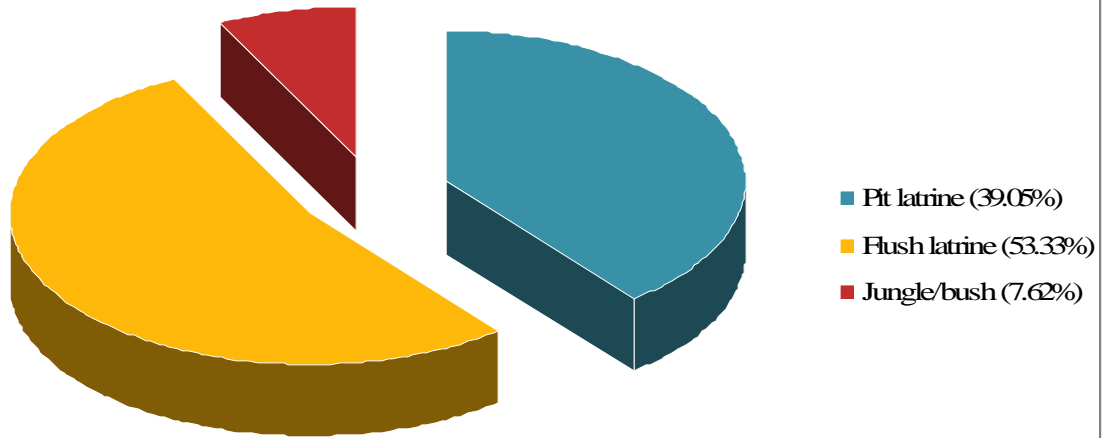
Table 18: Distribution of respondents by the use of latrine

Types	No of user	Percentage
Pit latrine	41	39.05
Flush latrine	56	53.33
Jungle/bush	8	7.62
Total	105	100.00

Source: Field Survey 2011.

By the survey in table 17, it had found that the largest number (53.33%) of Newars community had used flush latrine and least in jungle/ bush (7.62%). But, rest of all or largest number of people in rural area had using pit latrine except in urban community. They have been also shown in the following pie chart as follows (figure 13):

Figure 13: Percentage distribution of respondents by access to toilet facilities with types



CHAPTER- SIX

KNOWLEDGE, ATTITUDE AND PRACTICE OF SAFE MOTHERHOOD

In this section, knowledge, attitude and practice of safe motherhood among women of Newars community is described and also described the availability and accessibility of these services to the respondent.

6.1 Knowledge of safe motherhood

The first Plan of Action on Safe Motherhood was prepared for 1994-1997. The programme now covers 19 districts. The basic principle of this programme is to create awareness at all levels, building up the local capacity in dealing with three delays – delay in seeking care, delay in reaching care and delay in receiving care. The present programme has been enunciated under a 15-year plan of action (2002-2017). The ultimate aim of the plan is to scale up the intervention to all 75 districts. The 10th five-year plan (2003-2008) also proposed to establish a Comprehensive Emergency Obstetric Care (CEOC) in 10 hospitals and Basic Emergency Obstetric Care (BEOC) in 50 hospitals across in the country.

The knowledge of safe motherhood generally has included the knowledge about safe motherhood, during delivery and post natal care. A total of 105 women were selected for this survey and asked whether they had heard or not about safe motherhood. Antenatal check-up services mainly has focused on checking-up activities at least 4 times within pregnancy stage, de-worming after 4 month of pregnancy and distribution of ferrous salt with folic acid until 42 days after delivery which has been made compulsory to all respondents by the national health policy. The use of At least 2 doses of TT vaccine and delivered by skilled birth attendant as well as institutional delivery is made essential and the post natal visit (within 42 days after delivery) is made at least thrice is most compulsory. They have been made accessible through existing health institution like hospital, PHC, SHP etc. All the female were oriented for it with the help of IEC materials and broadcasted through audio-visual aids by the government. However the following findings had found in this survey were as mentioned below:

6.1.1 Heard/Seen about safe motherhood services

Most of the knowledge can get through hearing and seeing things. Hearing relates with audio aids like radio and speech of the related person. Seeing relates with posters, pamphlets and related literatures like books etc. Hearing and seeing both coincidentally relates with audio-visual aids like TV, computers and projector. All these things can have encouraged person to know about particular subject. Similarly, in this survey, the following facts had been found:

Table 19: Distribution of respondents by response and media of knowledge

Response	No. of Respondents	Percentage
Yes	91	86.67
No	14	13.33
Total	105	100.00
Main Source of knowledge		
Radio	29	31.88
T.V.	37	40.66
Related bulletin/ Pamphlets	13	14.28
FCHV/TBA	11	12.08
Health worker	1	1.09
Total	91	100.00

Source: Field Survey 2011.

In table 19, it was found that 86.67 percent out of 105 female had knowledge on safe motherhood and least percent had remained in ignorance.

The main source of knowledge was found TV and second greater was radio. FCHV/TBA had found effective media of knowledge than health worker that meant no or little relation had built between health worker and females. This data had shown that the health awareness program had been conducted poorly by the health worker.

6.1.2 Knowledge on types of safe motherhood services

Safe motherhood services may be divided into 3 sectors, according to the stage of motherhood like antenatal, during delivery and post natal. Antenatal care includes all the following services which are related with pregnancy and health of the mother after the date of conception and before the date of delivery. It plays important role to the health of mother and new born baby. Antenatal care and delivery holding from a trained health provider is important in order to monitor the risks associated with pregnancy and delivery for the mother and her child.

The following facts had been found for this relation about the knowledge of respondents on given ANC and delivery services which have been provided into governmental provision.

Table 20: Distribution of respondents by knowledge on type of safe motherhood services

Included service	Total no. of Respondents	Percentage
Regular check-up	16	15.24
Check-up during the period of pregnancy	9	8.57
Receiving vit A & ferrous salt with folic acid	18	17.14
Delivery assisted by trained health personnel	10	9.52
Use of CHDK's	7	6.67
Receiving de-worming tablets	5	4.76
Receiving TT vaccinations	9	8.57
All of the above	31	29.52
Total	105	100.00

Source: Field Survey 2011.

In table 20, we had known that 17.14 percent of respondents had known about receiving Vitamin A & ferrous salt with folic acid, 15.24 percent had known about regular check-up, 9.52 percent had known about delivery assisted by trained

health personnel and 29.52 percent of respondents had known all of the above total clues. By the given data, we have known that the greatest number of respondents had known about the safe motherhood services.

6.1.3 Knowledge about the need of safe motherhood services

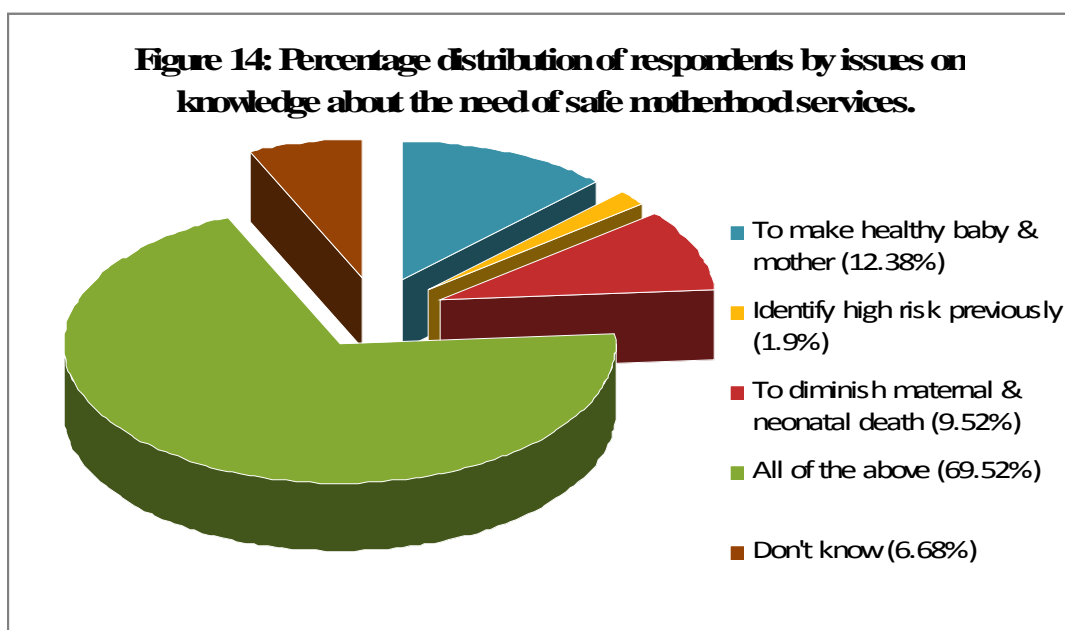
In this survey, the knowledge about necessity of safe motherhood service had been seeking for the respondents. The main reasons have been asked for respondents to identify about the need of safe motherhood services with following selected clues.

Table 21: Distribution of respondents by knowledge about the need of safe motherhood services

Main reasons	Total no. of Respondents	Percentage
To make healthy baby & mother	13	12.38
Identify high risk previously	2	1.90
To diminish maternal & neonatal death	10	9.52
All of the above	73	69.52
Don't know	7	6.68
Total	105	100.00

Source: Field Survey 2011.

By the table 21, respondents had found with the highest knowledge on all (69.52 percent) reason about the need of safe motherhood services. Among 105 respondents, 12.38 percent of them had known the reason, "To make healthy baby and mother" about the need of safe motherhood services. And the respondents who had no knowledge on reason about the need of safe motherhood had found 6.68 percent. This fact had seemed as greater challenges on safe motherhood services. They have been also shown into given pie chart:



6.1.4. Main sources of knowledge to know about safe motherhood services.

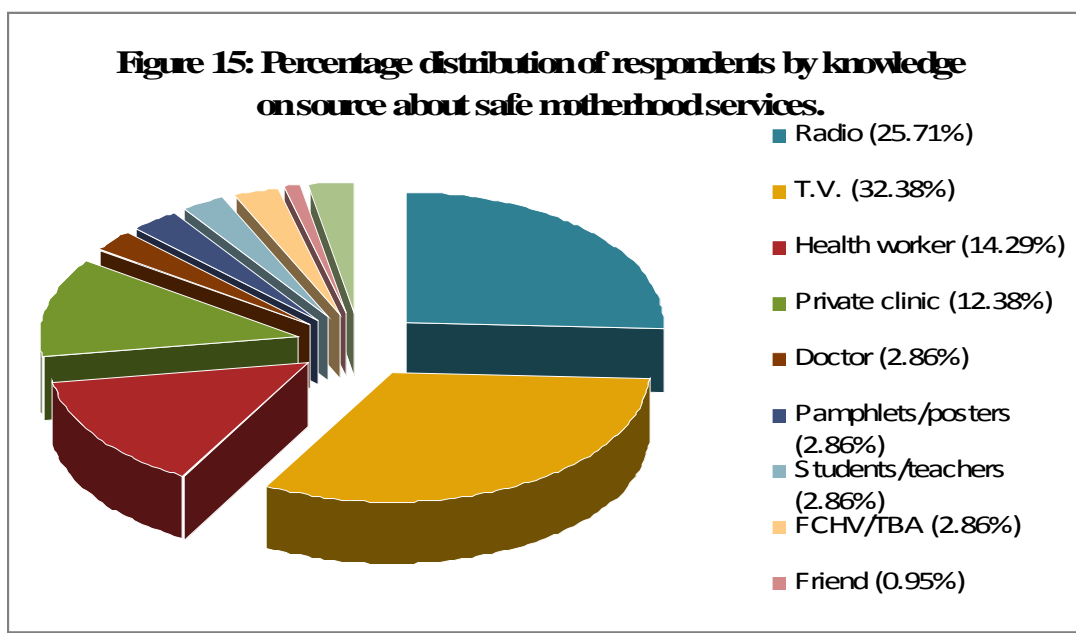
The main source of knowledge about safe motherhood for the respondents had asked in the Newars community by this survey. It had been found the facts which are mentioned below in table 21 and clarified in the given pie chart:

Table 22: Distribution of respondents by main sources of knowledge to know about safe motherhood services

Main sources	No. of Respondents	Percentage
Radio	27	25.71
T.V.	34	32.38
Health worker	15	14.29
Private clinic	13	12.38
Doctor	3	2.86
Pamphlets/posters	3	2.86
Students/teachers	3	2.86
FCHV/TBA	3	2.86
Friend	1	0.95
Husband	3	2.86
Total	105	100.00

Source: Field Survey 2011.

By table 22, most of the respondents had got knowledge by the help of TV (32.38 %), and the secondly by radio (25.71%). Health worker and private clinic had also given knowledge about the safe motherhood services in 14.29 & 12.38 percent respectively. Husband was stand for the least source of knowledge. Most of all respondents, no one could achieve knowledge by the INGOs. They have been also shown into following pie chart:



6.1.5 Knowledge about number of times to receive ANC check-up

Antenatal care is one of the most important components of maternity care. Antenatal care means the maternal health care services that a mother receives during her pregnancy and at the time of delivery which is important for the wellbeing of the mother and her child.

In this survey, 105 women aged between 15-49 years who had at least one child were eligible respondents and individual questions are asked about the utilization of safe motherhood practice. The trends which is increased from 41 percent of 2000-2001 to 44 percent of 2005-2006, have been found in ANC visit, *source by DoHM, HMIS, health Service Coverage Fact Sheet-2004*. To compare with this findings to the given data of fact sheets which are mentioned below in table 23 as:

Table 23: Distribution of respondents by knowledge on ANC visit

Required times	No. of Respondents	Percentage
More than 4 times	52	49.52
3 times	30	28.57
2 times	11	10.48
1 time	7	6.67
No need to check-up	5	4.76
Total	105	100.00

Source: Field Survey 2011.

By table 23, 49.52 percent of respondents among 105, were found more than 4 times visited for ANC. It is seemed to be better than the national achievement of 44% data of fact sheets 2004. Among all the respondent, there was still found 4.76 percent respondents who had answered no need to check-up and 45.72 percent respondents did not give the right answer about the right times of ANC visit (episodes). As whole, the greatest numbers of respondents were found unknown for the right times of ANC visit.

6.1.6 Knowledge about identification to service provider

In Nepal, 44 percent pregnant women were attended by trained personnel during pregnancy in 2005-06 (Demographic Health Survey, 2006). Around 18.3 percent of deliveries were attended by trained personnel in 2005-2006 (expressed as a percentage of expected pregnancies).

In the context of Nepal, over all one in two pregnant women received antenatal care. Twenty eight percent of mother received antenatal care either from a doctor (17%) or a nurse or auxiliary nurse midwife (11%). Another 11 percent of mothers received antenatal care from a health assistant or auxiliary health worker. Village health workers provided antenatal care to six percent of women and maternal and child health workers provided care to 3 percent of mothers. Traditional birth attendant provided antenatal care to less than one percent of mothers (NDH, 2001).

According to the 2011 NDHS, 58 percent of women who gave birth in the 5 years preceding the survey received antenatal care at least once for the last live birth from a health professional, that is, a doctor, or nurse/midwife. This is an increase of 33 percent compared with that reported in the 2006 NDHS, when the percentage of women receiving antenatal care from a doctor, or nurse/midwife was 44 percent (*MOHP, New ERA and Macro International Inc., 2007*).

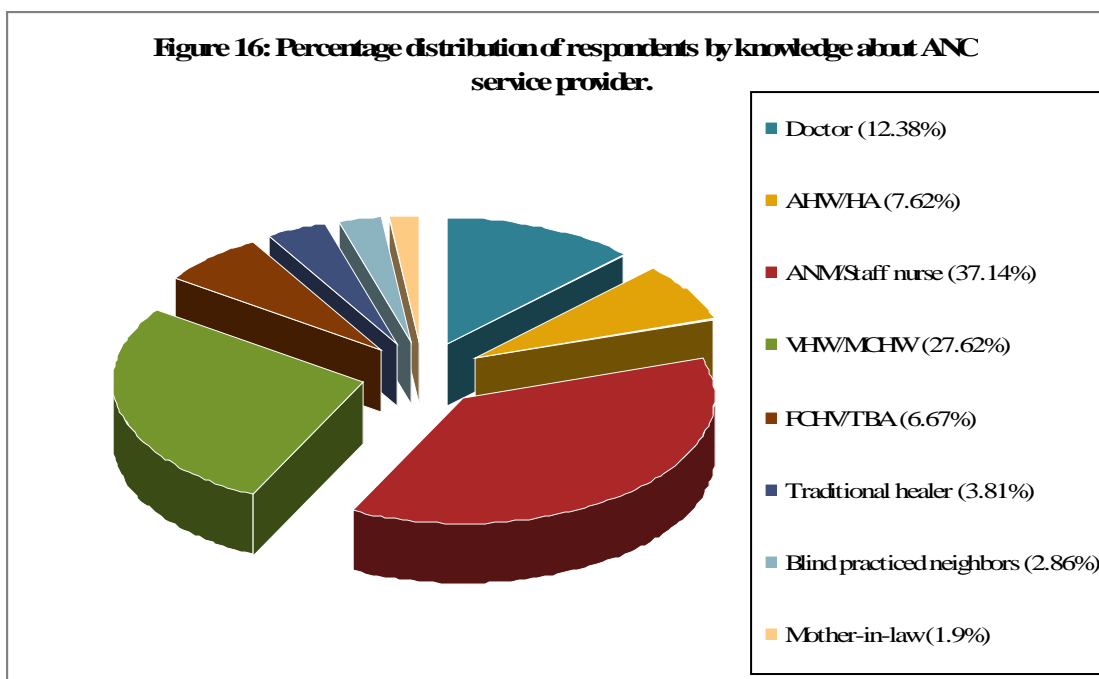
Table 24: Distribution of respondents by knowledge about ANC service provider

Service provider	No. of Respondents	Percentage
Doctor	13	12.38
AHW/HA	8	7.62
ANM/Staff nurse	39	37.14
VHW/MCHW	29	27.62
FCHV/TBA	7	6.67
Traditional healer	4	3.81
Blind practiced neighbors	3	2.86
Mother-in-law	2	1.90
Total	105	100.00

Source: Field Survey 2011.

By table 24, in compare with the national findings, most of the respondents were attended by trained personnel as in 84.76 percent and least of them in 15.64 percent were attended in less trained or untrained personnel like FCHV/TBA, traditional healer, mother- in-law and blind practiced neighbors. It has the positive impact found in this society in spite of low educational status of the respondents.

By dividing it as in skilled birth attendants, only 46.52 percent of respondents had been receiving ANC service with the Doctor instead of 44 percent national achievement of them. They have been also shown into following pie-chart:



6.1.7 Knowledge about service providing place

Place of delivery is the major factor of safe motherhood practice. More maternal and infant mortality have been occurred due to the unsafe place of delivery. In Nepal, home is common as a place of delivery where there is poor hygienic condition greatly found. That is the dangerous for all mother and new born babies. They are shown in following table:

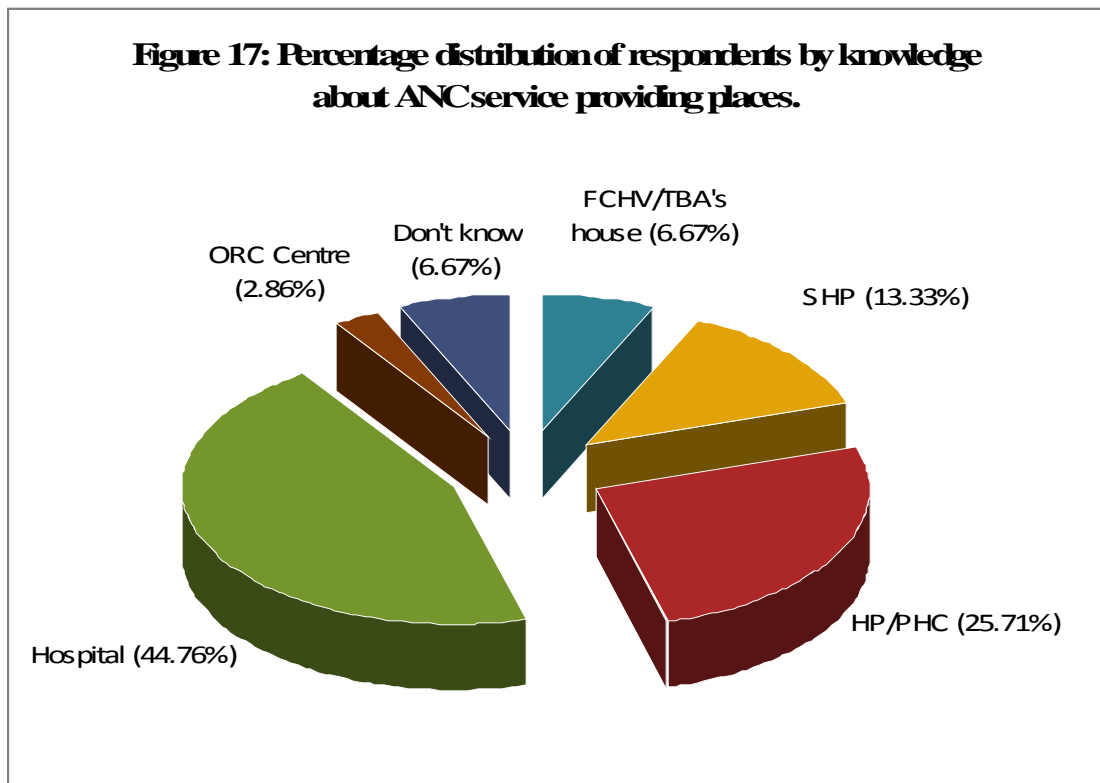
Table 25: Distribution of respondents by knowledge about ANC service providing places

Places	No. of Respondents	Percentage
FCHV/TBA's house	7	6.67
SHP	14	13.33
HP/PHC	27	25.71
Hospital	47	44.76
ORC Centre	3	2.86
Don't know	7	6.67
Total	105	100.00

Source: Field Survey 2011.

In table 25, about 44.76 percent of respondents had found knowing about the place where the ANC services can provided as in Hospital, and 25.71 percent respondents were reported that HP/SHP is the right place for providing this service as well as 13.33 percentage of respondents had reported that the SHP is the place of this kind of service providing places. Some of them had answered about ORC centre and FCHV/ TBAs house were the place of ANC service providing places. Among the total 105 respondents, 6.67 percent age of them didn't know whether the place to provide this kind of services or not.

They have also shown into following pie-chart in figure 17:



6.1.8 Knowledge about number of PNC check-up

The main aim of post natal care is to ensure physical and psychological well being of mother and the newly born baby in the first six weeks (42 days) after delivery. Post natal care is common in Nepal. 79 percent of women who delivered outside the health facility do not receive post natal check-up. But less than one in five mothers has received post natal care within the first two days after the delivery. In

Nepal, post natal care utilization differs by place of residence, level of education, social norms, casts and religion. Educated women have high tendency to receive PNC than uneducated women (NDHS, 2001).

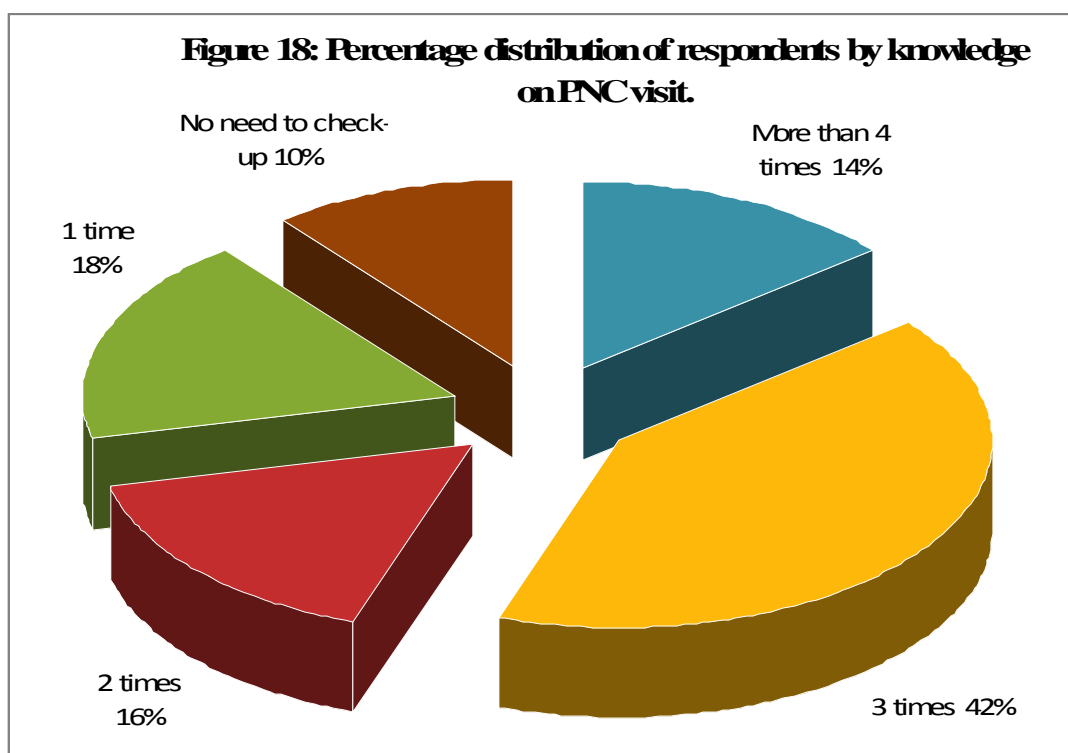
In Nepal, the provision of PNC check-up service, not less than 3 times per delivery has been made essential to provide by the health institution. So, in this survey, it had been searching knowledge of women in Newars community about it which is always essential for every woman for their wellbeing.

Table 26: Distribution of respondents by knowledge on PNC visit

Required times	No. of respondents	Percentage
More than 4 times	15	14.29
3 times	43	40.95
2 times	17	16.19
1 time	19	18.10
No need to check-up	11	10.47
Total	105	100

Source: Field Survey 2011.

In spite of their literacy rate 93.04 percent respondents, out of total population of the survey area had been found 40.95 percent respondents among 105 respondents were known about the right times to check-up at PNC and 10.47 percent respondents were totally ignored for this issue. And at all, the rest respondents had answered as their own practice. This is strongly co-related with the statement as above, "79 percent of respondents who delivered outside the health facility do not receive post natal check-up". They have been shown into following pie-chart in figure 18:



6.1.9. Knowledge about the main causes of maternal deaths

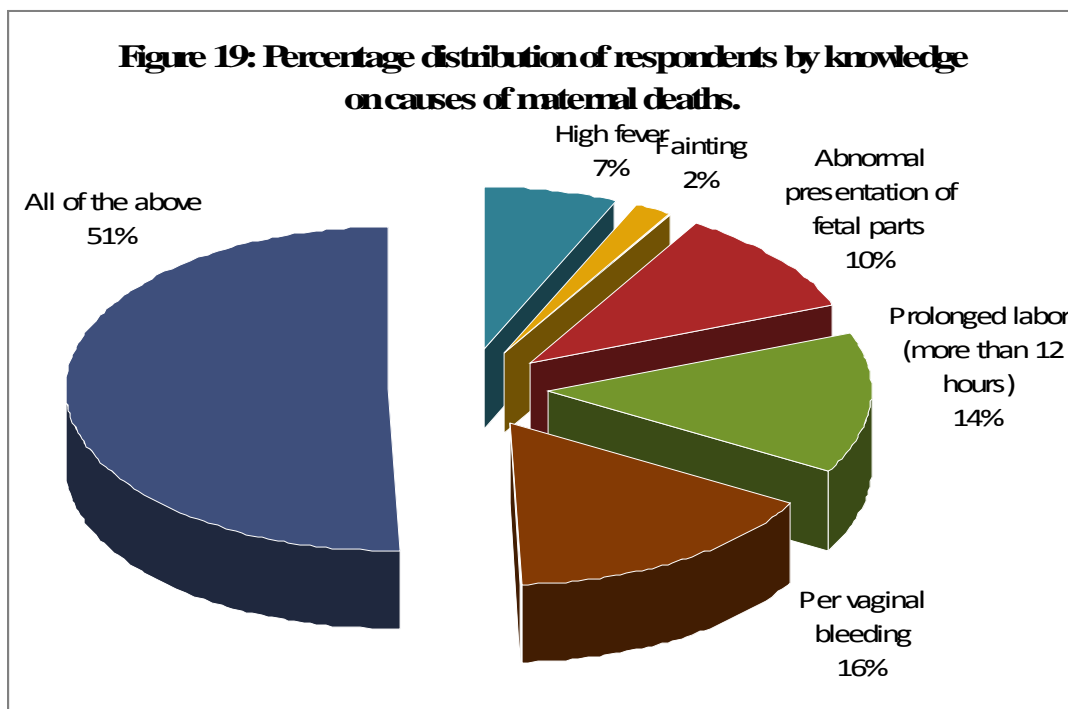
In this survey, the main causes of the maternal deaths had been seeking for the respondent (women) of that selected area by putting the given selected clues. Mostly the clues have been mentioned were categorized into 6 points like high fever, fainting, per vaginal bleeding, abnormal presentation of the fetal parts, prolonged labour and all of the above. In this issue, the following facts had been found which are given in table and had shown it into pie-chart below:

Table 27: Distribution of respondents by knowledge on causes of maternal death

Causes	No. of Respondents	Percentage
High fever	7	6.67
Fainting	2	1.90
Abnormal presentation of fetal parts	11	10.47
Prolonged labor (more than 12 hours)	15	14.29
Per vaginal bleeding	17	16.19
All of the above	53	50.48
Total	105	100.00

Source: Field Survey 2011.

In the selected area, more than 50 percent respondents out of 105 respondent respondents had replied that "all of the above" are the main cause of maternal death. About 16 percent had known as per vaginal bleeding is the main cause of maternal death, 14.29 percent respondents had known prolonged labour (more than 12 hour) is the main cause of death, 10.47 percent respondents had known as fainting and 6.67 percent respondents had known as high fever is the main cause of maternal death. But, some articles had found writing about per vaginal bleeding especially in postnatal period is the main cause of maternal death in Nepalese context.



6.1.10 Knowledge about the places of maternal death

The literature generally written about it by various sector has been included for this study.

Maternal Mortality has come down from 475 per 100,000 live births in 1997 to 281 per 100,000 live births in 2006 and is proposed to be reduced to 250 per 100,000 live births by 2017 (Health Information Bulletin 2001 and NDHS 2006).

While efforts have been made to improve maternal health in Nepal, the maternal mortality ratio still stands at 281 deaths per 100,000 live births. The majority

of women (81%) deliver at home, and less than 19% of births take place with the assistance of a Skilled Birth Attendant.

According to the record of the Maternity Hospital, Kathmandu (1993), about 20-27 percent of maternal deaths in the hospital occurred due to complications of abortion. The maternal mortality and morbidity study in 1998 revealed that five percent of the deaths in the community were due to abortions.

By the help of above literature, it had been seeking for the main place where the maternal mortality had taken place at that society in the selected survey area. So, it had been found the fact that had been given below:

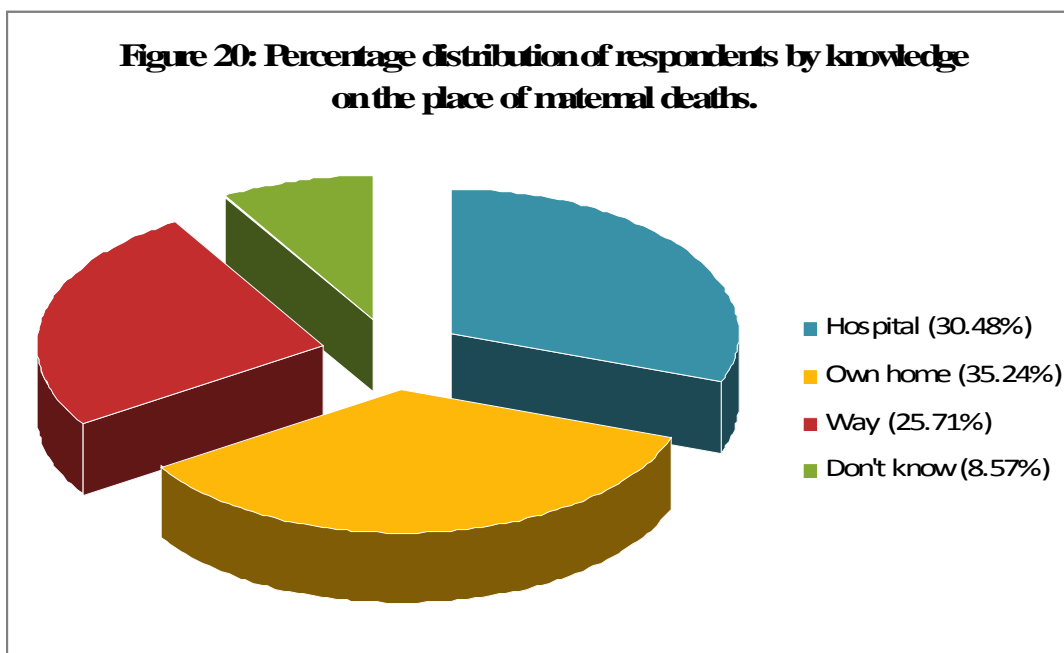
Table 28: Distribution of respondents by knowledge on the place of maternal deaths

Places	No. of Respondents	Percentage
Hospital	32	30.48
Own home	37	35.24
Way	27	25.71
Don't know	9	8.57
Total	105	100.00

Source: Field Survey 2011.

By table 28, it had found that the 35.24 percent of respondents had answered own home for the main place of maternal death, and 30.48 percent of them had replied hospital as a main place of maternal death (i.e. about 20-27 percent of maternal death found in hospital by complication of abortion had already shown in Maternity hospital Kathmandu), a few of them or 25.71 had replied that "on the way" as a main place of maternal death. Among the total respondent, 8.57 percent did not answer or unknown for this issues. Above data have been shown also in the given pie-chart:

Figure 20: Percentage distribution of respondents by knowledge on the place of maternal deaths.



6.2 Attitude of respondents to safe motherhood services

Table 29: Distribution of respondents by attitude towards safe motherhood services

Statements	No. of strongly agreed respondents	No. of agreed respondents	No. of undecided respondents	No. of disagreed respondents	No. of strongly disagreed respondents
Knowledge of safe motherhood is essential, useful, practicable and behavioral in daily life.	80 (76.19%)	24 (22.86%)	1 (0.95%)	0	0
Woman should be pregnant at first above the age of 20.	22 (20.95%)	80 (76.19%)	3 (2.86%)	0	0
Pregnant woman should regularly take ANC, during labor and PNC service as well.	66(62.86%)	31 (29.52%)	5(4.76%)	3 (2.86%)	0
First milk (colustrum) of mother should be given to new born baby.	24 (22.86%)	71 (67.62%)	7 (6.67%)	3 (2.86%)	0
Believe in Jhakri is better than health staff for providing better service in safe motherhood.	23 (21.90%)	11 (10.48%)	5(4.76%)	27(25.71%)	39 (37.14%)
Each couple should have born not more than 2 children is suitable in Nepalese context.	48 (45.71%)	37 (35.24%)	7 (6.67%)	11 (10.48%)	2 (1.90%)

Any tool can be used to cut the umbilical cord is good and possible everywhere.	5 (4.76%)	25 (23.81%)	9 (8.57%)	36 (34.29%)	30 (28.57%)
Mother should avoid taking alcohol and smoking during pregnancy, labor and after delivery period or all over life.	46(43.81%)	36(34.29%)	5(4.76%)	7(6.67%)	11(10.48%)
Identification of high risk mother and role of all family members to manage timely is always necessary for safe motherhood.	51 (48.57%)	51 (48.57%)	2 (1.90%)	1 (0.95%)	0
CHDK (Sutkeri Samagri) is always necessary to woman for safe delivery during labor.	44 (41.90%)	52(49.52%)	7 (6.67%)	2 (1.90%)	0
Exclusive breast feeding is good to infant.	42 (40%)	59(56.19%)	10 (9.52%)	3(2.86%)	1 (0.95%)
Regular check-up for pregnant respondents is always harmful.	14 (13.33%)	11 (10.48%)	9 (8.57%)	25(23.81%)	46 (43.81%)
Pregnant woman should immunize timely.	51 (48.57%)	48 (45.71%)	6 (5.71%)	0	0

Source: Field Survey 2011.

The perception of respondents on the statement: knowledge of safe motherhood is essential found highest (80%) percentage in strongly agreed. More than 80% respondents also found agreed to the statement: respondents should pregnant above the age of 20. Only 66% respondents were found strongly agreed to the statement: pregnant respondents should take ANC, PNC and during labor service as well. But perception of respondents on belief of Jhakri was found still high (23%). And only 11% of respondents had found strongly disagreed, and 46% of them were found strongly agreed. The perception of mother found positively high in "Pregnant should immunize timely" as well as in necessity of CHDK, respondents had found high in percentage. But 10% of the respondents couldn't decide whether exclusive breast feeding is good or not for infant. About 11% of respondents had ignored strongly about the statement: avoidance of smoking and alcohol for pregnant.

But, as a whole, the respondents had found highest in percentage with positive thinking in all statement.

6.3. Safe motherhood practices

6.3.1 Practices of ANC visit

About 58 percent of mothers received antenatal care from a doctor or nurse/midwife for their most recent birth. Women who give birth at a younger age (<20 years) are more likely to receive assistance from health professionals during delivery and also more likely to have delivery at a health facility than respondents who give birth at an older age (*Cited from preliminary report of NDHS, 2011*).

Trends in ANC visits and delivery services have mentioned as increasing 41% to 44% since 2000-2001 to 2005-2006, and delivery conducted by TBAs, also have increasing 6.5% to 11.3%, gradually since 2000-2001 to 2005-2006.

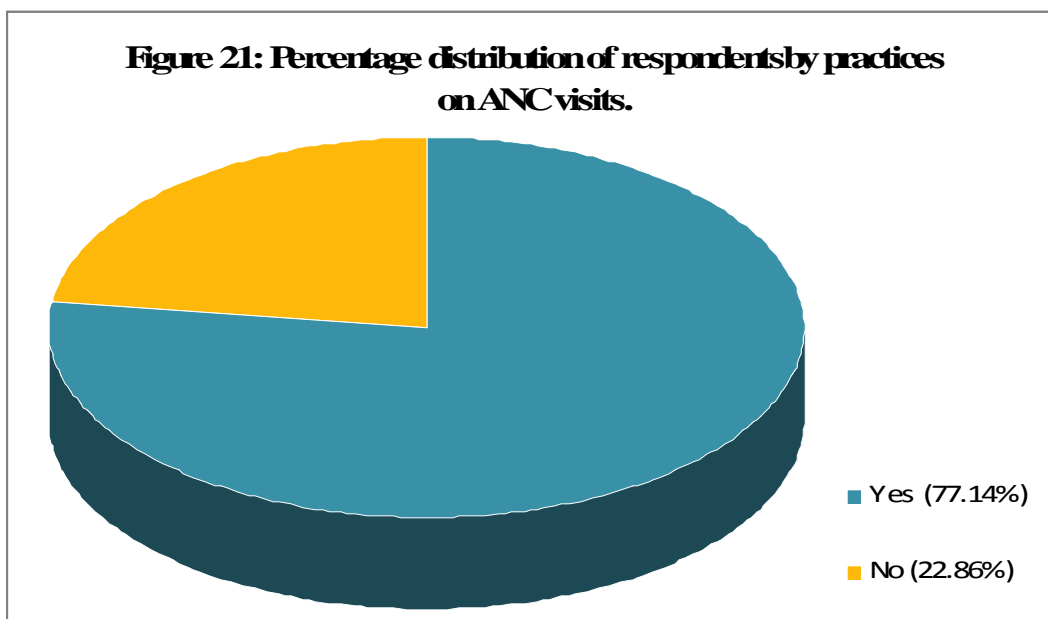
In this survey, respondents had also asked questions to depict the real status in their behaviors and it had found as below:

Table 30: Distribution of respondents by practices on ANC visits

Response	No. of respondents	Percentage
Yes	81	77.14
No	24	22.86
Total	105	100.00

Source: Field Survey 2011.

Among the 105 respondents, 77.14 percent respondents were found visiting for ANC. and the rest of 22.86 percent respondents were not visited for ANC. They have shown into following pie-chart.



6.3.2. Received of iron tablet & TT vaccination

Nowadays, the provision of receiving iron tablets and TT vaccine has been made essential for the pregnant, delivery or post natal mother by the national policy of Nepal. The main aim is to prevent from anaemia and to prevent from tetanus diseases, iron tablets and TT vaccines have been used for women who have got pregnant or delivery.

Table 31: Distribution of respondents by receiving Iron tablets and TT vaccination

Response	No. of respondents	Percentage
Yes	81	77.14
No	24	22.86
Total	105	100.00

Source: Field Survey 2011.

Among 105 respondents of survey area, only 77.14 percent respondents had found receiving iron tablets and TT vaccine and the least, 22.86 percent of them did not receive these essential things which are provided in health institution. That means, it is the greatest challenges for the national safe motherhood program. But, by the year 2003-2005, trends of taking TT-2 by pregnant respondents is found gradually

increasing from 26.9% to 48%. In compare with the national findings, the survey data co-relates satisfactorily.

6.3.3 TT vaccination

Nowadays, the provision of taking TT by a pregnant woman have been made at least twice is essential. But the following patterns of practice had been found in the respondents of survey area which are as mentioned in table 32:

Table 32: Distribution of respondents by receiving TT vaccination

Episodes	No. of respondents	Percentage
1time	17	16.19
2 times	43	40.95
3 times	19	18.10
4 times	1	0.95
Not taken	25	23.81
Total	105	100.00

Source: Field Survey 2011.

Among total 105 respondents, 40.95 percent had found taking TT twice, 16.19 percent had once, 18.10 percent had thrice and 23.81percent had found none. But, in compare with the total 76.19 percent respondents had found taking TT and the rest, 23.81percent didn't. It is also found as the challenges for vaccination program as well as for safe motherhood program in Nepalese context.

6.3.4 Health institution visit for TT vaccination

Trends of visiting institution for TT vaccination had been seeking in this survey but findings were as same as above (table 31) had found. They are mentioned in given table (table 33):

Table 33: Distribution of respondents by visiting institution for TT vaccine

Visit times	No. of Respondents	Percentage
1 time	17	16.19
2 times	43	40.95
3 times	19	18.10
4 times	1	0.95
Not visited	25	23.81
Total	105	100.00

Source: Field Survey 2011.

Among total 105 respondents, 40.95 percent had found visiting for taking TT twice, 16.19 percent had once, 18.10 percent had thrice and 23.81 percent had found neither visited to institution nor taken TT. But, in compare with the total 76.19 percent respondents had found visited institution for taking TT and the rest, 23.81 percent didn't. It is also found as the challenges for vaccination program as well as for safe motherhood program in Nepalese context

6.3.5. Main places of delivery to deliver last baby by respondents.

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother and/or the baby. So, it was found that the delivery practice on health institution is going on progress than at home nowadays because of launching effective programme by government. The survey reports of safe motherhood programme has given as justification as an example.

By the end of support to safe motherhood programme, also showed that a staggering 85 percent of women reported that respondents should deliver in a facility, including 80 percent of mothers-in-law. The Endline household survey found 40 percent of recently delivered women gave birth in a health facility, up from 21 percent at Baseline and over double the national rate of 15 percent in 2008-2009. Correspondingly, the number of women delivering with a skilled provider doubled from 19 percent to 41 percent with the vast majority delivering in a facility and only a small minority at home. Service records from the programme areas chart the same

upward trend in institutional deliveries, with an average increase of 29 percent during the first 2 years of the programme. The majority of women (81 percent deliver at home, and less than 19 percent of births take place with the assistance of a Skilled Birth Attendant (*New ERA, 2011*).

Table 34: Distribution of respondents by place of delivery to deliver last baby

Delivery places	No. of respondents	Percentage
Home	31	29.52
SHP	12	11.43
HP	10	9.52
Hospital	42	40
Others (Not mentioned)	10	9.52
Total	105	100.00

Source: Field Survey 2011.

Despite of finding as above in this survey, 40 percent of respondents had delivered in hospital, 11.43 percent had delivered in SHP and 9.52 percent had delivered in HP. Among all, 60.95 percent of respondents had delivered in Health institution only. But, 29.52 percent of them had still delivered in their own home and 9.52 percent of them had not mentioned about the place of their delivery.

6.3.6 Main supporter at child bearing time

Assistance of skilled health personnel during delivery is considered to be effective in the reduction of maternal and neo-natal mortality but in the study area, highest percent of respondent delivered at home without skilled health personnel and lower percentage of women delivered their baby at health institution with skilled health personnel. Only 36 percent of babies are delivered by a doctor or nurse/midwife, and 28 percent are delivered at a health facility indicating that Nepal has a long way to go to meet the Millennium Development Goal target of 60 percent births attended by a skilled provider. However, it is encouraging to note that the proportion of babies attended by skilled provider over the last five years has nearly doubled, from 19 percent in 2006 to 36 percent, while the proportion of babies

delivered in a health facility has increased from 18 percent in 2006 to 28 percent (MOHP, New ERA and Macro International Inc., 2007).

It has been also shown that the trend of delivery conducted by the health worker is increasingly found from 7.3 percent to 18.3 percent till the year 2000 to 2006. Similarly, delivery conducted by TBAs is found also increasingly found from 6.5 percent to 11.3 percent till the year 2000 to 2006 (*MoHP, 2004*). That means the trend of delivery conducted by skilled birth attendant is found gradually increasing.

Table 35: Distribution of respondents by support taken at child bearing

Supported by	No. of respondents	Percentage
TBA	10	9.52
FCHV	8	7.62
ANM/ Staff nurse	39	37.14
MCHW	14	13.33
Doctor	7	6.67
Mother-in-law	6	5.71
Blind practiced neighbors	5	4.76
Traditional healer	3	2.86
Without assistance (lonely)	13	12.38
Total	105	100.00

Source: Field Survey 2011.

In this research, it had shown that more respondents were deviated to trained health personnel for the sake of their own support at delivery period. Most of the respondents had delivered with the assistance of ANM/Staff nurse (37.14 %) and the second one found on Maternal child health worker (13.33 %) who is also trained for Skilled birth attendant. Around 57.14 percent respondents out of 105 were adopted on trained health personnel and the rest of 42.86 percent were remained in traditional techniques. Among the 42.86 percent respondents, 12.38 percent had delivered lonely, 2.86 percent had delivered with the assistance of traditional healer, 4.76 percent with blind practiced neighbor and 5.71 percent with the assistance of their own mother-in-law at home. Other 17.14 percent respondents had delivered their baby with the

assistance of less skilled birth attendant including 9.52 percent respondents with TBAs and 7.62 percent with FCHVs. This data had shown that all respondents had remained at risk if they had not been made aware on safe motherhood practices.

6.3.7 Use of CHDK (Sutkeri Samagree)

Government has been encouraged for using sutkeri samagree (Clean home delivery kits) to make home delivery safer. It consists have a blade, a cutting surface, a plastic sheet, a soap, and pictorial instruction assembled by maternal and child health product for safe delivery practices. It is also provided to health institution where delivery services have been given. It is also available in private clinics. The main purpose of this material is to make delivery services safer wherever they found. But the following facts had been found about the use of CHDKs as practices.

Table 36: Distribution of respondents by use of CHDKs on their delivery

Response	No. of respondents	Percentage
Yes	70	66.67
No	35	33.33
Total	105	100

Source: Field Survey 2011.

In table 36, the data had shown that 66.67 percent out of 105 female had used CHDKs and 33.33 percent hadn't. This meant the 33.33 percent respondents didn't know about the safe delivery. They should have oriented immediately to diminish further mortality and morbidity.

6.3.8 Use of instruments to cut umbilical cord of newborn baby

In this research, it had been seeking about the behavior of women to cut the umbilical cord which is the most important factors for determining the newly born baby's health. Different women had got the use of different instrument by place of delivery like home, hospital etc. But, the following data had obtained by the survey as table 37:

Table 37: Distribution of respondents by use of instruments to cut umbilical cord

Used instruments	No. of respondents	Percentage
Sterilized blades	92	87.62
Unsterilized blades	8	7.62
Knife	5	4.76
Total	105	100.00

Source: Field Survey 2011.

In table 37, more respondents (87.62%) out of 105 had used sterilized blade to cut umbilical cord and less of them (12.38%) had used unsterilized instruments. This meant that there are more chances to have umbilical cord infection and the risk of tetanus. So, they should have made aware to it as soon as possible.

6.3.9 Encounter of labor problem

In Nepal, most of the health problems of mother occur after delivery. It accounts 62 percent in urban area and 86 percent in rural areas (NDHS, 2001). In this research, it had been seeking that the encountered problems with types after delivery period by the women using response checklists as if yes or no questions. But following responses had been found which were shown in table:

Table No. 38: Distribution of respondents by response on encountered problem.

Response	No. of respondents	Percentage
Yes	79	75.24
No	26	24.76
Total	105	100.00

Source: Field Survey 2011.

In this survey, it was found that the 75.24 percent respondents had faced problem on and after delivery. Respondents of 24.76 percent did not have faced problem. That meant they had delivered easily. The more percent of respondents found in this survey might be due to the cause of home delivery. So, it (causes) should be diminished as far as possible.

6.3.10 Types of encountered problems

In this survey, types of encountered problem on postnatal period had asked to the women which they had faced previously. The main aim of this question was concerned to look for morbidity pattern on PNC period of the women. But the following facts had been found. They are as:

Table 39: Distribution of respondents by encountering typical problems

Types	No. of respondents	Percentage
Excessive vaginal bleeding	30	28.57
High fever	14	13.33
Presentation of abnormal parts of baby	9	8.57
Prolonged labor	52	49.52
Total	105	100.00

Source: Field Survey 2011.

In this survey, majority of the respondents (49.52%) had found facing prolonged labor. Among all the respondents, 28.57 percent had facing excessive vaginal bleeding, 13.33 percent had facing high fever and 8.57 percent had facing problems like abnormal presentation of baby parts on their delivery.

6.3.11 Safe motherhood practice for management of encountered problem

In this survey, women had asked question about techniques to manage encountered problems adopted by them in practice. For this purpose, following facts had been found as shown in table:

Table 40: Distribution of respondents by manner of managing problems

Managed by	No. of respondents	Percentage
Refer to better center	85	80.95
Forcefully treated at home	20	19.05
Total	105	100.00

Source: Field Survey 2011.

Among 105 respondent, 80.95 percent respondents had found managed by their problem by referring better center, and the 19.05 percent of them had found forcefully treated at home in practice. This meant most of them had seemed aware for their further wellbeing on health status.

6.3.12 Participation of husband for help to problematic woman during labor

In Nepalese context, women have found suffering from patriarchal conflict. As a result, they have to face lonely in working at every condition. So, it had been searching about this issue in women of this community by the survey.

Table 41: Distribution of respondents by spousal support during labor

Response	No. of respondents	Percentage
Yes	99	94.29
No	6	5.71
Total	105	100.00

Source: Field Survey 2011.

But, by the survey none of the respondents had found without spousal support during the labour. Only 5.71 percent of respondents had found without spousal support during the labour. They might have borne their child lonely. That is hazardous for their life.

6.3.13 Safe motherhood practice of respondents to PNC check-up (within 42 days after delivery)

Post natal care service consists of care after expulsion of baby and placenta and within 42 days after delivery, like per vaginal bleeding occurred or not, using vitamin A or not, management of sepsis or not and vaccination to child as well as intake of birth spacing ideas.

Table 42: Distribution of respondents by practice of PNC check-up

Response	No. of respondents	Percentage
Yes	50	47.62
No	55	52.38
Total	105	100.00

Source: Field Survey 2011.

In table 42, seeking for practices of respondents on PNC check-up had found as poor behavior. Only 47.62 percent of respondents had known about the PNC check-up and the rest greatest number of the respondents did not know about this service of safe motherhood program.

6.3.14 Number of PNC (visit) check-up

As same as in the ANC visit, the trend of practice in PNC visit by women also had been counted in this survey. The findings are mentioned below as:

Table. 43: Distribution of respondents by PNC visit.

Visiting episodes	No. of respondents	Percentage
1 time	18	17.14
2 times	12	11.43
3 times	28	26.67
4 times	8	7.62
None	39	37.14
Total	105	100.00

Source: Field Survey 2011.

In table 43, most of the respondents had taken 3 times PNC visit (26.67 percent) which is belongs to the norm and regulations of government at least for thrice in postnatal period of the nation. But 37.14 percent of them did not know about the right time to check-up, 17.14 percent of them had visited only one time and 11.43 percent to them had visited only for 2 times for PNC services. It is the greatest

challenges to safe motherhood program of Nepal. So, they have to make aware as soon as possible in near future to get further success.

6.3.15 Vaccination to newborn baby

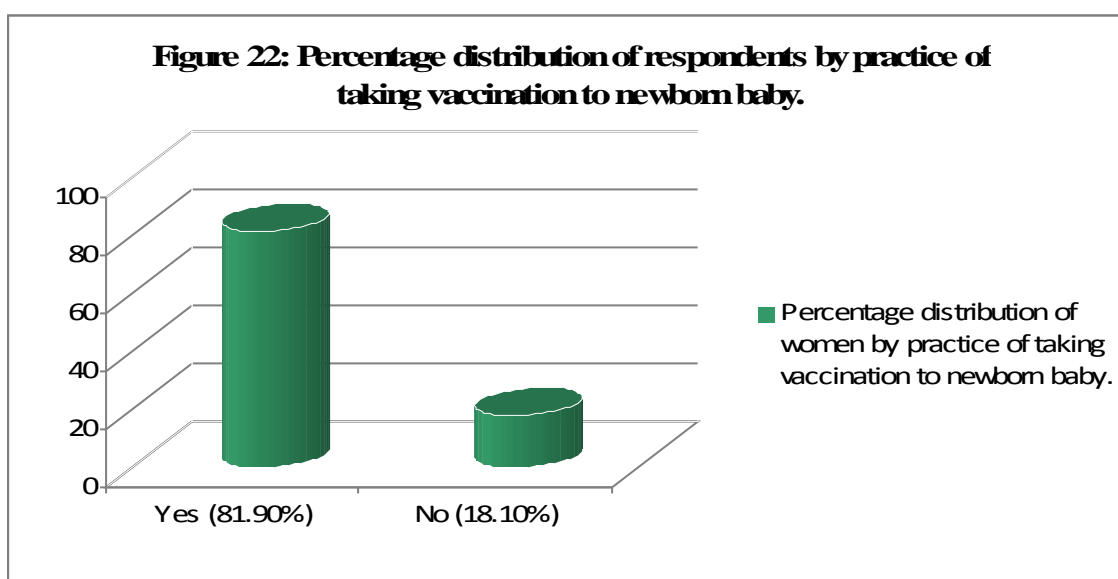
As same as the practice of taking TT vaccine, the trend of giving vaccination to their baby had been counted by the women in the survey. The following facts had been found:

Table 44: Distribution of respondents by practice of vaccination to newborn baby

Response	No. of respondents	Percentage
Yes	86	81.90
No	19	18.10
Total	105	100.00

Source: Field Survey 2011.

By this survey, it had clearly depicted that the highest percentage of the respondents (81.90%) had vaccinated their newborn children and only the least percent of them hadn't done yet. This figure had shown as the challenges for national vaccination program. So, it is seemed necessary to make them aware as far as possible by the related sector. The given data has been shown in the given diagram as below:



6.3.16 Taking advice for birth spacing from health institution during PNC check-up

Around 40.2 percent women of childbearing age were using family planning methods during this period (*Demographic Health Survey, 2006*). It is found gradually increasing from 20.5 to 40.2 percent. But, the following practices had found in women taking advice for birth spacing from health institution.

Table 45: Distribution of respondents by taking advice for birth spacing from health institution during PNC check-up

Response	No. of respondents	Percentage
Yes	91	86.67
No	14	13.33
Total	105	100.00

Source: Field Survey 2011.

By table 45, it has known that the largest percentage (86.67%) of respondents had to have taken advice for birth spacing from health institution during PNC check-up and the rest of the least percentage of respondents (13.33%) hadn't have taking advice for birth spacing. Thus, this trends had shown that the positive attitude for taking advice on birth spacing behavior.

CHAPTER- SEVEN

SUMMARY, CONCLUSION, RECOMMENDATIONS AND FURTHER RESEARCH ISSUES

7.1 Summary

This study has been conducted to find out the knowledge, attitude and practice of safe motherhood services among the women of reproductive age of Newars women who had at least one child within reproductive ages have been resided at phungling, Dhungesanghu and Change VDCs of Taplejung District. This study was fully based on primary source of data which was formulated by the researcher own-self. This study was able to find out the knowledge, attitude and practice of safe motherhood among the women. The major issues on this survey are as given below:

-) Out of total 560 people, 48.04 percent of male and 51.96 percent of female have found in that society at survey area.
-) Out of total 560 people including both sexes, 22.50 percent were engaged in business. Secondly, 20.54 of them were engaged in agriculture and the greatest number i.e. 31.07 percent of them were engaged in school as student. Similarly higher numbers of females (15.33%) were engaged in household work than males (1.57%).
-) Majority of respondent had using radio, 31.43 in percent of respondent and TV, 21.90 in percent of total respondents (respondent).
-) Most of the respondents had using piped water, 87.62 in percent and least, 4.76 percent of them had still using river water for their safe drinking water.
-) Among total population 89.46 percent are literate and 10.36 percent are illiterate including both sexes. In male only, 92.94 percent are literate and 7.06 percent are illiterate, in female only 86.60 percent are literate and 13.40 percent are illiterate. Only 4.09 percent of male and 0.34 percent of female have obtained master's degree and including both sexes only 2.14 percent have obtained master's degree yet in this society of survey area.
-) More than 56 percent respondents married before the age of 20 and 43.81percent after the age of 20.

-) About 87 percent of respondents have known about safe motherhood, 77.14 percent have taken part in ANC visit and 47.62 percent have taken part in PNC visit.
-) It was observed that 22.86 percent of mother did not receive ANC visit and 52.38 percent did not received PNC visit.
-) About 48.57 percent of respondent's perception in safe motherhood is necessary, similarly 1.90 percent of respondents reported that they did not know it is necessary or not.
-) About 32.38 percent of respondents still believe in Dhami/Jhakri for better care in the survey area despite of modern facility of health services.
-) About 94 percentage of respondents received spousal support during the time of delivery.
-) About 77 percent of respondents had gone to receive ANC services and 47.62 percent of respondents had gone to receive PNC services to hospital.
-) About 76 percent of respondents had received TT vaccination on ANC, PNC, and during delivery services at health institution and 81.90 percent respondents had vaccinated their children.
-) More than 40 percent respondents had given birth at hospital only and 29.52 percent respondents had given birth at their own home yet.
-) More than 37 percent respondents were delivered with the assistance of ANM/Staff nurse, 6.67 percent of respondents were delivered with the assistance of Doctor and 13.33 percent of respondents were delivered with the assistance of MCHW as well as 12.38 percent respondents were delivered without assistance lonely at home and 13.33 percent respondents were delivered with the assistance of layman like traditional healer, blind practiced neighbor, mother-in-law etc.
-) More than 67 percent respondents had used CHDK (Sutkeri samagree) during their labor.
-) More than 50 percent of respondents had suffered from prolonged labor and 28.57 percent of respondents had suffered from excessive vaginal bleeding.
-) About 93 percent of respondents had known the need of safe motherhood and 6.68 percent of them had still unknown.

) More than 47 percent of respondents had able to decide themselves for economical issues.

7.2 Conclusion

This study was conducted to find out the KAP of safe motherhood at Phungling, Dhungesanghu and Change VDCs of Taplejung District in Newars community using previously designed questionnaire and interview schedule. It was followed empirical research design and sampling were designed purposively in that area where one VDC was selected near from or within district headquarter and the other two were selected far from the headquarter. Survey was conducted firstly as household and secondly by selecting the main respondent (women) who have married and given a birth at least one child during the time of survey at the age between 15-49 years. This survey was conducted with the assistance of trained human resources from campus students and social worker of the related VDCs. In this survey, total 110 household with the total population of 560 around 3 VDCs were selected and among them only 105 respondents (women) from 105 household were selected for the interview especially in KAP of safe motherhood.

In this survey, chief findings in short mentioned as 46.67 of respondents decide themselves for economical status, out of total 560 people, 48.04 percent of male and 51.96 percent of respondents have found in that community. Among them 22.50 percent were engaged in business, 20.54 of them were engaged in agriculture and the greatest (i.e. 31.07%) of them were engaged in school as student. 92.94 percent of male are literate and 7.06 percent are illiterate, 86.60 percent of female are literate and 13.40 percent are illiterate. Only 4.09 percent of male and 0.34 percent of female have obtained master's degree. 56.19 percent respondents married before the age of 20 and 43.81 percent after the age of 20. About 86.67 percent of respondents have known about safe motherhood, 77.14 percent have taken part in ANC visit and 47.62 percent have taken part in PNC visit. It was also observed that 22.86 percent of mother did not receive ANC visit and 52.38 percent did not received PNC visit. Mostly 94.29 percent of respondents received spousal support during the time of

delivery. 40 percent respondents had given birth at hospital only and 29.52 percent respondents had given birth at their own home yet.

More than 37.14 percent respondents were delivered with the assistance of ANM/Staff nurse, 6.67 percent of respondents were delivered with the assistance of Doctor and 13.33 percent of respondents were delivered with the assistance of MCHW as well as 12.38 percent respondents were delivered without assistance lonely. About 66.67 percent respondents had used CHDK (Sutkeri samagree) during their labor and 49.52 percent of respondents had suffered from prolonged labor and 28.57 percent of respondents had suffered from excessive vaginal bleeding.

On the basis of major findings we can generalize that the knowledge and practice of motherhood is not satisfactory due to high rate of illiteracy and poor socio-economic status of the respondents as well as highly engagement in business and agriculture but their attitude towards safe motherhood is little satisfactory because they are positive toward utilization of safe motherhood practice.

7.3 Recommendations

According to the findings of the study, there are various problems and this research try to generalize that problems which are useful in policy making in the national level as well as it may be more useful for the local bodies of government belonged to the study area. The following suggestions are made after the research work.

-) Educational status of the respondent seemed very poor, so that 21.90 percent of them are illiterate. So, they should be encouraged to acquire higher levels of education so that respondents can decide their own self for health or other personal setting.
-) All people should have necessary to encourage in official job (4.47% of respondent engaged), so that fertility rate can automatically decreased by such family.
-) It is realized that further knowledge of respondents with respect to maternal health care services is essential. So, information, education, and extra communication program should be launched effectively.

-) Most of the people in the study area are engaged in business (60%) and agricultural work (35.24%). Similarly higher numbers of females (15.33%) were engaged in household work than males (1.57%). Therefore they couldn't raise their living standard. So, they should be provided different opportunities in the different sector by the policy maker and government of Nepal to raise their socio-economic status.
-) All respondents should have given efforts for taking ANC (77.14%), during delivery and PNC (47.62%) services.
-) Perception on the treatment to Dhami/jhakri (32.38%) should be gradually diminished as soon as possible by launching awareness program and providing better/ free health facility from health institution.
-) The rate of occupying delivery (60%) in health institution should be increased by launching effective incentives program by focusing local areas..

7.4 Further Research Issues

This study is based on Knowledge, Attitude and Practice of Safe motherhood only in Newar community, purposively selected VDCs at Phungling, Dhungesanghu and Change of Taplejung district which is not enough samples for this study. In this survey the components of Safe motherhood like ANC, PNC and Delivery care are included except family planning issues. New born care is included shortly but it is not enough for this study.

So, it is better to include entire population of Newar community of whole districts. The survey design and procedure must be used as systematic random sampling or cluster sampling wherever possible at all VDCs. Family planning issues also necessary to include in this survey. So far as to meet completeness of this survey, detail base line survey is most necessary for further findings.

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- 6 Which level did your husband pass?
- a) Illiterate b) Literate only c) Primary
d) Lower secondary e) Secondary f) Higher Secondary
g) Intermediate h) Bachelor's degree I) Master's degree

Questionnaire on safe motherhood Knowledge

- 1 Have you ever heard/seen safe motherhood?
- a) Yes b) No
- 2 If yes, from which media you have heard/seen about it?
- a) Radio b) T.V. c) Related bulletin/pamphlet
d) FCHV/TBA e) Health worker
- 3 What kind of services in safe motherhood included?
- a) Regular check-up b) Check-up during the period of pregnancy
c) Receiving vitamin. A and ferrous salt with folic acid
d) Delivery assisted by trained health personnel
e) Use of CHDK's f) Receiving de-worming tablets
g) Receiving TT vaccination h) All of above
- 4 Why is it needed to regular check-up at pregnancy, during delivery and after delivery?
- a) To make healthy baby and mother b) Identify high risk previously
c) To diminish maternal and neonatal death d) All of the above
e) Don't know
- 5 What are the main sources of your knowledge?
- a) Radio b) T.V c) Health worker d) Private clinic
e) Doctor f) Pamphlets/posters g) Student/teacher
h) FCHV/TBA i) Friend j) Husband
k) I/NGO
- 6 How many times at least a pregnant woman should take part in ante-natal check-up?
- a) more than 4 times b) 3 times c) 2 times
d) 1 time e) No need to check-up
- 7 Who provide safe motherhood services to you?
- a) Doctor b) AHW/HA c) ANM/Staff nurse
d) VHW/MCHW e) FCHV/TBA f) Traditional healer

- g) Blind practiced neighbor h) mother-in-law
- 8 Where is the service found?
- a) FCHV/TBA's house b) SHP c) HP/PHC d) hospital
e) ORC Center f) Don't know.
- 9 How many times at least had delivery woman taken part in PNC check-up?
- a) More than 4 times b) 3 times
c) 2 times d) 1 time e) No need to check-up
- 10 What are the main causes of maternal deaths on pregnancy, during delivery and after 42 days after delivery?
- a) High fever b) Fainting c) Abnormal presentation of fetal parts
d) Prolonged labor (more than 12 hours) e) Per vaginal bleeding (PPH)
f) All of above g) don't know
- 11 In your opinion, where Is the more chances of maternal mortality occurs?
- a) Hospital b) Own home c) Way d) Don't know.

Questionnaire on safe motherhood attitude

Likert's Attitude Scale

S. N.	Statement	Strongly agreed	Agreed	Undecided	Disagreed	Strongly disagreed
1	Knowledge of safe motherhood is essential, useful, practicable and behavioral in daily life.					
2	Woman should be pregnant at first above the age of 20.					
3	Pregnant woman should regularly take ANC, during labor and PNC service as well.					
4	First milk (colustrum) of mother should be given to new born baby.					
5	Believe in Jhakri is better than health staff for providing better service in safe motherhood.					
6	Each couple should have born not more than 2 children is suitable in Nepalese context.					
7	Any tool can be used to cut the umbilical cord is good and possible everywhere.					
8	Mother should avoid taking alcohol and smoking during pregnancy, labor and after delivery period or all over life.					
9	Identification of high risk mother and role of all family members to manage timely is always necessary for safe motherhood.					
10	CHDK (Sutkeri Samagri) is always necessary to woman for safe delivery during labor.					
11	Exclusive breast feeding is good to infant.					
12	Regular check-up for pregnant respondents is always harmful.					
13	Pregnant woman should immunize timely.					

Questionnaire on safe motherhood practice.

- 1 Did you visit for Ante-natal check-up?
 - a) Yes
 - b) No
- 2 If yes, did you have received iron tablet and TT vaccination?
 - a) yes
 - b) No
- 3 How many times did you have received TT?
 - a) 1 time
 - b) 2 times
 - c) 3 times
 - d) 4 times
- 4 How many times did you have visited health facilities?
 - a) 1 time
 - b) 2 times
 - c) 3 times
 - d) 4 times

- 5 Where did you deliver your last baby?
 a) Home b) SHP c) HP d) PHC
 e) Hospital f) Private clinic g) Other
- 6 Who had helped you for child bearing at that time?
 a) TBA b) FCHV c) ANM/Staff nurse
 d) AHW e) MCHW f) VHW g) HA
 h) Doctor i) mother-in-law j) Blind practiced neighbor
 k) Traditional healer l) without assistance alone
- 7 Did you use CHDK?
 a) Yes b) No
- 8 Which instruments had used to cut the cord?
 a) Sterilized blade b) Unsterilized blade
 c) Knif d) Bamboo parts sharp
- 9 Have you had any problem during labor?
 a) Yes b) No
- 10 What type of problems?
 a) Excessive vaginal bleeding b) High fever
 c) Presentation of abnormal parts of the baby d) Prolonged labor
- 11 How did it manage?
 a) By referral to better centre b) By forcefully treated at home
- 12 Did you have helped by your husband or other male of your family during this condition?
 a) Yes b) No
- 13 Did you receive PNC check-up?
 a) Yes b) No
- 14 How much time did you visited for this purpose?
 a) 1 time b) 2 times c) 3 times d) 4 times e) None
- 15 Did you give vaccines to your newborn baby timely?
 a) Yes b) No
- 16 Did you take advice for birth spacing from health institution during the period of PNC?
 a) Yes b) No

Thanks for your kind co-operation.