CHAPTER ONE INTRODUCTION

1.1 General Background

World Health organization (WHO) has given guidelines for the essential newborn care as following cleanliness, thermal protection, initiation of breathing, early and exclusive breast feeding, eye and cord care, immunization, management of illness and care of low birth infants (WHO,2006). According to the Global Health Council 2005 across the world nearly 11 million children die every year below 5 years. More then a third of these deaths occur in first months of life of them 3000 child death that occurs each day. Over 60 percent might have been prevented with basis, inexpensive prevention and treatment measures. The total low birth weight ratio is (9 percent) in New York and (23 percent) in Nepal (Global Health Council).

A health infants born at term (between 38 to 42 weeks) should hare an average birth weight usually exceeds 2500 gram, cries immediately following birth, establishes independent rhythmic respiration and quickly adapts to the changed environment, (Dutta,2004). At birth a baby is transposed from the warm contentment of the uterine environment to the outside world where the role of independent existence is assumed. The baby must be able to make this sharp transition swiftly, and in order to achieve this series of adaptive function hare been developed to accommodate the dramatic change from the intrauterine to extra uterine environment (myles).

The proportion of babies who are breast-feeding is high in all regions of world but there are wide variations in the duration of breast-feeding. Sub-optimal breast feeding practices are still in norm in most countries. Failure to give newborn infants colostrums is a common example of bad practice. Lack of exclusive breast feeding substantially increase the risk of poor newborn care outcome. In developed countries it is assumed that neonatal mortality is 10/1000 live births (WHO, 2006). Nepal's neonatal mortality rate is 389/1000 live births, which is the third highest in world (MOH, 2000 report). Most newborn deaths can be avoided by preventive measures and by effective management of complications (such as management of infections). Other interventional also have improved preventive

effects (thermal protections, breast feeding and eye care to reduce blindness) (WHO, 2006).

There are striking variations from place to place in the pattern of care and interventions that newborn infants receive. In many cases there is a lack of knowledge of what is needed for optimal newborns, (WHO, 2006).

Women are crucial to social and economics development. Their health and well-being matter to template, their family and their community. Pregnancy and childbirth are natural process but they are no means risk-free. Women and children die and suffer because they do not have access to the basis minimum of health care that is their right. Every year, over 4 million newborn infants die and million women are disabling because of poorly managed pregnancy and deliverers.

Data from the 2006 NDHS shows majority of births were delivered at home (81 percent). Only one third of women received postnatal care. In our country 3 neonates die per hour. In brief maternal and neonatal mortality and morbidity is high due to lack of skilled care during pregnancy, birth and postpartum period and poor referral system when life-threatening conditions occur. Since safe motherhood and newborn health care are not purely health issues, they warrant a multi-spectral approach. Several cross-cutting issue should be addressed like education, information and communication, transport and ideal development gender and empowerment, social exclusions due to caste, ethnicity, age, religious of gender, poverty etc.

Safe motherhood and neonatal health has been a national priority program for the last decade and is highlighted in all major health related policies and plans. In order to ensure focused and coordinated effort among many stake holders involved in safe motherhood and neonatal health programming, the government and non-government, the national. Safe motherhood plan 2002-2017 highlighted to reduce high level of mortality among a 2/3 reduction in under five mortality rates and 75 percent reduction in MMR by the year 2015.

1.2 Statement of Problems

Every year globally, an estimated four million babies die before they reach the age of one month. Nearly the same numbers die in late pregnancy or are stillborn and these deaths are far more likely to occur early in the neonatal period.

The annual global burden of neonatal death is estimated to be 4 million, in addition to the 4 million babies born stillbirth. At least 1.2 million newborn infants die from complication during delivery.

Every year globally, of the 130 million babies born every year, about 4 million die in the 4 weeks of life the neonatal period. Deaths are more likely to occur early in the neonatal period. It is stated that 2/3rd of all deaths in the first years of life occurs in the first months of life. Among infant deaths approximately 2/3rd deaths occur in the first week of life. Of these deaths, approximately 2/3rd deaths occur in the first day of life. A similar number of babies are stillborn dying in uterus during the last 3 months of pregnancy. Most neonatal deaths (99percent) arise in low income and middle income countries and at least half of neonatal deaths arise after home births. Million more are disable because of poorly managed pregnancies, deliveries and neonatal care. Reducing these deaths is a moral imperative and essential for achievement of MDG-4. The major direct causes of neonatal deaths are infections (36percent) and asphyxia (23percent) maternal complication, especially during childbirth, carries a high risk of neonatal deaths.

In Nepal, infant and neonatal mortality and morbidity is very high: IMR-64, NMR-39 per 1000 live births, and PMR 47.4 per 1000 live births and still births(3). It is estimated that in Nepal nearly 50000 children under one year of age die every twelve months. Two third of them die within 28 days of age resulting in over 30000 neonatal deaths per year. Among those dying within the neonatal period, 20000(two third) die in the first week of life. Nearly the same numbers of babies are stillborn (3). More than 16000 of those dying within the first week of life die within 24 hours. As thing stand, this means that three to four newborn are dying every hour in Nepal.

In Nepal approximately 81 percent of babies born at home and 70.7 percent of deliveries conducted by untrained friends, relatives, family members, TBA, less than 19 percent

with the assistance of skill birth attendant and 6.5 percent without any attendant at all. In Nepal infant and neonatal mortality and morbidity is high IMR-48, MMR-33 per 1000 live birth. Traditional attitudes and practices dominate newborn care and are often hazardous. Hypothermia has been shown to be an important cause of neonatal morbidity in hospital setting in Nepal (Barnett, A.K. Barua).

But in some cultures, some kind of substance is applied to the cord stump. Ash, oil, herbs and mud are commonly used. Those substances are often contaminated with bacteria and spores and that increase the risk of infection. (WHO essential new born care: A report of technical working group).

Among home delivery, 18 percent births use new blade from safe delivery kit, 61 percent of birth use new or boiled blade, 12 percent of births use sickle and 5 percent of birth use old blade as their cord cutting instrument (Report 2006, NDHS).

In Nepal, the practice of keeping the newborn warm is not common. In most of the cases families do not have warm clothes ready at the time of delivery. The newborn is kept naked or covered by a thin piece of cloth until the placenta is delivered or the umbilical cord is cut. The NDHS2006 revealed that 43 percent are dried and 44 percent are wrapped in cloth before the placenta is delivered. Ninety percent babies were given a bath within 24 hours of delivery, 74 percent in the first hour. Only 9 percent of the babies were given a bath after 24 hours. Similarly 35.4 percent children were breastfed within one hour of birth, 85 percent started breastfeeding within one day of birth (2006, NDHS).

Women who have completed their SLC or higher level education are slightly more likely to initiate breastfeeding within one hour than women who have lower levels of education. More than eight percent of the children delivered by an SBA were breastfed within a day of delivery, compared with 79 percent delivered by other types of health worker (report 2006 NDHS).

Closely linked to neonatal mortality and morbidity is lack of attention to maternal nutrients, maternal infections during pregnancy, poor preparation of the mothers to initiate an exclusively breastfed her infant and inadequate planning for birth. The essential newborn core included clean delivery practice, temperature control, eye and cord care and early and exclusive breast feeding. From above statements we can say majority of maternal and neonatal mortality and morbidity are preventable by minimum efforts on health sector. To promote ANC checkup, PNC checkup and knowledge about danger sign and referral, Nepal government (MOHP) started orientation and training programs to FCHV and other grass root level health worker at each VDC. The national safe motherhood plan 2002-2017 was revised as SMNHLTP 2006-2017. To reduce the risk associated with pregnancy and childbirth and to address these delays, three major strategies have been adopted in Nepal as (a) provision of 24 hour emergency obstric care at selected HF(b) promoting the use of SBA at every birth and (c) promoting birth preparedness and complication readiness particularly the availability of blood, transport and money. (Annual report 2005 Department of health services, Teku, ktm, Nepal).

1.3 Research Questions

-) What was the level of knowledge on PNC?
-) Where they prefer for safe delivery?
-) How are the socio-economic, socio-demographic and educational factors effects on newborn care practices?
- How they conduct the health practices at home delivery?
-) What are the breastfeeding, immunization and seeking care practices?

1.4 Objectives of the study

The general objective of the research in to study the situation of new born care practices in Dumarwana VDC of Bara on the base to different socio-economic and demographic variable. The specific objectives are as follows:

-) To identify the newborn care practices.
-) To assess the home based delivery care.
-) To find out the factors associated with safe delivery and newborn care practices among the mothers i.e. socio-demographic and economic factors.

1.5 Significance of the study

Nepal remains amongst the poorest and least developed countries in the world with almost one-third of its population living under the poverty line. Although the survey results indicate that there have been decline in the fertility from 4.6 in 1996 to 3.1 births per women in 2006. Childbearing begins early. At current mortality levels, one in every

21 Nepalese children dies before reliving one while one in every sixteen does survive to fifth birthday.

4 out of 5 births (81 percent) take place at home. There is a strong association between health facility delivery, mother's education and wealth quintile. The proportion of deliveries in health is only 8 percent among births to uneducated mothers, compared with 67 percent among births to mature with SLC and higher education.

Most of newborn deaths are due to infection that occur either at birth or shortly after birth the major cause of death in developing countries are birth asphyxia, birth injuries, neonatal tetanus, sepsis, pneumonia, diarrhea, prematurity etc. Appropriate care during pregnancy and delivery can substantially reduce newborn deaths but it must be accompanied by special newborn care and measures to reduce newborn deaths and disabilities. Most postnatal infants' deaths are caused by preventable and/or treatable disease. Preventive interventions are simple, inexpensive, attainable and cost-erective.

The government also recognizes that the present rate of neonatal mortality in country can not be reduced without bringing change in behavior for home based newborn health practices where nearly 81 percent of newborns born at home. Although there has been marked progress in a number of health indicators in recent years, newborns are still atrisk and largely neglected population. The state of newborns in Nepal still compares poorly to that of almost all other developing countries.

In our country, many interventions that will reduce neonatal mortality are already developed, such as those included in the safe motherhood program, broader reproductive health programs, the integrated childhood management illness (IMCI), maternal and neonatal tetanus elimination (MNTE) program, immunization and nutrition activities. The revised National Safe Motherhood and Newborn Health Long Term Plan (NSMNH-LTP) 2006-2017 has been developed which purpose are increased healthy practices and utilization off quality, maternal and neonatal health services, especially by the poor and excluded, delivered by the well-managed health sector.

1.6 Limitations of the Study

-) The study is limited with in Dumarwana VDC in Bara district. So it cannot be generalized to other place.
-) Information depends on the answers given by the respondents.
-) The result of the study cannot be generalized to the total population.

1.7 Organization of the Study

This thesis is divided into seven chapters, in first chapter write about introduction. About literature review is written into 2nd chapter. Chapter three is related with methodology of the study. In fourth chapter I have try to show socio-economic and demographic characteristics of simple households. Fifth chapter beings to Newborn care practices, in sixth chapter I have write about factors associated newborn care practices, and in last seventh chapter is related about summary, conclusion and recommendation.

CHAPTER TWO LITERATURE REVIEW

2.1 Theoretical Review

New born care is very important in preventing neonatal death. Particularly essential care of the normal newborn to prevent illness, extra care of low birth weight babies, and access to quality emergency care for the sick newborn. However, many of the cause of neonatal deaths, such as asphyxia, respiratory distress in a pre-term baby, and early sepsis are related to the health or care of the mother. The main causes of neonatal deaths are poor pre-pregnancy health and inadequate care during pregnancy and delivery.

Newborn care is strongly influenced by women's social and health status and by home care and practices for mother and newborn, as well as by maternal and newborn cares services (Rodolfo et al. 2000). Traditional care practices at home and in the community inevitably affect maternal and newborn health. In the countries of South Asia women often have many children who are closely spaced; women maintain their full workload during pregnancy and restrict their diet due to fear of delivering a big baby. Women are valued less than men. This attitude may manifest through female infanticide, limited access to food, lack of mothers in law, expectation to bear many children, heavy workloads, physical and emotional abuse and inadequate access to health services. Lack of understanding of the urgency attached to newborn illness or obstetric emergencies, traditions of seclusion of mother and newborn, fatalistic outlook, belief in evil sprits, and lack of family finances to pay for care and transport also cause delay in deciding to seek care.

Air	Resuscitate and maintain an airway
Warmth	Keep new born warm and avoid unnecessary hypothermia or cold stress
Food	Encourage early breast feeding and feeding high risk new born more frequently
Hygiene	Maintain hygiene during delivery and cord cutting: treat infections promptly
Love	Ensure the newborn infant stays close to mother and mother have open access to their new born infants if he/she requires special care

Table 1.1: Principles of essential newborn care

Newborn deaths result from a combination of medical causes, social factors and health system failures, that very by context and culture. In most settings, newborn health is closely associated with maternal (Belsey, 1992). Paul and Beorari (2002), however, observe that factors contributing the high newborn mortality rates in South Asia include widespread LBW, lack of skilled health care at birth and low levels of exclusive breast-feeding in the initial months of life. There is a lack of community-based data on cause of neonatal deaths, many of which occur at home. Various studies (Wigglesworth 1980, Stoll 1997, Havatta et al. 1983, Huang 2000, WHO 2001, Child Health Research Project 1999 Van Dam 1995) show birth asphyxia/birth injuries, infections, complications of preterm birth and birth defects as major causes of fetal-neonatal death. Maternal sexually transmitted infections (STI) are a major Preventable cause of stillbirth. WHO(1991) and Van dam (1995) reported that STI could cause spontaneous abortion, low birth weight baby, congenital abnormalities, neonatal infections, and birth injuries, infection and birth defects.

2.2 Empirical Review

Newborn care is of immense importance for the proper development and healthy life of a baby. Although childhood and infant mortality in South Asia has reduced substantially during the last decade the rate of neonatal mortality is still high. According to one source, 60 percent of all neonatal deaths and 68 percent of the world's burden of prenatal deaths occur in Asia (Paul and Beorari, 2002). Further, although 70 percent makers and health professionals in developing countries, until recently, neglected newborn care (Costello and Manandhar, 2000). On the other hand, this latter group of authors maintain that the principles of essential newborn care are simple, requiring no expensive high technology equipment: resuscitation, warmth to avoid hypothermia, early breastfeeding, hygiene, support for the mother-infant relationship and early treatment for low birth weight or sick infants.

Newborn care often receives less-then optimum attention. Although, over the past 25 years, child survivals programs have helped reduce the death rate among children under age 5, the biggest impact has been on reducing mortality from diseases that affect infants and children more than 1 month old. As a result, the vast majority of infant deaths occur during the first month of life, when a child's risk of death is nearly 15 times greater than

at any other time before his or her first birth. Unlike infant and under five mortality rates, reductions in neonatal mortality have been less in the developing countries (Darmstadt, 2000).

The average infant mortality rate worldwide has dropped from 95 per 1000 live births in 1993 to 60 per 1000 live births in 1995 (Costello,1995; Stembera,1990). But the progress in reducing prenatal and neonatal mortality in South Asia region has been distressingly low despite improvement in childhood and infant mortality rates in the last two decades. Table shows newborn health status for countries in South Asia. It can be observed from the table that both neonatal and prenatal mortality rates are highest in Pakistan (50 and 57 respectively). The issues of prenatal and newborn infant health, therefore, require focused attention in South Asia.

Countries	Neonatal	Infant	Child mortality	Under-5	Prenatal
	mortality rate	mortality rate	rate	mortality rate	mortality rate
Bangladesh	50	80	33	110	57
Bhutan	-	-	-	-	-
India	47	74	-	-	44
Nepal	39	61-64	-	-	57
Pakistan	51	91	30	117	68-81
Srilanka	13	15	-	-	-

Table 2.1: New born health status for countries in South Asia

It has become increasingly evident that any further impact on infant mortality, or achievement of millennium development goals, world fit for children goals and UNICEF MTSP target, is not going to be dramatically reduced. Except for congenital anomalies, neonatal deaths are quite amenable to reduction through various interventions. International agreements have affirmed the world's commitment to improving newborn health and recent global assessments have confirmed that doing so makes good social and economic sense.

Care for women during pregnancy and child birth is essential to ensure health and successful outcome of pregnancy for the mother and her infants. Many women in the developing countries do not have access to proper health facilities. A woman often delivers in unhygienic condition and without the help of an experienced birth attendant that increase the risk to both the women and the new born baby.

Every year more than 200 million women became pregnant. Every year globally, an estimated 4 million babies die before they reach the age of 1 month. Nearly same numbers dies in late pregnancy or are stillborn and these deaths are rarely recorded. Millions more are disabled because of poorly managed pregnancies, delivers and mental care. Deaths are more likely to occur in the neonatal period. It has been nearly summarized as "two third rule" which states that approximately 2/3 of all deaths in first year of life occur in the first month of life. In this also 2/3 occurs in the first week of the life and approx. 2/3 occurs in the first day of life.

For neonates the major causes of death are infections (sepsis, pneumonia, tetanus, and diarrhea) asphyxia and pre-maturity/low birth weight. Nepal like many countries in South Asia has low number of birth attended by SBA and low utilization of postnatal care. Almost all maternal and newborn death are due to preventable conditions.

Study from Punjab, Pakistan on neonatal tetanus associated with topical umbilical ghee: cover role of cow dung found that after controlling for all factors ghee that had been heated with dried cow dung fuel was significantly associated with neonatal tetanus.

To explore traditional neonatal beliefs and care practices a study was conducted in low socioeconomic settlements of Karachi, Pakistan. The study found significant proportion of women (44.8 percent) reported giving pre lacteals' colostrums (41.7 percent) or animal/formula milk (3.1 percent) as the first feed. Newborn were given bath immediately (82.1 percent) after delivery. Risky feeding practices such as giving pre lacteals (55.0 percent) or delaying first feed (30.9 percent) were common. During the neonatal period, breast milk was the preferred feed (98.65 percent); however, honey (28.7 percent), gutty (27.8 percent) and water (11.8 percent) were also given.

Over 90 percent of the deliveries took place at home and only 11 percent were attended either by a doctor or by a nurse. The mothers reported three key hygienic practices in 54 percent of deliveries: attendants washing their hands with cord. About 44 percent of the infants were given colostrums as their first food and 28 percent of the infants were put to the breast immediately, with 48 percent within the first hour, while 22 percent waited for more than 24 hours after delivery. A study done in urban slum of Dhaka city to describe the patterns of birth of birth related practices amongst women indicated that about 70 percent had no prenatal care. Most of them (96 percent) delivered outside the hospital and 57.9 percent delivered at home. Over 75 percent had delivers performed by an untrained attendant, 8 percent delivered without assistance and 3 percent had a doctor-assisted delivery. The umbilical cord was cut with a razor blade in 95 percent and 5 percent used a strip of bamboo. Very few (13 percent) reported boiling the razor blade for sterilization. Nothing was applied in 71 percent of the umbilical cord. Breast feeding delays over 24 hours occurred more among TBAs deliveries.

According to the cross-sectional study conducted in rural Utter Pradesh, India to describe selected newborn care practices (17 percent) women received at least one ANC. Family members or friends conducted (83 percent) of the deliveries, while doctors, nurses or ANMs assisted in (6 percent) cases. Both clean cutting instrument and clean thread (i.e. "clean cord care") were used in (32 percent) of deliveries; a disposable delivery kit was used in 1.8 percent of home deliveries. The proportion of newborns that received thermal care was (20 percent) only 5 percent of newborns were breastfed within six hours of birth. Maternal education level (secondary school or higher) and Muslim religion, receiving ANC, a home visit and skilled birth attendance were significant predictors of clean cord care. Mothers with a secondary or higher education level were less likely to report thermal care (either drying and wrapping the newborn before the placenta was delivered or delaying the newborn's first bath for two or more days). Receiving counseling emerged as a significant predictor of thermal care maternal education level (primary or secondary school), Muslim religion, and birth order between second and fifth, having ANC and a skilled birth attendant practice were predictors of early breastfeeding.

A study conducted in Nepal to describe the home delivery and newborn care practices showed that 30.4 percent had not gone for any ANC visit and only 10.4 percent mothers had four ANC visits. About 20 percent mothers didn't receive TT during their precious pregnancy and 35.8 percent received two doses of TT. Only 6.2 percent of deliveries had a skilled birth attendant present, 5 percent had mother-in-low as attendant and 15.8 percent mothers gave birth alone. Only 16.2 percent women had used a CHDK and only 38.3 percent birth attendants had washed their hands. The umbilical cord was cut using a new/boiled blade in 90.4 percent deliveries. Mustard oil was applied to the umbilical cord

in 22.1 percent deliveries. Birth place was heated throughout the delivery in 64.2 percent deliveries. Only 45.8 percent newborns were wrapped within 10 minutes and 97.1 percent were wrapped within 30 minutes. Majority 93.8 percent of the newborns were given a bath soon after birth. About 10.8 percent mothers did not feed colostrums to their babies. Pre lacteal feeds were given to 15.2 percent newborns. Initiation rates of breast feeding were 57.9 percent within one hour and 85.4 percent within 24 hours.

According to the community based study conducted in Nepal to determine home based newborn care practices in rural Nepal 90 percent women gave birth at home either inside or in the courtyard. Attendance at delivery by skilled health workers was low 6 percent and 11 percent women gave birth alone. When an attendant was present, she was usually a family member or neighbors (78 percent), particularly the women's and 55 percent of attendants had washed their hands. The umbilical cord was cut with a razor blade in 56 percent of births, although in only 33 percent could the blade be reliably described as clean. A household sickle was used in about one third of births. The umbilical stump was usually left undressed (73 percent). The most common application was oil (18 percent). Only 64 percent newborn infants had been wrapped within half an hour of birth, and 92 percent had been bathed within the first hour. Almost all babies had been bathed within six hours of birth, there quarters within the first half hour, and 92 percent within an hour. Nearly all newborn infants were wrapped in used pieces of clothes. In three quarters of cases the cloth had been. Washed and dried in advance 99percent of babies were breast fed, 63 percent within an hour of birth and 91 percent within six hours of birth. A taste of clarified butter (ghee), sugar or honey was given before feeding began (12 percent) but 85 percent of women said that the first feed given to their newborn infants was breast milk. Colostrums were discarded before the first feed in 45 percent of cases.

A qualitative study was done in Nepal to explore how different categories of birth attendants at home deliveries accepted and used clean home delivery kit (CHDK). Result showed that the attendants who used the kit perceived it as hygienic and convenient, affordable and culturally acceptable. The razor blade and thread were the most useful items and the purpose of the plastic coin was understood.

A cross-sectional study was done in Nepal to study whether socio-economic factors, distance to maternity hospital affected the choice between home and hospital delivery in a developing country. The study found that 91 percent of women delivering at home were

attended only by relatives and 7 percent by ANM. A study done in sunsari district of Nepal showed that only 27 percent mothers went for at least one antenatal check up during their pregnancy. TT and iron folic acid tablets were received by 43.7 percent and 3.6 percent mothers respectively. Only 30.5 percent deliveries were conducted by trained health manpower.

In many parts of the world girls are subject to discrimination in the allocation of family resources and access to health care. Study indicated that girls may not get medical treatment when they are ill or they may receive in desperate care. Regarded to a position of subordination from the moment of birth girls eat least, are overwork and under educated, and can prove their worth only by bearing many children from the early age.

2.3 Conceptual Frameworks

This study is concerned about new born care practices among the Dumarwana VDC of Bara district. In this study researcher has considered the following conceptual framework for studying the newborn care practice in Dumarwana VDC.

Figure 1: Relation between independent and dependent variablesIndependent VariablesDependent Variables

This analytical framework is suitable for the study. Since the maternal and newborn care practice is influenced by different socio-economic and demographic variables. For the study two types of socio-economic variables like education, occupation and economic status of the family are selected. These variables affect the maternal and newborn care practices. Similarly, there are also different demographic variables like education, age, sex of the child and so on. Health facilities, delivery practice and awareness play the vital role for mothers and child health. Thus the given all variables help to have condition of maternal and newborn child health practice in this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Study Site Description and Rational for the Selection of the Study Site

The study site of the research was community at Dumarwana VDC of Bara district. Bara district is a part of Narayani zone which is among one of the seventy-five district of Nepal with Kalaiya as its district headquarter lies in the Central Development Region. The site was selected due to the familiarization of place. And according to the secondary data most of home deliveries were conducted. The site was selected according to the literature reviewed from the past data and the situation in the central region was seen poor in the care giving practices for the newborns.

The sample size was selected by using non-probability purposive sampling method and the sample size was taken as 150 mothers having children of age under one year.

3.2 Research Design

The study design of the research was based on quantitative methods where obtained data were analyzed and interpreted descriptively.

3.3 Nature and Sources of Data

A descript cross sectional analytical study was conducted to find out the newborn care practices among the mothers of Dumarwana VDC of Bara district and the primary sources of data was used for the study and where needed secondary data was also reviewed for the study.

3.4 Sampling Procedure

Non-probability purposive sampling method was applied to select the required sample.

3.5 Data Collection Techniques/Instruments

At recruitment, mothers were interviewed using a semi-structured questionnaire. The questionnaire was pre-tested before the study, and necessary changes were made accordingly. The final questionnaire was then being prepared consisting of both close-ended and open-ended.

3.6 Method of Data Analysis

Quality control of data was done concurrently, daily or day-after basis. All interviewed questionnaire were checked for its completeness, correctness and internal consistency exclude missing or inconsistent data was discarded. Data was fed into the computer by using the statistical software namely SPSS (statistical program for service solution).

CHAPTER FOUR

SOCIOECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF SAMPLE HOUSEHOLDS

This chapter describes the general socio-economic and socio-demographic characteristics of the study population and respondents. Sex, Age, Family members, Education status, Source of income, Occupation are showed in this chapter which are important variables that determine the new born care practice.

4.1 Household Characteristics

Under this topic household characteristics of the respondents age, sex, family members, education status, sources of income, occupation are showed in the from of table and diagram.

4.1.1 Age Sex Composition of Total Population

Population data are classified by sex and age and then made variables to data users. Age and sex are fundamental characteristics of any demographic group and affect not only. Age and sex structure not only prevail the present demographic situation of population but also provides the basis for the study of past as well as the demographic situation of any population in the days to come. Hence we can conclude that, no doubt, study of age and sex structure plays a vital role in the history of demographic analysis or population dynamics. So, the age sex composition table is presented below.

Age group		Se	ex		То	tal
	Ma	Male Female		nale	Number	Percent
	Number	Percent	Number	percent		
0-4	95	28.9	118	31.7	213	30.4
5-9	31	9.4	37	9.9	68	9.7
10-14	5	1.5	15	4.0	20	2.9
15-19	2	0.6	14	3.8	16	2.3
20-24	13	4.0	71	19.1	84	12.0
25-29	83	25.2	51	13.7	134	19.1
30-34	38	11.6	18	4.8	56	8.0
35-39	16	4.9	2	0.5	18	2.6
40-44	4	1.2	7	1.9	11	1.6
45-49	16	4.9	19	5.1	35	5.0
50-54	9	2.7	4	1.1	13	1.9
55-59	7	2.1	6	1.6	13	1.9
60-64	4	1.2	7	1.9	11	1.6
65+	6	1.8	3	0.8	9	1.3
Total	329	100.0	372	100.0	701	100.0

 Table 4.1: Percentage distribution of the total population by age and sex

The study shows for male as well as female a higher proportion of population in early age and it is highest for age group 0 to 4 (30.4 percent). 28.9 percent for male and 31.7 percent female in the age group 0 to 4 years. Lowest for age group higher than 50 years of age, less than one for each five year age group. This shows that child survival ratio is high in this study and life expectancy is low.

4.1.2 Sex of the Household Head

In most society, men exercise greater power in nearly every sphere of life, ranging from personal decisions regarding the size of family to the policy and program decision taken at all levels of government. Gender based expectation can keep men from enriching the lives as well studies confirm that for many men, fatherhood, guardianship enhances well being and confers provides accurse of purpose and fulfillment some studies have found that fatherhood, guardianship many also reduce men's criminal behavior & other forms of risk taking.

Figure 2: Distribution of respondents by sex of their household head

Source: Field Survey, 2011

From the study it was found that majority of household head of the respondent family were male i.e. 93 percent and only 7 percent of the respondents were having female as the household head of their family. The results are showed in the following figure.

4.1.3 Family Members of the Respondent

Family members in the family compose the family size and type, in the study when asked to the respondent about the number of family members it was found 50.0 percent of the respondents having 4-6 family members in their family. Similarly 38.0 percent were with 7-10 members in their family and only few remaining respondents were with 1-3 members in their family as showed in the following table.

Table 4.2: Distribution of population by family members

Family member	Number	Percent
1-3 members	18	12.0
4-6 members	75	50.0
7-10 members	57	38.0
Total	150	100.0

Source: Field Survey, 2011

4.1.4 Family Type

The concept of small family size is increasing in modern society. Most of the families are nuclear family i.e. father, mother and son-daughter. In this study area also there is small family system. In the modern society, most of the people believe that small family can only easily get different opportunities than big family. Respondents were asked about family size in their in households which are shows in this figure.

Figure 3: Distribution of respondents by family type

The family type was decided according to the number of the members in the family, family having 1-3 members was grouped as nuclear family type, 4-6 members as joint family type and 7-10 members as extended family type respectively. It was found that the most of the respondents selected under the study belong to joint family type i.e. 50 percent. Similarly 38.67 percent belong to extended family type and remaining 11.33 percent of the respondents belong to nuclear family type.

4.1.5 Literacy and Educational Level of Total Population

Education is an important element for development. Illiterate people don't know any thing about the world except their occupation. Education has positive relationship with socio-economic status of women. The poor education can be the cause of domestic.

Level of education	Number	Percent
Illiterate	95	19.5
<secondary< td=""><td>204</td><td>41.8</td></secondary<>	204	41.8
SLC+	162	33.2
Non formal education	27	5.5
Total	488	100.0

Table 4.3: Distribution of total population by level of education

Source: Field Survey, 1011

Education status determines the level of knowledge and the practices in an individual in his/her day to day life. Must of the population were literate as the study showed 41.8 percent were with secondary level, 33.2 percent were with SLC and above education. 19.5percent populations were found illiterate and only 5.5 percent were found non formal education.

4.1.6 Respondent Land Ownership

The household who have no land or have a few lands but not sufficient to feed the family members may have cultivated others land to support the family need. Thinking the fact, all respondents were also asked about the landholding status. The responses given by the respondents are presented in table.

landownership	Number	Percent
Yes	147	98.0
No	3	2.0
Total	150	100.0

Table 4.4: Percentage distribution of respondents according to landownership

When asked to the respondents whether they landownership 98.0 percent answered yes whereas 2.0 percent replied no.

4.1.7 Food Sufficiency of Respondent Supporting in Months

Sufficiency or insufficiency of food indicates the economic status of the people. Those people who have enough food certainly their economic status are strong than those who have not enough food for their live hood. So, to know their economic status, respondents were asked about insufficiency of food.

 Table 4.5: Percentage distribution of respondents according to sufficiency of food

Food sufficiency in a year	Number	Percent
<6 months	14	9.3
6-10 months	42	28.0
All 12 months	94	62.7
Total	150	100.0

Source: Field Survey, 2011

When asked with them about their food sufficiency supporting their landownership, it was found that 9.3 percent replied their sufficiency support for their landownership was for less then 6 months, the sufficiency supporting for 6-10 months was of 28.0 percent of respondents and the food sufficiency supporting for all 12 months was of 62.7 percent of the respondents

4.2 Background Characteristics

Basic information a respondents and respondents family members are described under this topic, which is include age groups of respondents, educational status, occupational status, marital status and mass media exposure etc.

4.2.1 Age of Baby's Mother

It was found that the maximum percentage of the age of the mothers were of the age group 15-24 years i.e. 52.7 percent followed by age group 25-34 years 46.0 percent. Only 1.3 percent was found the age group 35-49 years.

Age	Number	Percent
15-24 years	79	52.7
25-34 years	69	46.0
35-49 years	2	1.3
Total	150	100.0

Table 4.6: Distribution of population by age of mother

Source: Field Survey, 2011

4.2.2 Educational Status of the Respondent

Education is one of the most important means of empowering women with the knowledge, skill and self-confidence necessary to participate fully on the development process. But lack of education makes the women dominated in a family. Her subordinate role can be the cause of domestic violence. From the field survey it has been found that the most of the respondent are literate.

 Table 4.7: Distribution of educational level by respondents

Educational level	Number	Percent
Illiterate	47	31.3
Primary	24	16.0
Lower secondary/secondary	29	19.3
SLC	50	33.3
Total	150	100.0

Source: Field Survey, 2011

The table 4.6 shows that out of the total 150 respondents, 31.3 percent are illiterate, 19.3 percent respondent are in secondary level, 33.3 percent are in SLC and above and 16.0 percent are in primary level which can only read and write.

4.2.3 Respondent Currently Attending School/Campus

When asked to the respondents about whether their attended school/campus yes or not, must of them replied they didn't attend the school/campus i.e. 92.0 percent whereas only 8.0 percent of them answered the school/campus for education.

Attending school/campus	Number	Percent
Yes	12	8.0
No	138	92.0
Total	150	100.0

 Table 4.8: Distribution of respondents currently attending school/campus

4.2.4 Occupational Status of the Respondents

Agriculture is main occupation in the study area. In this area vast majority of people are engaged in agriculture. Although some people are engaged in services, business, students and others but most of the women in study area dependent on agriculture and housewife this is also one factor to occur DVAW. The children, disable people the old people who are not in any occupation are not included.

Table 4.9: Distribution of women by occupation status

Occupation	Number	Percent
Help in household work	85	56.7
Agriculture	42	28.0
Studying	12	8.0
Business	1	0.7
Govt. services	7	4.6
Pvt. Services	3	2.0
Total	150	100.0

Source: Field Survey, 2011

The table 4.8 shows that majority of women 56.7 percent are involves in help in household work, 28.0 percent are involves in agriculture, 8.0 percent of women are involves in studying. Minority of women are involves in business which is 0.7 percent. 2.0 percent women are involved in pvt. Services and 4.7 percent govt. services.

4.2.5 Respondent by Mass Media Exposure

Access to information through the mass media is indispensable to increasing people's knowledge and awareness of what is taking place around them. Which may eventually affect their perceptions and behaviors, in the survey, exposure to media was assessed by asking respondents if they intended to radio, watched television or read newspaper or magazine.

Media exposure	Number	Percent
Listen Radio		
Yes	67	44.7
No	83	55.3
Total	150	100.0
Watch Television		
Yes	102	68.0
no	48	32.0
Total	150	100.0
Read Newspaper		
Yes	11	7.3
no	139	92.7
Total	150	100.0

Watching Television and Reading Newspaper)

Source: Field Survey, 2011

Each respondent were asked for the use of radio, television and newspaper as media exposure. From the frequent answer it has been found that 44.7 percent respondent listen radio out of 100.0 percent. Only 7.3 percent respondents read newspaper usually out of the 100.0 percent. Maximum respondents watch television i.e. 68.0 percent out of the 100.0 percent. Above analysis reveals that more respondents use of the radio and television than newspaper is due to transportation difficulty.

4.2.6 Marital Status of Respondents

Marital status is an important determinant of fertility behavior, particular in a noncontraceptive society and where most of the birth taken place in marital union in Nepal. Therefore, it is one of the most important characteristics for this study. The marital status is grouped into four categories. In this study are currently married, widow, divorced and separated.

Marital status	Number	percent
Currently married	139	92.7
Widow	3	2.0
Divorced	1	.7
Separated	7	4.7
Total	150	100

Table 4.10 provides information about marital status of respondents population of the study area. The majority of the respondents (92.7 percent) are currently married. Similarly, 2.0 percent respondents are widow and 4.7 percent of respondents are separated.

Chapter Five

Newborn Care Practices

This chapter describes the newborn care practices of the respondents that affect the newborn care practice. Place of delivery, assistance during delivery, knowledge on cleanses of delivery surface, practices and knowledge of delivery attendant, use of safe delivery kit, cord cutting practices, baby bathing practices, breastfeeding practices etc are included in this chapter.

5.1 Place of Delivery, Practice during Child Delivery

The health care that a woman receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and child. This heading covers the practices and knowledge of the respondent and delivery attendant of delivery.

5.1.1 Place of Delivery Conducted

There should be proper care at the time of delivery for good health of mother and her baby. The place to give birth of child should be clean and can receive facilities if there is any problem. In this study, the places of delivery are Health post, Hospital, Private clinic and Home as follows.

Delivery place	Number	Percent
Home	52	34.7
Hospital	80	53.3
HP/SHP	9	6.0
Private clinic	4	2.7
Relative/neighbors	5	3.3
Total	150	100.0

Table 5.1: Distribution of respondents by place of delivery

Source: Field Survey, 2011

The table 5.1 represent birth place of baby where 34.7 percent of delivery was conducted at home, 53.3 percent were at hospital, 6.0 percent were at HP/SHP, 2.7 percent were at private clinic and 3.3 percent were at relatives and neighbors

5.1.2 Assistance During Delivery of Respondent

Delivery assisted person is the person assisted at the time of delivery to respondent. In this study delivery assisted persons are categorized as Doctor, TBA/Nurse. Who are health personal and family member in the house in the following way.

Table 5.2: Distribution of respondents by assistance during delivery

Assistance by	Number	Percent
Health professional	81	54.0
TBA	6	4.0
Relatives/friends	60	40.0
No one	3	2.0
Total	150	100.0

Source: Field Survey, 2011

The table showed the result about assistance during delivery where 4.0 percent went for TBA, 54.0 percent took assistance from health professional, 40.0 percent took assistance during delivered by relatives/friends and 2.0 percent no one assistance during delivery.

5.1.3 Transportation Used to reach the Delivery Place

The table 5.3 showed the vehicles used to reach the delivery place, 53.3 percent used ambulance, 6.7 percent private vehicle where as 16.7 percent used public vehicle. 23.3 percent used others or not used vehicle.

Table 5.3: Distribution of respondents by using means of transportation to reach delivery place

Transportation means	Number	Percent
Ambulance	80	53.3
Private vehicle	10	6.7
Public vehicle	25	16.7
Others	35	23.3
Total	150	100.0

5.1.4 Cleanness of the Surface of Delivery Place

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may cause the death or serious illness of the mother and baby or both.

Figure 4: Distribution of respondents by knowledge on cleanness of delivery place

Source: Field Survey, 2011

The figure showed that 23.3 percent respondent doesn't know about cleanness of the surface during delivery whereas 14.7 percent respondent answered the surface during delivery was not clean and 62.0 percent replied the surface of the delivery place was clean.

5.1.5 Delivery Attendant's Hand Washing Practice

The place should be clean/safe and well equipped and the hands that assist the delivery should be clean. Results of different studies have conduced that most of the deliveries take place in the houses in rural part of the countries takes place in house.(HMG-Nepal/NPC,1998).

Hand washing	Number	Percent
Yes	90	60.0
No	13	8.7
Don't know	47	31.3
Total	150	100.0

 Table 5.4: Distribution of respondent's delivery attendant's hand washing practice

60 percent mother told that their delivery attendant washed hand before the delivery whereas it was found 8.7 percent of delivery attendant didn't wash hand before know about the practice of hand washing of their attendance.

5.1.6 Safe Delivery Kit Used During Delivery

Delivery kit is the special materials ready to use at the time of delivery for safe delivery. In this study, there are two options use, not used. Some times respondent are care less about use or non use of delivery kit at time of delivery. Following table shows the situation of use of delivery kit.

Figure 5: Distribution of respondent by safe delivery kit use

Source: Field Survey, 2011

The figure showed 74.0 percent were delivered using safe delivery kit whereas 26.0 percent didn't use safe delivery kit during the delivery.

5.1.7 Respondent by Receiving Vitamin A Dose

Vitamin A is necessary to prevent mother and newborn baby from night blindness which is caused by lack of vitamin A element in human body. In the study, the situation of use of vitamin A capsule is included once, which are as follows.

Receiving Vit. A	Number	Percent
Yes	85	56.7
No	39	26.0
Don't know	26	17.3
Total	150	100.0

Table 5.5: Distribution of respondent receiving vitamin doses

Source: Field Survey, 2011

The table 5.5 represent that majority of mother know about vitamin A tablets and 56.7 percent were receiving vitamin tablets, 26.0 percent mother were not receiving vitamin A tablets and about 17.3 percent mother didn't know about vitamin A tablets.

5.1.8 Respondent by Taking Iron Dose

Iron tablets are necessary to take at least six month period to away from Anemia to pregnant women. At the time of pregnancy the may be lack of iron in women's body which may cause of lack of hemoglobin element in blood cells which is the cause of Anemia, In the study, the respondents taking iron tablets which are as follows.

Figure 6: Distribution of respondent by receiving iron dose

Respondent of baby's mother answer on taking iron dose was found 62.0 percent mother were taking iron tablets does whereas 28.0 percent mother were not taking iron dose and 10.0 percent mother don't know about iron dose.

5.2 Practice Related to Cord Cutting

The primary care of newborns, includes the proper practice of cutting the umbilical cord, traditionally,the cord is usually cut with a razor blade, knife/sickle or even a piece of wood, none of which is generally sterile. Under this heading cord cutting and other practices of the respondent related to cord cutting are defined and showed.

5.2.1 Cord Cutting Practices

Clean delivery kit is another component for safe and effective to save life of mother and newly born baby from other infections. Clean delivery kit consists of a razor, a blade, a cutting surface, a plastic sheet, a piece of soap and pictorial instructions assembled by maternal and child health product pvt. Ltd.for safe delivery practices.

 Table 5.6: Distribution of respondents by cord cutting practices

Practice	Number	Percent
Don't remember	27	18.0
New blade	111	74.0
Old blade	7	4.7
Sickle/knife	5	3.3
Total	150	100.0

Source: Field Survey, 2011

Newborn baby's cord cutting practice was seen as; 74.0 percent used new blade, 4.7 percent used old blade, 3.3 percent used sickle/knife and 18.0 percent don't remember about the cord cutting of the baby.

5.2.2 Respondent Applied Anything after Cord-Cutting

In some cultures, some kind of substance is applied to the cord stump. Ash, oil, butter, herbs and mud are commonly used. These substances are often contaminated with bacteria and spores and that increase the risk of infection.

Figure 7: Distribution of respondents who applied after cord cutting

Source: Field Survey, 2011

The figure represent 88.0 percent answered they applied something after cord cutting. 5.3 percent did not apply anything after cord cutting and 6.7 percent replied they don't know whether they applied anything after cord cutting.

5.2.3 After Cord Cutting Applied Substances

From the study it was found 40.9 percent applied oil after cord cutting whereas 9.1 percent applied turmeric. Similarly, 31.8 percent used antiseptic and 16.7 percent answered they don't know anything applied subsistence after cord cutting.

Applied substances	Number	Percent
Oil	54	40.9
Turmeric	12	9.1
Ash	2	1.5
Antiseptic	42	31.8
Don't know	22	16.7
Total	150	100.0
S		1

Table 5.7: Distribution of respondents who applied substances after cord cutting

5.2.4 Cord Tying Practice

Instrument used to cut the cord is one of the most important factors for determine the neonatal health. Unsterilized instrument play important role to the neonatal health.

Figure 8: Distribution of respondent by cord tying practice

Source: Field Survey, 2011

The figure showed about cord tying practices, 72.7 percent tied cord by sterile thread whereas 27.3 percent tied cord by unsterile thread.

5.3 Practice Related to Thermal Care

The practice of keeping the newborn warm is not common in Nepal. The general practice is to look for clothes after the baby is born, and in most cases, families do not have warm clothes ready at the time of delivery. The newborn is kept naked or covered by a thin piece of cloth until the placenta is delivered or the umbilical cord is cut (save the children/us, 2002).

Practices related to baby drying, baby bathing time, baby wrapping practices are included under this heading.

5.3.1 Practice Related to Drying Baby Before Placenta Delivered

The figure showed that 66.7 respondent were drying baby before placenta was delivered, 17.3 percent were not drying baby before placenta delivery and 16.0 percent replied not know about drying baby before placenta delivered.

Figure 9: Distribution of respondents by baby drying practice

Source: Field Survey, 2011

5.3.2 Baby Wrapping Practice

The table represents the practice of wrapping clothes for new born baby. Majority had practice of wrapping baby i.e. 74.7 percent replied yes, 18.7 percent answered no and 6.7 percent answered don't know about it.

Wrapping practice	Number	Percent
Yes	112	74.7
No	28	18.7
Don't know	10	6.7
Total	150	100.0

5.3.3 Material Used to Wrapper the Baby

The table 5.9 represents the practice of material used for wrapping baby; majority had practice of wrapping by old washed clothes 30.7 percent, 14.7 percent used old unwashed clothes, 19.3 percent used new washed clothes and 14.7 percent used new unwashed clothes and 20.7 percent don't know about it.

Table 5.9: Distribution of respondents by material used for baby wrapping

Wrapping material	Number	Percent
Old washed cloth	46	30.7
Old unwashed cloth	22	14.7
New washed cloth	29	19.3
New unwashed cloth	22	14.7
Don't know	31	20.7
Total	150	100.0

Source: Field Survey, 2011

5.3.4 Baby Bathing Time after Delivery

The table 5.10 represents the practice of baby bathing, 4.7 percent bath within less than 30 minutes, 21.3 percent bath within 30 to 60 minutes whereas 62.0 percent bath baby after 1 hour and 12.0 percent replied don't know about bathing time for newborn.

Table 5.10: Distribution of respondents by baby bathing time after delivery

Bathing time	Number	Percent
Less than 30 minutes	7	4.7
30-60 minutes	32	21.3
After 1 hour	93	62.0
Don't know	18	12.0
Total	150	100.0

Source: Field Survey, 2011

5.4 Practices Related to Breast Feeding Practice

The baby's condition is described according to their mother's knowledge and the weight of the children at birth. Low weight below 2.5 kg and handicapped by their organs are counted abnormal children. Abnormal means the children who need extra care and precaution. First breast feeding time, colostrums feeding practices, drinks other then milk giving practices, exclusive breast feeding practices are discussed under this heading.

5.4.1 First Breast Feeding Time to the Baby

Early initiation of breastfeeding is encouraged for a number of reasons. Mother's benefit from early sucking because it stimulates breast milk production and facilitates the release of oxytocin, which helps the contraction of the uterus and reduces postpartum blood loss.

Table 5.11: Distribution of respondents by first breast feeding time

1 st breast feeding	Number	Percent
Within 1 hour	94	62.7
After 1 hour	34	22.7
After 6 hour	16	10.7
Don't know	6	4.0
Total	150	100.0

Source: Field Survey, 2011

The table 5.11 represents first breast feeding time to baby after delivery, majority of first breast feeding time to baby among the mother within 1 hour was 62.7 percent, 22.7 percent breast feed after 1 hour, 10.7 percent breast feed after 6 hour and 4.0 percent answered don't know about the time for first breast feeding.

5.4.2 Colostrums (yellow milk) Feeding and Squeezing Practice

The first breast milk contains colostrums which is highly nutritious and has antibodies that protect the newborn from disease. Early initiation of breastfeeding also fosters bonding between mother and child.

Table 5.12: Distribution of respondents by feeding/squeezing yellow milk

Feed/squeeze	Number	Percent
Feed colostrums	135	90.0
Squeeze and discarded	15	10.0
Total	150	100.0

Source: Field Survey, 2011

The table represents practice of feeding and squeezing colostrums, majority of mothers' feed yellow milk, i.e. 90.0 percent and about 10.0 percent mother squeeze and discards yellow milk.

5.4.3 Baby Given Any Drink Other Then Milk within Three Days of Delivery

A large proportion of maternal and neonatal deaths occur during the 24 hours following delivery. In addition, the first three days following delivery care critical for monitoring complications arising from the delivery. At that time visit is also an ideal time to educate a new mother on how to care for herself and her newborn.

Figure 10: Distribution of respondents by giving drink to baby other then milk within three days of delivery

Source: Field Survey, 2011

The figure represents baby given any drink other than milk within three days of delivery. It was seen that 63.3 percent of mother give drinks to the baby other then milk and 36.7 percent mother give only milk within three days of delivery.

5.4.4 Drinks given to the Baby within Three Days of Delivery

Breastfeeding is necessary to provide colostrums to baby before 1 hour. After birth, baby should feed only mothers breast milk at least six month for good nutrition which ultimately affects the further health of baby.

Table 5.13: Distribution of respondents by feeding baby with other drinks to the

Drinks	Number	Percent
Bottle milk	77	51.3
Water	61	40.7
Glucose water	5	3.3
Fruit juice	5	3.3
Sugar salt water	2	1.3
Total	150	100.0

baby within three days

Source: Field Survey, 2011

The study showed that 51.3 percent mother give their baby to drink bottle milk within three days of delivery, 40.7 percent mother give water to the baby within three days of delivery, 3.3 percent mother give glucose water to baby within three days of delivery, 3.3 percent mother give fruit juice and 1.3 percent give sugar salt water to the baby.

5.4.5 Respondents Still Breast Feeding

Breastfeeding is the best from of nutrition for children and which provides immunological protection against common childhood disease such as diarrhea and acute respiratory infection (ARI).

Maternal nutritional status has important implications for health of the mother as well as of her children. A woman who is in poor nutritional health has a greater risk of having an adverse pregnancy out come and is more likely to be births to under weight baby (NFHS, 1996).

Table 5.14: Distribution of respondent by continuing breast feeding

Still breast feeding	Number	Percent
Yes	141	94.0
No	9	6.0
Total	150	100.0

Source: Field Survey, 2011

The table represent the practice of still breast feeding i.e. 94.0 percent mother were still breast feeding their baby and 6.0 percent mother were not still breastfeeding.

CHAPTER SIX

FACTORS ASSOCIATED WITH NEW BORN CARE PRACTICS

Associated factor or predisposing factor that determine knowledge and practices on newborn care practices are described in this chapter. Immunization of the baby, knowledge on danger signs of neonate, treatment seeking behaviors, knowledge on nutritional foods is some main components included.

6.1 Factors Related to Seeking Care, Immunization Treatment Seeking and Nutrition.

This topic presents finding on the prevalence and treatment of childhood illness, the extent of utilization of health care services in the event of an illness and immunization coverage, seeking treatment and nutritional.

6.1.1 Respondents Knowledge on Danger Signs of Neonates

When asked to the respondent about whether they know about the danger signs of neonates, 48.0 percent answered fever as the danger sign of neonates, 6.0 percent replied unable to suck milk. Similarly 18.0 percent answered fast/difficult breathing, 5.3 percent replied not active and remaining 22.7 percent replied they don't know about the danger sign of neonates.

Danger signs	Number	Percent
Don't know	34	22.7
Fever	72	48.0
Unable to suck	9	6.0
Not active	8	5.3
Fast/difficult breathing	27	18.0
Total	150	100.0

Table 6.1: Distribution of respondents by knowledge of the danger signs

Source: Field Survey, 2011

6.1.2 Treatment Seeking Behavior Incase of Illness

Treatment seeking behavior incase of illness, it was seen that 55.3 percent went PHCC/HP/SHP, 13.3 percent take to dhami/jhakri when their baby was ill.

Table 6.2: Distribution of respondents by treatment seeking practice

Treatment seeking	Number	Percent
Dhami/jhakri	47	31.3
SHP/HP/PHCC	83	55.3
Hospital	20	13.3
Total	150	100.0

Source: Field Survey, 2011

6.1.3 Respondent Child has Diarrhea

Dehydration caused by serve diarrhea is a major cause of morbidity and mortality among newborn children, although the condition can be easily treated with oral rehydration therapy (ORT). Exposure to diarrhea causing agent is frequently related to the use of contaminated water and to unhygienic practices in food preparation and disposal of excreta.

Table 6.3: Distribution of respondents by whose child is having diarrhea

Diarrhea	Number	Percent
Yes	85	56.7
No	65	43.3
Total	150	100.0

Source: Field Survey, 2011

When asked what to do whether their child has diarrhea, majority of respondent children suffered from diarrhea i.e. 56.7 percent and 43.4 percent replied that their child were not suffering from diarrhea.

6.1.4 Respondent Taking Baby for Treatment of Diarrhea

When asked about where they take their baby when they were having diarrhea, 36.7 percent were found taking baby for treatment to health institution, 41.3 percent give ORS to the baby incase of diarrhea and 22.0 percent give plenty of water.

Treatment from	Number	Percent
Take HP	55	36.7
Give ORS	62	41.3
Give plenty of water	33	22.0
Total	150	100.0

Table 6.4: Distribution of respondent by treatment seeking practice for diarrhea

Source: Field Survey, 2011

6.1.5 Immunization of the Baby

Universal immunization of children against the sex vaccine preventable diseasetuberculosis, diphtheria, whooping cough, tetanus, polio and measles is crucial to reducing infant and child mortality. Children are considered fully immunized when they have received one dose of the vaccine against tuberculosis (BCG), three doses each of the DPT and polio vaccines and one dose of measles vaccine, BCG is given at birth or at first clinical contact, DPT and polio require three doses at approximately 6,10 and 14 weeks of age and measles vaccine is given soon after 9 months of age.

Table 6.5: Distribution of respondent by immunization practice

Immunization	Number	Percent
Yes	148	98.7
No	2	1.3
Total	150	100.0

Source: Field Survey, 2011

The table shows the immunization practice of baby, 98.7 percent immunized their baby and only 1.3 percent respondent hadn't immunized their baby.

6.1.6 Name of Vaccine Given to the Baby

Immunization is the most important component which helps to reduce high child mortality. The world health organization (WHO) has set the following programs for the child vaccinations. In order to be considered fully vaccinated, a child should receive the following vaccines: BCG, DPT, Polio and Measles etc.

Vaccine	Number	Percent
BCG	41	27.3
DPT	27	18.0
Hepatitis B	21	14.0
Polio	19	12.7
Measles	27	18.0
All of above vaccines	15	10.0
Total	150	100.0

Table 6.6: Distribution of respondents by vaccine given to the baby

Source: Field Survey, 2011

The table shows that vaccine given to the baby, 27.3 percent respondent had given their baby BCG vaccine 18 percent had given DPT vaccine, 14.0percent had given their baby hepatitis vaccine, 12.7 percent had given polio vaccine to the baby, 18 percent had given measles vaccine and 10 percent had given all of the above vaccine to their baby.

6.1.7 Respondent Know about Nutrition Foods

The poor nutritional status of children and women has been considered a serious problem in Nepal for many years. The most common forms of malnutrition in the country are protein energy malnutrition (PEM), iodine deficiency disorders (IDD), vitamin A deficiency (VAD) and iron deficiency anemia (IDA).

Knowledge	Number	Percent
Yes	133	88.7
No	17	11.3
Total	150	100.0
Comment Field Comment 2011		

Source: Field Survey, 2011

Knowledge on respondent on nutritional food was found as; 88.7 percent respondents know about nutritional food and 11.3 percent respondent didn't know about nutritional food.

6.1.8 Nutritional Foods in Respondents' Perception

The nutritional status of young children and women of reproductive age reflects household. Community and national development children and women in developing countries are most vulnerable to malnutrition because of low dietary intake, infectious disease lack of appropriate health care and inequitable distribution of food within the household.

Nutritional foods	Number	Percent
Sarwottam pitho	26	17.3
Cerelac	3	2.0
Cow and buffalo milk	26	17.3
Fresh fruits	3	2.0
Green vegetables	17	11.3
All the mentioned food	75	50.0
Total	150	100.0

Table 6.8: Distribution of respondents by perception on nutritional foods

Source: Field Survey, 2011

When asked about the nutrition baby food in their knowledge, the result was 17.3 percent replied sarwottam pitho, 2.0 percent cerelac, 17.33 percent replied cow and buffalo milk as nutritional food for baby whereas 11.3 percent go for fresh fruits. 2.0 percent answered green vegetables and about 50 percent answered all the above mentioned food as nutritional food for the baby.

CHAPTER SEVEN

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with overall findings of the study, conclusion and recommendations for further research on Newborn Care Practices. The study shows newborn care practice related knowledge and practices of Dumarwana VDC of Bara district. The major elements of the newborn care and practice included in the study are newborn care and practices and factors associated with the newborn care and practice. The socio-economic and demographic characteristics of the study are also covered in the study.

7.1 Summary

The information collected in the survey gives basic information to the study on Newborn Care Practice in Dumarwana VDC of Bara district. The study covered 150 responded who were women of reproductive age group and had at least one children less then one of age. The objectives of the study were to assess and find out the home based newborn care practices, to assess the home based delivery care, to identify the newborn care practices and to find out the factors associated with safe delivery and newborn care practices among the mothers i.e. socio-economic and demographic factors.

7.1.1 Socio-economic and Demographic Situation

In the study of the total sample population the household head of the respondent's family was found male higher then female i.e. 93 percent. Educational status of the respondents was also seen good as only 19.5 percent were illiterate.

Majority of the respondent had 4-6 members in their family i.e. 50 percent and 50 percent of the respondents were living with joint family as their family type. The main source of income for the majority of the respondent was own agriculture. Form the study it was found 98.0 percent household have landownership and 2.0 percent household have not landownership. From the study it was found only 62.67 percent of respondents income support all of 12 months for their family expenses, 28.0 percent for 6-10 months and remaining 9.33 percent for only less than 6 months.

Most of the respondents were from age group 15-24 years i.e. 52.7 percent and least were from age group 35-49.

Only 33.3 percent of the total respondents were illiterate remaining were literate. Education of respondent was also found good as except 31.3 percent all others were found literate and had attended school.

7.1.2 New Born Care Practice

From the study it was found that maximum number of delivery were conducted at hospital i.e. 53.3 percent and most of the delivery were assisted by health professional i.e. 54 percent followed by relatives/friends i.e. 40 percent.

Of the total respondents high were the number of respondents 62.0 percent who had knowledge on cleanliness of the surface of delivery place and about 60.0 percent of respondents had knowledge and practice of hand washing before conducting delivery. Use of the delivery kit was done for 74 percent of delivery. Most of the respondents were taking vitamin A dose i.e. 56.7 percent and 62 percent were also taking iron doses.

Majority of the respondents had good practices of cord cutting as 74 percent used new blade for cord cutting, on the practice related to applying something after cord cutting most of the respondents were found applying home made substances like turmeric, oil, ash etc. about 72.7 percent respondents had used sterile thread for tying cord. Out of total respondents 66.7 percent dry their baby before placenta delivery. On baby wrapping practice most of the respondents wrap their baby i.e. 74.7 percent and 28.7 percent wrap their baby by old washed clothes most of the respondents bath their baby in less then 30 minutes to delivery i.e. by 4.7 percent. First breast feeding time to the baby for most of the respondents was within 1hour i.e. 62.7 percent 90 percent of total respondent feed yellow milk to their baby.

7.1.3 Factors Associated with Newborn Care Practice

It was found that only 22.7 percent respondents had no knowledge on danger signs of neonates and remaining had knowledge on at least one danger signs of neonates. Only 31.3 percent of the total respondent went to the dhami/jhakri for treatment incase of illness whereas remaining respondent were found going to health institution/facilities for

seeking treatment. 56.7 percent of the baby have/had suffered from diarrhea and most of the respondent took their baby to health institutions/facilities for treatment of diarrhea. About 98.7 percent of the baby were immunized remaining were to be immunized depending on their age and time to get immunized of the total respondents 88.7 percent had knowledge on nutritional foods.

7.2 Conclusions

The study was conducted to determine knowledge and practice related to newborn care practice among the women of reproductive age who had children below one year age.

The study has conducted that literacy rate of most household head was good which may help for good practice in newborn care most of the families were found living in joint family so it may help in taking good care of new born as well as mother.

The practice related to delivery was found good as the study showed maximum number of delivery were conducted at healthy institution under assistance/supervision of health workers. It was also found that most of the respondents had knowledge for cleanliness of delivery surface which in turn may reduce the infection and other complication for new baby as well as for the mother.

It may be because of the most of delivery attendance were health workers so they were practice and knowledge on hand washing before attending delivery. Use of safe delivery kit was also found it may be result of good service delivery from HP and IEC materials.

A good number of respondent were found taking vitamin and iron doses but it must be increased somehow to reduce the related complications. A good number follow safe cord cutting practice were still it also needs to be increase. Many peoples in the study were found applying house made substance after cord cutting. Which may be due to lack awareness regarding the topic it may lead to infection to baby. Cord tying practice was good as handsome of study population used sterile thread.

The analysis showed that baby wrapping practice was poor because most of the study population was found using old washed clothes instead of using new clothes. Baby bathing practice and knowledge was found satisfactory. Knowledge and practice on first breastfeeding was also found satisfactory. Similarly yellow milk feeding practice was also higher than those not feeding yellow milk. Knowledge on feeding drink other than milk was found other drinks within 3 days to baby. Breastfeeding was continuity by maximum respondents.

The analysis showed that respondent had good knowledge on danger sign of neonates and treatment seeking behavior was also found good as they go to HP. It was found that the maximum children had gone through diarrhea at least once. It may be come of unhygienic practice and feeding practice but the treatment seeking practice for diarrhea was found good as most of them consult to health workers. Immunization practice was also found good but a few numbers of respondent were found less concerned about immunization their children majority of respondents had knowledge on nutrition.

7.3 Recommendation for Policy Implementation

- Although the study showed probable practice on newborn care practice these still need to be focus on knowledge rising programmers.
-) Some high risk newborn care practice like bathing within one hour of unsafe cord cutting, applying something to the cord cutting, wrapping baby old clothes and discarding colostrums need to be paid more attention and addressed were through culturally accepted community based programmers.
-) Delivery conducting was seen well some still unsafe deliveries were also conducted at home neighbors so, special programs on safe motherhood and new born care should give more emphasis by DPHO.
-) Most of the women are engaged in own agriculture and house work occupation. So supported and increase level of women various vocational programmers and training based on agricultural and housework should be provide them to raise the socio-economic status.
-) Utilization of safe home delivery kit and essential care can be increased through better mobilization of MCHW&FCHV.
-) TBA&MCHW and women health volunteers can be empowered with training which in turn will help give better and increasing awareness about care of newborn.
- Male involvement should be increased in newborn care and care of baby's mother.

7.4 Recommendation for Further Research

-) This study examined some-economic & demography characteristics of respondent role of husband on newborn care practice can be included in other study.
-) This study carried out by using simple distributive analysis. Other study could be done by using correlation, regration and other statistical mathematical tools.
-) This study examined only few selected socio-economic variables. Thus further study may include other variables to assess the knowledge and utilization of newborn care practices.
-) The study is based on data collection at one point time; further study can be made using trend analysis.

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APPENDIX

"New Born Care Practice"

A Case Study of Dumarwana VDC of Bara

Identification Questionnaire

(Information to be furnished by anybody from the household)

- 1. Household Number.....
- 2. Name of VDC/Municipality.....
- 3. Ward number.....
- 4. Name of respondent.....

Household Number......District.....

Household Roster/Schedule

							Eligibility
SN	Name	Relation to	Sex	Age	Literacy	Completed	Aged 15-
	(start asking from the	household	(8)	(9)	(10)	grade	49=1
	household head)	head				(11)	Others=2
	(6)	(7)					(12)
1							
1							
3							
4							
5							
6							
7							
8							
9							
10							

Codes for QN 7 and QN.11

Relation to Household Hea	ad(QN.7)	
01: Head	02: Wife/Husband	00: Less than class ne (grade 1) 01: One Class Completed
03: Son/Daughter	04: Daughter/Son in Law	02: Two Class Completed (Like this up to class 8)
05: Grand Son/Daughter 06: Father/Mother		09: Nine Class Completed 10: Completed SLC
07: Father/Mother in Law	08: Brothers/Sisters	11:Intermediate1 st year/10+1 12: Intermediate completed/10+2
09: Nephew/Niece	10: Brother-in-	13: Bachelor's not complete 14: Bachelor's complete/higher.
law/Sister in law		95: Non-formal education 98: Don't Know.
11: Co-wife	12: Adopted/step child	
13: Other Relatives	14: No Relation	
98: Don't know		

13	Does your family own land?	Yes1	
		No2	15
14	If yes, how many mothers does your	Month's food sufficiency	
	family have food sufficiency in a year?		
15	Who is the primary care-giver to children	Mother1	
	in your household?	Father2	
		Parents-in- law3	
		Others(specify)4	
16	Does your household have Electricity?	Yes No	
	A radio?	Electricity1 2	
	A television?	A radio1 2	
	A telephone?	A television1 2	
	A bicycle?	A telephone1 2	
		A bicycle1 2	

Individual Questionnaire

Section 1. Background of the Respondent (to be asked to the mother of the new born baby

Name of mother.....

QN	Questions and filters	Coding categories	Skip
101	How old are you?	Completed age	
102	Can you read and write?	Yes1	
		No2	
103	Have you ever attended school/campus?	Yes1	
		No2	
104	What is the highest grade you completed?	Grade	
	(note: use code of QN 11)		
105	Are you currently attending school/campus?	Yes1	
		No2	
106	If yes, at what grade you are studying?	Grade	
	(note: use code of QN 11)		
107	If no, why did you never been to	School/campus too far1	
	school/drop-out from school/campus?	Can not afford2	
		Parents did not send3	
		Household chores4	
		No desire to study5	
		Others (specify)6	
108	Do you feel there are different attitudes	Yes1	
	towards the education of males and females?	No2	
109	What is your main occupation?	Studying1	
		Help in household work2	
		Agriculture3	
		Cottage industry4	
		Govt. service5	
		Private service6	
		Business7	
		Wage laborers (agriculture and non-	
		agriculture8	
		No work9	
		Social workers10	
		Others (specify)11	

110	Do you usually read a newspaper/magazine	Yes1
	at least once a week?	No2
		Illiterate3
111	Do you usually listen to the radio everyday?	Yes1
		No2
112	Do you usually watch television at least	Yes1
	once a week?	No2
113	What is your marital?	Never married1
		Currently married2
		Widow3
		Divorced4
		Separated5
114	If yes, how old were you when you first got	Age
	married?	
115	What is the best age for marriage?	Age for boys
		Age for girls
116	Have you ever given birth during your life	Yes1
	time (including current pregnancy,	No2
	miscarriages and still birth)?	
117	How many birth/pregnancies (including	No of pregnancies
	current pregnancy, miscarriage and still	Current pregnancies
	birth) have you had during your life time?	
118	How old is your last baby?	months
119	Do you know about the type of marriage	Yes1
	prevailing in your locality?	No2
120	If yes, please mention the type of marriage?	Monogamy1
	(multiple answer possible)	Polygamy2
		Others (specify)3

QN	Questions/filters	Coding categories	skip
201	Was it pre-decided on issue like where to go	Yes1	
	for delivery?	No2	203
202	What was the decision?	Home1	
		Hospital2	
		HP/SHP3	
		Private clinic4	
		Relatives/neighbors5	
		Others (specify)	
203	Who assist with the delivery?	Health professional1	
		тва2	
		Relatives/friends3	
		No one	
204	Who transportation to be used?	Ambulance1	
		Public vehicles2	
		Private vehicles3	
		Others (specify)	
205	Who checked your health at that time?	Doctor1	
		HA/AHW2	
		MCHW/VHW3	
		тва4	
		Others (specify)	
206	Was the surface of delivery clean?	Yes1	
		No2	
		Don't know3	
207	Did your birth attendant wash hands with	Yes1	
	soap before delivery?	No2	
		Don't know3	
208	Was safe delivery kits used?	Yes1	
		No2	
209	In the first two months after delivery did you	Yes1	
	receive a vitamin A dose?	No2	
		Don't know3	
210	After delivery did you take iron tablet?	Yes1	
		No2	
		Don't know3	

Section II. Place of delivery, practice during child delivery

Section III. Practice related to cord cutting

301	What instruments was used to cut the cord?	Don't remember1
		New blade2
		Old blade3
		Sickle/knife4
		Others (specify)
302	Did you apply something on the stump after	Yes1
	the cord was cut?	No2
		Don't know3
303	If yes, what was applied?	Oil1
		Turmeric2
		Ash3
		Anti-septic4
		Don't know5
304	What was used to tie the cord of baby	Sterile thread1
	(name)?	Unsterile thread2
		Others (specify)

Section IV. Practice related to thermal care

401	Was the baby dried before placenta was	Yes1	
	delivered?	No2	
		Don't know3	
402	Was the baby wrapped before placenta was	Yes1	
	delivered?	No2	404
		Don't know3	
403	What was used for wrapping the baby?	Old washed clothes1	
		Old unwashed clothes2	
		New washed clothes3	
		New unwashed clothes4	
		Don't know5	
404	How long after birth was the baby bathed?	minutes 1	
		hours 2	
		Don't know 3	

501	How long after birth did you first put the	Within 1 hour1	
	baby to the breast?	After 1 hour2	
		After 6 hour3	
		Don't know4	
502	Did you feed the yellow milk or squeeze and	Feed yellow milk1	
	through it?	Squeeze and discard2	
503	In the first 3 days after delivery was given	Yes1	
	anything to drink other than breast milk?	No2	505
504	What was given to drink?	Bottle milk1	
		Water2	
		Glucose water3	
		Fruit juice4	
		Sugar salt water5	
		Others	
505	Are you still breast-feeding?	Yes1	
		No2	
506	If no, why?	Specify	

Section V. Practice related to breastfeeding practice

Section VI. Practice to immunization and seeking care

601	What are the danger signs of neonates?	Don't know1	
		Fever2	
		Unable to suck	
		Not active4	
		Fast or different breathing5	
		Others	
602	Where did you take baby incase of illness?	Dhami/jhakri1	
		SHP/HP/PHCC2	
		Hospital3	
603	Did the child get Diarrhea?	Yes1	
		No2	
604	In case of Diarrhea what did you do?	Take up HP1	
		Give ORS2	
		Give plenty of water3	
		Others	
605	Have you immunized?	Yes1	
		No2	607

606	Which vaccine is given?	BCG1	
		DPT2	
		Hepatitis3	
		Polio4	
		Measles5	
		All of above6	
607	If no, why?	Specify	
608	Do you know about nutritional foods?	Yes1	
		No2	610
609	What is nutritional food?	Sarwottam pitho1	
		Cerelac2	
		Cow& buffalo milk3	
		Green vegetable4	
		Fresh fruit5	
		All of above6	
610	If no, why?	Specify	