MATERNAL HEALTH CARE PRACTICE AND EDUCATION STATUS OF RAI WOMEN

(A CASE STUDY OF RAI COMMUNITY IN CHHINAMAKHU VDC, BHOJPUR DISTRICT)

DISSERTATION SUBMITTED TO THE CENTRAL DEPARTMENT OF POPULATION STUDIES, FACULTY OF HUMANITIES AND SOCIAL SCIENCES IN PARTIAL FULFILLMENT OF THE COURSES FOR THE DEGREE OF MASTER OF ARTS IN POPULATION STUDIES

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Recommendation

This dissertation work entitled "*Maternal Health Care Practice and Education Status of Rai Women*" is an independent work of Ms Kishu Nani Rai, completed under my supervision. She has collected the primary data for this purpose in Rai communities and completed successfully the requirements for dissertation in Master of Arts in Population Studies.

I recommend this dissertation for evaluation by the Dissertation Committee.

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APPROVAL LETTER

This dissertation work entitled "Maternal Health Care Practice and Education Status of Rai Women: A case study of Rai Community in Chhinamakhu VDC, Bhojpur District" by Mis. Kishu Nani Rai has been accepted as partial fulfillment of the requirement for the Master's Degree of Arts in Population Studies.

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Abstract

This study on "Maternal health care practice and education status in Rai community in Chhinamakhu VDC, Bhojpur" was carried out by using the primary data collected in the field survey. The filed survey covered selected wards 2 and 9 of Chhinamakhu VDC of Bhojpur and 110 married women aged 15-49 years were selected under the purposive sampling.

The main objective of this study was to examine the relationship between maternal health care practices and educational status in Rai community. The relationship between two or more variables has been examined through cross tabulation.

The main determinant for this research is antenatal check-ups, TT injection, receiving iron tablets, delivery assistance, use of delivery kit and postnatal check-ups.

The study included 512 populations from 110 households which consisted 47.9 percent males and 52.1 percent females. The study shows that most of the households were involved in agriculture.

In the study, 54.5 percent respondents were literate. Higher percentages of respondents were in the age group 25-29 years. The study shows that 53.6 percent respondents have knowledge about antenatal care.

According to study, 86.4 percent respondents received ANC service and higher percent of respondents received ANC from the health post. In the study 83 percent literate respondents received ANC services.

In the study, 51.8 percent respondents received TT injection, 52.7 percent have taken iron tablets. In the study 79.1 percent respondents delivered their babies at home, 20 percent respondents used clean delivery kit.

In the study area, 67.3 percent respondents received postnatal care services and higher percentages (86.5%) of respondents received postnatal care from health post.

This study found a strong positive relationship between education and maternal health care practices. There was significant relationship between receiving iron tablets, TT injection and age at marriage, level of education of respondents.

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ABBREVIATIONS

AHV	Auxiliary Health Worker
AIDAS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
CBS	Central Bureau of statistics
CDPS	Central Department of Population Studies
DC	Delivery of Care
FP	Family Planning
FCHVW	Female community Health Volunteer
HA	Health Assistant
HP	Health Post
ICPD	International Conference on Population and Development
MCH	Maternal and Child Health
MMR	Maternal mortality Ratio
MOH	Ministry of Health
NDHS	Nepal Demographic and Health Survey
NFHS	Nepal Family Health Survey
NGOs	Non-Governmental Organizations
PHC	Primary Health Centre
PNC	Postnatal Care
SHP	Sub- Health Post
SPSS	Statistical Package for Social science
STIs	Sexually Transmitted infections
TBAs	Traditional Birth Attendants
TT	Tetanus Toxoid
UN	United Nation
UNFPA	United Nations Population Fund
VDC	Village Development Committee
VHWS	Village Health Workers
WHO	World Health Organization

Chapter - One

Introduction

1.1 General Background

Nepal is one of the developing countries in the world. It has to face various socio-economic as well as health problems. The major health problems of Nepal are lack of physical infrastructure, lack of nutrition and lack of sanitary facilities. In Nepal most of the people live in rural and remote areas.

Maternal health care is one of the major components of reproductive health. Maternal health care is defined as the care that women received during pregnancy delivery and after delivery. Reproductive health is defined as "a state of complete physical, mental and social well being and not merely the absence of disease or infirmity in all matters relating to its functions and processes". Therefore reproductive health implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduction and the freedom of deciding it when and how often to do so (ICPD, 1994). The provision of care for women during pregnancy and child birth is essential to ensure healthy and successful born infant. The maternal health care covers the several aspects;

- Antenatal care
- Delivery care
- Postpartum care

In the developing countries, many women do not have the privilege or the accesses to basic health care services during pregnancy and child birth. Women often deliver in unhygienic surroundings without the help of a trained birth attendant. So, the increasing risk to both the mother and newborn baby is resulting frequently unhappy outcomes.

Maternity care is the major key factor for reducing maternal mortality rate. The provision of care for women during pregnancy and childbirth is essential to ensure healthy and successful outcomes of pregnancy for the mother and her newborn infant. The maternal mortality rate (MMR) is an

effective index to the quality of maternity care services in any given country. CBS has recently published in his profile published on world population day 2007 that MMR is 281 per 100,000 live births.

The most common direct causes of maternal deaths are hemorrhage, sepsis, toxemia, obstructed labour and consequences of abortion. Nepal is a developing country, most of the women reside in rural areas where only basic health care services are available at the health post and sub health post. Some community based services are being provided by trained TBAS or FCHVS. Maternity care services available at all these levels are usually inadequate in quality and accessibility.

The national health policy's main thrust is to increase the accessibility of the rural population to primary health care services (including MCH/FP) in order to improve the situation. This has been envisaged through the establishment of health facilities in every village development committee i.e. sub- health post (SHP) and also maintaining and upgrading these facilities to health post and primary health care centers (PHC).

Nepal is a country having a high maternal mortality rate in the world. It is 281 per 100,000 live births (MOHP et al. 2006). Nepal is suffering from various reproductive health problems. Because low level of practice of antenatal care, delivery care and postnatal care which are the major problems of maternal morbidity and mortality. The main causes are poor access of health services, by lack of education, socio-cultural factors, low per capita income and gender discrimination.

"Introduction of Rai"

Rai community has different, separate and unique history and identification as well in comparison to other caste in Nepal. Rai, the indigenous people of Nepal with stout and short stature, originated from Chomolungma (Mt. Everest) are spread especially over the Eastern Districts like Bhojpur, Khotang, Solukhumbu, Okhaldhunga, Udayapur, Dhankuta, Sankhuwa-sava, Sunsari, Ilam and other places too. They were brave, doughty, warriors and very deft archers. Yalambar, the first Kirat king,

overthrew the last king Abhir dynasty and laid the foundation of the kirat dynasty that lasted for about 1225 years. The last Kirat king was Gasti. After defeated by Lichhavi, they were moved to the Eastern hills of Nepal from kathmandu valley and settled down divided into three regions i.e. 'Wallokirat', 'Majhkirat' and 'Pallokirat' that lied East of Nepal. Rai enjoy a free and open society. There is no gender discrimination in Rai community since its origin. By region Rai were worshippers of nature and Earth. They worshipped, the sun, the moon, their main God were Paruhang and Sumnima. The cultures of Rai are celebrated using Mundhum. Within Rai caste more than 28 sub Rai castes are found and mother tongue is different to each other. Out of all, Bantawa Rai language is spoken by more Rai people than other languages due to the high no. of people in Bantawa Rai. After the eradication of malaria disease, Rai people were migrated from Hill region to Terai. The main occupation of Rai is agriculture and some youth are recruited in British and Indian Army. According to the census 2001, in Nepal, 2.79% of total population is Rai people.

In the study area, the socio-economic status and literacy status of Rai women is very poor. During delivery, ANC visits and PNC visits are very low. Health care centre are not availability and accessibility. Most of the Rai women are do not have nutritional food during delivery. Majority of the births are delivered at home and very little of births are assisted by health professionals. Most of these people are depended on agriculture and followed by labour.

1.2 Statement of the problem

Health problems are the major problem of the world. Maternal health care problem is one of the burring issues in Nepal. Maternal health care practice is an important component which aims to save the mother's life and to improve the health status of women with special emphasis on reducing maternal and neonatal mortality and morbidity. Various type of private and governmental health agencies have started to lunch the programmed for improving the health status of mother. But, the results have not been satisfactory yet.

Maternal mortality is one of the major causes of women's death. Developing countries have more maternal mortality rate than developed countries do have. Nepal's maternal mortality is higher in the world which is a serious problem of our country. In Nepal, per day 12 women died by complication of delivery. In every two hour one Woman dies under pregnancy complication and 64 children die per 1000 births under one year (WHO, 2005).

In Nepal, Nepalese women have higher work burden compared to men. They are dependent them husband; the facilities provided to them are very less. They cannot exercise the economic power; they cannot allow taking an active role in decision making process of the family. They are social poor in the Nepalese society. So, those Nepalese women over work which has a negative impact on their health status, especially on maternal health issues.

Demographic and Health Survey, (2006) reported the percentage of women receiving antenatal care service from health professionals is 44. Nearly 80 percent of the births are delivered at home. 13 percent of births were delivered in a public facility, 4 percent in a non- government health facility and 1 percent in a private facility. Health assistants or health workers assist in the delivery of 4 percent of birth, FCHVS assist in 2 percent of births, and traditional birth attendant assists in 19 percent of birth. 7 percent of births are delivered without any type of assistance at all. It is the serious problems, Nepalese women are not getting access to antenatal care, delivery care and postnatal care so that, we should emphasized on maternal health care (NDHS, 2006).

Nepal is a multi-ethnic nation with diverse language, religions, and cultural traditions. Nepalese society has its own culture norms and practices that play effective roles in terms of maternal health management. Rai is one of the 59 indigenous groups of Nepal.

In the study, women of reproductive age 15-49 of Rai community. Who live in urban area in Chhinamakhu VDC of Bhojpur district was considered as the target population. This study attempts to find out the maternal health care practice and education status of Rai women. It is believed that these women have low level of maternal health care practice

and education status. It is because low level of socio-economic status, low level of standard of living, low level of income, unemployment and cultural and religious constraints they have high fertility, high mortality and morbidity. Rai women usually do not go to hospital for the check- up during pregnancy period. So, for no research has been done to examine the behavior and practices of Rai community regarding maternal health care in this field. Therefore, the Rai community is selected for the study. Such studies are likely to play an important role in improving maternal health and reduce maternal mortality rate in this community.

1.3 Objective of the study

The overall objective of this study to identify the status of maternal health care practices in Rai community. The specific objectives of this study are as follows;

- To examine the socio-economic and demographic characteristics of Rai community.
- To find out the status of maternal health care practices.
- To examine the relationship between maternal health care practices and educational status of Rai women of Chhinamakhu VDC of Bhojpur.

1.4 Limitation of the study

Every study has its own limitation due to the time limit and economy. The study is limited in the following areas;

- This study is limited to the Rai community. So, the findings cannot be generalized to other community.
- The target of this study is married women aged 15-49 years who have had a child or currently pregnant.
- This study is based on sample population of Rai community of Chhinamakhu VDC of Bhojpur district. Therefore, it may not represent for all areas in Nepal.

- This study covers only some variables of maternity care. So, predictions for all components of reproductive health cannot be made from this study.

1.5 Significance of the study

Maternal health care practices play important role in reducing the large volume of maternal mortality. Maternal health care practices can be done differently by community to community and ethnicity as well. This is effective by the socio-economic and cultural practices in the community. This study provides baseline information about the recent status of maternal health. Generally, this study helps the policy maker and program planner. Some significances of this study are as follows;

- It is useful to local people to develop awareness and knowledge towards maternal health care.
- This study helps the future researchers as a guideline in similar studies.
- The results of this study are useful for planners and policy makers to improve the health status of mothers and to reduce the maternal mortality rate in Rai community of Chhinamakhu VDC.
- The study is useful for local government agencies, NGOs, researchers, policy makers, program planners and others who are interested in this field.

1.6 Organization of the study

This study has been dealt within seven chapters. The first chapter deals with introduction, statement of problems, objective, significance and organization of the study. The second chapter of this study has been presented the literature review, lessons from the world, experiences from Nepal, summary of the literature and the conceptual framework. The third chapter deals with various aspects viz. the methodology, selection of the study area, research design, nature and source of date, sample design, methods of data collection and data analysis.

Similarly, the chapter four deals with the background characteristic of the respondents. Likewise, chapter five deals with the maternal health care

practice. Chapter six examines the relationship between education and maternal health care practices. In the last chapter, it has been included the summary, conclusions and recommendation.

Chapter - Two

Literature Review

This chapter deals with some literatures related to the maternal health care practices in Nepal as well as in the global context. In this chapter some of the facts and study reports related to this study are reviewed. After the initiation of world safe motherhood strategy 1987, this topic has got worldwide emphasize. Many developed and developing countries based on the same strategy have made national policy to integrate the issues of safe motherhood to ensure the life of mother and child. It has become an integral part of national health system as well as of reproductive health in almost all part of developing world.

2.1 Lessons from the world

Countries should strive to effective significant in maternal mortality by the year 2015: a reduction in maternal mortality by one half by 2015. The realization of these goals will have different implications for with different 1990levels of maternal mortality. Countries with intermediate levels of mortality should aim to achieve by the year 2005 a maternal mortality rate below 100 per 100,000 live and by the year 2015 a maternal mortality rate below 75 per 100,000 live births. However, all countries should reduce maternal morbidity and mortality to levels where they no longer constitutes a public health problem (UN, 1994).

Births at home is not necessarily unsafe if the mother's family and her birth attendant can recognize the sign of complication during the labour and delivery and if complication occur can promptly carry her to the health facilities with adequate facilities. Family may not be able to transport the women to a medical center in time or they may not take her because they fear patronizing treatment, poor quality. Deliveries in the facilities can still be risky because of poor medical care. All pregnancies involve some risk even for healthy women. An estimated 15 percent of pregnancies result in complications requiring medical care in life threatening cases women needs emergency obstetric care (UNFPA, 2001).

(MOH, 2001) has made estimation showing the facts that there are 415 maternal deaths per 100,000 live births. In developing countries the fire is 480and in developed countries it is only 24. This figure reflects a women's risk of dying each time she becomes pregnant, because women in developing countries bear many children and obstetric care is poor and their lifetime risk of maternal death is much higher almost 40 times higher than in developed world. In addition to maternal mortality, half of all deaths are due to inadequate maternal care during pregnancy and delivery. Preventing maternal deaths and illness is an issue of social justice and women's human rights. Redefining maternal mortality as "health disadvantage to a social injustice" provides the legal and political basis for government to ensure maternal health care for all women care that will save their lives. At present, approximately 90 percent of the countries of the world, representing 96 percent of the world population, have polices that permit abortion under legal conditions to save the life of mother.

Reproductive tract infection is viral, bacterial, protozoa infection of the labour and upper reproductive tract transmitted through sexual intercourse, unsafe child birth, abortion and other practices, including genital mutilation. Most are sexually transmitted diseases (STDs). STDs may also include systematic disease such as AIDS and affected other parts of the body (UN, 1995). WHO estimated that 60 to 80 million people experience some form of during their reproductive life. Studies in Bangladesh, Brazil, Indonesia, Nigeria and Singapore, found that male factors are major causes of infertility in about 25 to 30 percent of infertile cases. And they are contributing factors in another 15 to 25 percent of cases (UN, 1995).

At least 35 percent of women in developing countries receive no antenatal care during pregnancy almost 50 percent give birth without a skilled attendant and 70 percent receive no post partum care in the six weeks following delivery (WHO, 1997) complications of pregnancy and child birth constitute the leading cause of death and disability among women 15-49 years of age and 99 percent of these deaths occur in developing countries. The problem is particularly acute in Africa and South Asia, where women's access to safe motherhood care and family planning is especially limited (Pathak, 2001).

More adolescent girls die from pregnancy related causes than from any other causes, because they have not completed their growth. Adolescent girls are at greater risk of obstruct labor (when the birth canal is looked), which can lead to permanent injury or death for both mother and infant. In many countries the risk of death during the first years of life if one had half times higher for infants born to mothers under age 20 than for those born to mother aged 20-29 years, because adolescents have less experience, resource, and knowledge about maternal health care than older women (UN, 2002).

Every year, 210 million women become pregnant. An estimated 30 million or about 15 percent of these women develop complication which is 1.7 percent of causes of all health statistics, those for maternal mortality represents the greatest disparity between developing and developed countries. More than 99 percent of maternal deaths occurring in developing countries where a woman runs average risk of dying from a pregnancy related to disorder about 250 fold greater than a woman in most developed countries. More than 70 percent maternal deaths are caused by just five conditions, bleeding after delivery (25%), infection after delivery (15%), unsafe abortion (13%), hypertensive disorder (12%), and obstructed labour (8%). In addition about 20 percent of maternal deaths are due to disease that are aggravated by pregnancy such as malaria, and cardiovascular disease, not to mention an HIV infection which adds to the risk of maternal deaths. In many developing countries, the no. of visits and the different procedures that pregnant women under go as part of nationally recommended antenatal care program generally follow the traditional pattern used in most industrialized countries. As a rule, this pattern requires women to submit to an impressively larger batter of clinical examination and laboratory tests crammed in to about a antenatal visits. The trouble is firstly that not all tests and procedures have been shown through rigorous study to be necessary to ensure a successful out-comes to a healthy pregnancy and secondly, the pattern model is clearly not the most cost effective for developing countries (WHO, 2002).

2.2 Experiences from Nepal

Nepal is a developing country of the world with the low level of social-economic development. The social system and legal system are male dominated. Females are dominated in various ways within a family and society. Female employment participation rate is very low compared to male. Most of the female are found to be engaged in household chores. They do not have control over their own fertility and early marriage. Still exists in society, which is influenced by religious beliefs. Female literacy rate is very lower compared to male. So that reproductive health status of women is not better in Nepal.

In the world Nepal has the highest maternal mortality rates. There are several factors associated with it.

In Nepal, the family planning plays a critical role in promoting healthy pregnancy, reducing the chance of high-risk pregnancies, seeking routine maternity care and recognizing and taking immediate action for obstetric emergency. Twenty-five percent pregnancies developed complication during different periods of pregnancy, delivery and after delivery. These complications are responsible for death and loss of healthy life of a women and her new born (MOH, 1996).

The maternity service factor relate to place and attendant of antenatal care and attendant of delivery, related to the period of pregnancy when death occurred. About 28 percent of women die during pregnancy, 9.9 percent women die undelivered during labour and 62.1 percent die after delivery. The high risk pregnancies are too early, too late, while low risk of maternal deaths occurs in age group 20-39 years of age (MOH, 1998).

NFHS (1989/99) has revealed that the proportion receiving antenatal check-up is long among older and higher parity women. The proportion of birth for which the mother received antenatal check-up is slightly higher in urban areas (95%) than in rural areas (88%). However, the proportion receiving antenatal check-up from doctors is much higher in urban areas. The proportion receiving antenatal check-ups from other health professionals is much higher in rural areas. The proportion check-ups

increase with mother's education. More educated mothers are more likely to receive antenatal checks-ups from doctors and less likely to receive antenatal check-ups from other health professionals. Place of delivery is associated with the antenatal check-ups. Women who receive antenatal check-ups are more likely than other women to deliver in a health facility because their antenatal providers might have advised them to do so, women who received four or more antenatal check-ups (80%) as among women who received three antenatal check-ups (46%) and about six times as high as among women who did not receive any antenatal check-ups (14%).

DHS (2001) reported that the proportion of birth attended by a doctor varies by the mother's age from 40 percent for teenage mothers to 5 percent for mother's aged 20-34. The differentials are much larger by birth order, ranging from 59 percent for first birth to 29 percent for births of order 4.5 and 37 percent for births of order of 6 or higher. Many factors can prevent women from getting medical advice or treatment for her. Two in three women consider getting money for treatment to be a big problem and 57 percent do not want to go to a health facility be a big problem. One in two women alums considers the distance to a health facility having to take transport and lack of female providers to be a big problem. To decide where to go was big problem for 28 percent of women.

In Nepal, the socio-cultural factors play a considerable role influencing negatively women's life as factors discrimination, start as early as infancy and continued throughout childhood effects girls care, nutrition and education, resulting in malnourished, uneducated and low self esteemed teenagers. Religious and cultural factors, to a large extant determine women's freedom of choice of marriage, age at marriage, choice of pregnancy, childbirth and after childbirth. These behavior patterns and practices are expected to differ to different communities and ethnic groups. Education of women is main contributing factor for good health, especially in pregnancy, delivery and after delivery period.

Educated women are likely to marry latter, have their first pregnancy later and have fewer children. They are more likely to know about contraception and to attend for antenatal delivery and post-natal care. The increasing level of education of women helps to decrease the early age of

marriage and the first pregnancy age is late for higher educated women than secondary and primary level educated mother's (Subedi, 2001).

A study by Regmi (2001) entitled "Safe Motherhood Practices Among Chidimar Community" found that 47.24 percent women utilized antenatal care service and 52.76 percent women did not receive any antenatal care service during pregnancy. Similarly, on an average 2.12 times visits were made by each woman. No one visited more than three times for antenatal care and most of them continued working during pregnancy. The average of working period was 8.7 months during the time of pregnancy, where as majority (69.94%) worked 9 months and 30.06 percent worked for 8 months. About 84percent women delivered births at home and the rest (16%) delivered at health facilities under the supervision of trained health personnel. Due to poverty they could not deliver at hospital under the supervision of trained health personnel. In the study, most of the women (85.27%) were assisted by TBA and family member during delivery followed by AHW/HA/Nurse (13.30%) and a few were assisted by MCHW (1.23%). In the study, about 18% women reported to have used safe delivery kit. About 32 percent reported to have suffered from different problems during such as fever excessive bleeding and other whereas 46 percent women did not faced any problem during labour pain and delivery. Only 23.31 percent women received postnatal care after delivery.

Females are dominated in terms of family planning issues. Most of the popular methods in Nepal are female oriented. Though there are methods for males but males do not intend to use. Females do not have control over their own fertility in number of ways, the society dominates females. The major cause of maternal death is unsafe abortion, which arise because of the unwanted pregnancy (Pokharel, 2003).

2.3 Summary of the Literature

Maternal health is the burning issue, especially in developing countries. In developing countries, maternal health status is not better compared to develop countries. The set of barriers also effect women. Women and children in developing countries are disadvantaged. Therefore, they are

affected more. The long range of discrimination is also responsible for the low level of maternal and child health.

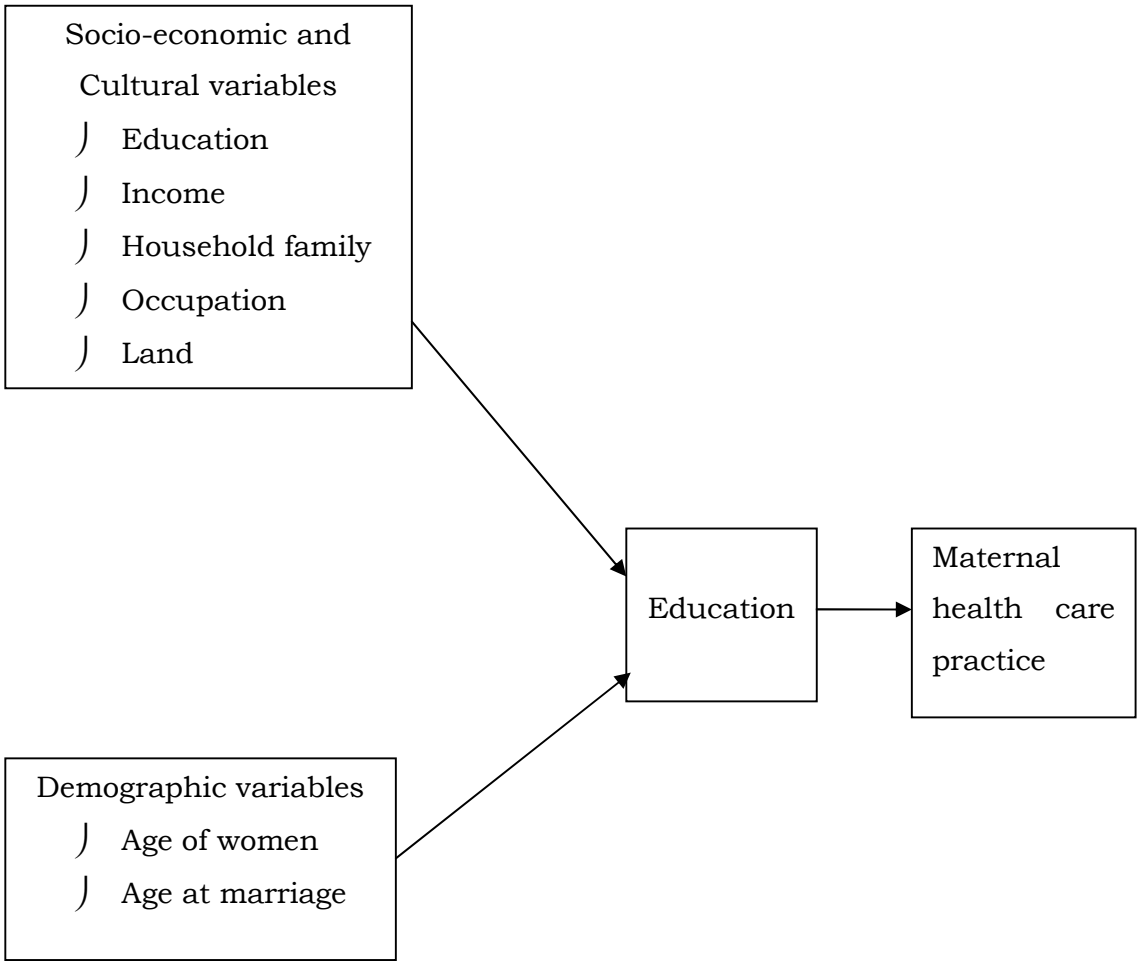
There are various factors determined by maternal health. So, there is low level of maternal health in Nepal. There is various social caste and ethnic groups that are socially and economically deprived. The state of discrimination has pushed women in the state of lower health status. Lack of social such as education, health and other physical facilities are other major reasons.

However, the indicators are progressive; the expected speed is not achieved yet. In indicators speak that here is positive change. The society has reached to better status from the poor stage. Many efforts have been made. The literature cited above shows the progressive change over the time. However, it is important to access the factors associated with the maternal and child health care practices differential. A variety of factors are there, which influence the status of mother and child.

There are some standard limits of health care system. For example, as prescribed by the WHO, a mother should visits health facilities at least four times for a birth very less women complete the required limit. Similarly, TT vaccine coverage, other immunization and iron tablets etc, also require completing prescribed dose. Besides, lack of competent manpower and physical facilities of the health facilities that are dissatisfying women. Work burden and low level co-operation from family members are other barriers for low level of maternal and child health.

To sum up, the indicators have maternal and child-health are progressive but yet have not reached to the destination. The differential is often pronounced large based on the background characteristics.

2.4 The Conceptual Framework



The analytical framework is suitable for the study. The maternal health care practice is influenced by different socio-economic and demographic variables. For the study two type's socio-economic variables like education, income, household family, occupation and land are selected. These variables affect the education and education affects the maternal health care practice. Similarly, there are also different demographic variables like age of women and age at marriage. Age of women and age at marriage plays the vital role for mother and child health. Thus, the given all variables help to have condition of maternal health care practice among Rai women.

Chapter - Three

Research Methodology

3.1 Selection of the Study Area

The selected area for this study is Chhinamakhu VDC of Bhojpur district. It is situated in the Eastern Development Region of Nepal. It is a hilly district. Khotang, Samkhuwashova and Udayapur are its neighboring district. The study village consists of Rai, Tamang, Sherpa, Kami, Dhamai, Gurung, Braman and Kshetri caste/ethnic population and selected caste population is Rai of this VDC. Because of high density of Rai population in this village, this village has been selected for study. The VDC is selected by non probability sampling as purposive sampling.

3.2 Research Design

The design of this research study is basically non experimental. It is based on field study method. The data is collected on the basis of the socio-economic and demographic characteristics, educational status, antenatal, delivery and postnatal care services.

3.3 Nature and Source of Data

This study is based on primary data collection, which was obtained through census type survey in the study area. Among the Rai community in the study area married women of age group 15-49 years were main source information for this study. As a complementary data, the secondary data are obtained from various journals, books, bulletins, previous census data, survey report of NDHS (2006), etc.

3.4 Sample Design

This study was selected 2 wards of Chhinamakhu VDC of Bhojpur district. Out of nine wards, the two representing wards (2 and 9) was selected by lottery methods for the study and as for making sample size 110 women was taken as sample, purposively. This sample was taken by visiting 110 selected households and asking them questions.

3.5 Questionnaires Design

Questionnaire is designed in such a way that it provides all required data needed to fulfill the objectives of the study. The questions probable options for answers inside questionnaire contained for both qualitative and quantitative information in the form of close ended. The questionnaire include information about household individual knowledge and attitudinal towards reliable in the subject matter of dissertation.

3.6 Methods of data collection

Data was collected by using structural questionnaire, and the questionnaire was designed in such a way that two types of information could be obtained from household and individual schedules. The individual schedule consists of only the part of respondent i.e. married women aged 15-49 years.

3.7 Data Analysis

The questionnaire were pre-coded and closed ended. After the collection of the questionnaire, the filled-in questionnaire were manually checked and carefully edited. Then the necessary tables were generated using the statistical tools such as frequency tables, cross tables and multiple tables with absolute numbers and percentage, which were the analytical tools used to analyze the collected information.

Chapter - Four

Background Characteristics of Respondent

Background characteristics have a strong relationship with the level of people's perception and attitudes. Background characteristics not only show the position of an individual but also influence activities they show. In social research, background characteristics of respondents provide a strong base for the logical end of the study. Background characteristics include socio-economic and demographic characteristics. This chapter deals with the age-sex composition of household population, economic, educational and other demographic characteristics of the study population and the respondents.

4.1 Socio-Demographic and Economic Characteristics of the Study Population

4.1.1 Age-sex Structure of Household Population

Age-sex composition plays an important role in determining the population distribution or population dynamics

Table 4.1: Distribution of Household Population age 5 and above by sex

Age Group	Male	Percent	Female	Percent	Total	Percent	Sex Ratio
0-4	55	22.45	56	20.97	111	21.68	98.21
5-9	22	8.98	28	10.49	50	9.77	78.57
10-14	16	6.53	22	8.24	38	7.42	72.73
15-19	7	2.86	20	7.49	27	5.27	35.00
20-24	16	6.53	31	11.61	47	9.18	51.61
25-29	32	13.06	42	15.73	74	14.45	76.19
30-34	40	16.33	26	9.74	66	12.89	153.85
35-39	23	9.39	15	5.62	38	7.42	153.33
40-44	10	4.08	6	2.25	16	3.13	166.67
45-49	5	2.04	5	1.87	10	1.95	100.0
50-54	3	1.22	7	2.62	10	1.95	42.86
55-59	3	3.27	5	1.87	13	2.54	160.0
60+	8	3.27	4	1.50	12	2.34	200.0
Total	245	100.00	267	100.00	512	100.0	91.76

Source: Field Survey 2009

Table 4.1 shows the distribution of population by age group and sex According to survey data; the highest percent of both males and females were in age groups 0-4 year (22.45% and 20.97% respectively) which indicates that there was high level of fertility in the study area. Similarly, the lowest proportion of the males was in age group 50-54 (1.22%) and that of females was in age group 60+ (1.50%). The sex ratio according to age group was highest in 60+ years which was 200.0 and lowest in age group 20-24 years which was 51.61.

4.1.2 Educational Status of the Respondent

Education is considered as the most important factor for the socio-economic development of an individual. It also influences the perception of an individual and maternal and child health care is closely related to the personal perception of a mother. Many mothers are unknown about their personal hygienic activities. This has a negative effect on attainment of maternal and child health care. Educated mothers are more aware of the issue or quality of health and children than that of non-educat

Table 4.2: Percent Distribution of Respondents by educational attainment

Educational status	No. of Respondents	Percent
Illiterate	50	45.5
NFE/Primary	29	26.4
Secondary (6-10)	25	22.7
SLC above	6	5.5
Total	110	100.0

Source: Field survey, 2009

Table 4.2 shows the distribution of respondents by their educational attainment. The highest percent of respondent 45.5 percent are illiterate, followed by NFP/primary 26.4percent, secondary level of education 22.7 percent and 5.5 percent respondents has completed SLC level or above.

4.1.3 Physical Facilities Available

Respondents were asked about the physical available in their household. Table 4 shows the distribution of respondents by facilities available in their households. Respondents were particularly asked about

source of light, communication media, source of drinking water and toilet facilities.

Table 4.3: Percent Distribution of Respondents by physical facilities Available in the household

Facilities	No. of Respondent	Percent
Source of Light		
Electricity/solar	26	23.6
Kerosene	81	73.6
Fire	3	2.7
Total	110	100.0
Communication Media		
Radio	108	98.2
Television	12	10.9
Telephone	15	13.6
Total	110	100.0
Source of Drinking Water		
Piped water	90	81.8
Well	19	17.3
Stream/River	1	.9
Total	110	100.0
Type of Toilet		
Traditional	93	84.6
Modern	4	3.6
None	13	11.8
Total	110	100.0

Source: Field Survey, 2009

Table 4.3 shows that 73.6 percent respondent used kerosene the source of light. Radio is the more available medium of communication as 98.2 percent respondents reported it. In the study area the facility of drinking water is better, 81.8 percent people had been using piped water. Toilet facilities are not good in almost all rural area of Nepal. They have traditional toilet facilities or either do not have any toilet facilities. Very few use modern toilet facilities. In the study area, the highest percent (84.5%) of respondents reported to have traditional toilet facility. Only 3.6 percent have modern facilities but 11.8 percent have not any toilet facilities. Still, a large number of people are not using toilet facilities, which indicates the weak health and weak sanitation condition in rural areas of Nepal. Table 5 shows

that the village is on the way of changing but not rapidly. This, further, shows the traditional life status.

4.1.4 Distribution of Respondents by Source of Household Income

Income plays an important role in personal attitude. It is because income is supposed to be a strong power, which determines the access to other facilities. Similarly, occupational status is associated with the standard life of an individual. Source of income plays vital role in promotion and protection of individual's health as well as community health.

Table 4.4: Percentage Distribution of Respondents by Source of income

Occupation	No. of Respondents	Percent
Agriculture	93	84.5
Government and private sector service	7	6.4
Paid labor	8	7.3
Business	2	1.8
Total	110	100.0

Source: Field Survey, 2009

Table 4.4 shows that highest percent of respondents (84.5%) depends on agriculture. This shows that agriculture dependent family is not decreased. The second largest source of income is paid labor. Only 1.8 percent family depends on business so it is clear that few families (6.4%) depend on government or private sector services.

4.1.5 Earner of the Family

The earner has the strong power of decision making in a family. In the most of the families, female exercises are less decision making power as they do not have ownership on the economic source.

Table 4.5: Percentage Distribution of Respondents by Earner in the family

Earner in the family	No. of Respondents	Percent
Husband	93	84.5
Own self	4	3.6
Father/mother in-law	8	7.3
Brother/Sister in-law	5	4.5
Total	110	100.0

Source: Field Survey, 2009

Table 4.5 shows that the distribution of respondents by earner of the family. Many respondents (84.5%) reported husband as the main earner in the family whereas 7.3 percent reported father/mother in-law. Three percent respondents reported themselves as the earner. This shows that in the study area a large proportion of women have not economic power on their hand. Brother/sister in-law is 4.5 percent, main earner in the family.

4.1.6 Distribution of Agriculture Land in the study area

In the study area, the table 4.6 shows that these who have land 43.6 percent have land ranging between 10-19 ropanese. About 29.1 percent respondents have land ranging between 5-9 ropanese.

Table 4.6: Percentage Distribution of land holding status among the respondents

Size of Land	No. of Respondent	Percent
<5 ropani	18	16.6
5-9 ropani	32	29.1
10-19 ropani	48	43.6
20+ ropani	12	10.9
Total	110	100.0

Source: Field Survey, 2009

4.1.7 Age composition

The study is conducted mainly to analyze the currently married women of reproductive age. Therefore, the age of respondents ranges from 15-49 years only. The age distribution of respondents is presented in table no.8.

Table 4.7: Distribution of Respondents by Five years Groups

Age group	No. of Respondent	Percent
15-19	3	2.7
20-24	12	10.9
25-29	16	14.5
30-34	22	20.0
35-39	18	16.4
40-44	25	22.7
45-49	14	12.7
Total	110	100.0

Source: Field Survey, 2009

Table 4.7 shows that the largest number of respondents is in the age group 40-44 years which is 22.7 percent of the total respondents. The age group 30-34 years is 20.0 percent of the total respondents. Similarly, the lowest number of respondents is in the age group 15-19 years which is 2.7 percent of the total respondents. The age group 20-24 years comprises 10.9 percent and there is other age group 45-49 years which is 12.7 percent of total respondents. Likewise, there are 14.3 percent respondents in the age group 25-29 years. Similarly, there are 16.4 percent respondents in the age group 35-39 years.

Chapter - Five

Maternal Health Care Practices

Maintenance and promotion of maternal health status is called maternal health practice. This concept includes antenatal delivery and postnatal cares. Furthermore, maternal and child health care induces person to apply all necessary cautions in order to improve and protect the health of mother and child. This also aims at reducing maternal and infant morbidity and mortality. This chapter deals with the major aspects of maternal health care in the study areas.

5.1 Age at marriage

Marriage is the main component of population dynamics. Getting marriage is universal in the world. Early marriage practice is being common all over the world. Marriage makes the point in women's life at which child bearing becomes socially acceptable. Women who marry early at younger age has longer exposure to the risk of becoming pregnant and therefore early age at marriage often implies early age at child and higher fertility in a society as well as in a country also.

Table 5.1: Distribution of Respondent by Age at Marriage

Age at marriage	No. of Respondent	Percent
<18	27	24.5
18-20	39	35.5
>20	44	40.0
Total	110	100.0
Mean age at marriage	20.2	
Median age at marriage	20.0	

Source: Field Survey, 2009

Table 5.1 deals with the great majority of respondents who got married at the age group 18-20 years and over 20 years i.e. 75.5 percent altogether. Similarly, 24.5 percent respondents had married at the age of under 18 years. It is clear that in the study area, the rate of early marriage is lower. Whereas mean age at marriage is 20 years and median age at marriage is 20 years.

5.2 Age at First Birth

As marriage is universal, in Nepal first birth within one year of marriage is also universal. In many societies, being parent is considered as an entire goal. They priorities for birth right after the marriage therefore, if the age at marriage is earlier then the child bearing practices also start at earlier age. From the reproductive point of view, the age group 20-35 years is considered as the appropriate age for childbearing. Childbearing practices out of this age range are considered to be dangerous.

Table 5.2: Percent Distribution of Respondents by Age at first birth

Age Group	No. of Respondent	Percent
<18	9	8.2
20-25	32	29.1
25 above	69	62.7
Total	110	100.0
Mean age at first birth	21.9	
Median age at first birth	22.0	

Source: Field Survey, 2009

The highest percent of respondents (62.7%) reported that they had their first birth in the age of 20 over and the lowest percent of respondent (8.2 %) in the age group less than 18 years. Whereas mean age at first birth is 21 years and median age at first birth is 22 years.

5.3 Antenatal care practice

Antenatal care includes all the services which are related with pregnancy and health of mother from the date of conception to before the date of delivery. Antenatal check up plays an important role to the health of mother and newly born baby.

5.3.1 Antenatal check-up

Antenatal check-up is very important in order to maintain the health of mother. Antenatal visits have various advantages for both mother and fetus. Various check-ups are done during the visit.

Table 5.3: Distribution of Respondents by knowledge of ANC

Knowledge of ANC	No. of Respondent	Percent
Yes	59	53.6
No	51	46.4
Total	110	100.0

Sources of ANC

	No. of Respondent	Percent
Doctor	3	5.1
Nurse	3	5.1
HA	48	81.4
TBA	5	8.5
Total	59	100.0

Source: Field Survey, 2009

Table 5.3 shows that 53.6 percent of respondents have knowledge of ANC whereas 46.4 percent do not hear about ANC. The table clearly shows that majority of respondents heard about ANC. These who reported they have antenatal visits 81.4 percent should go for health assistance.

5.3.2 Knowledge on Advantages of Antenatal service

Respondents had known that ANC service is important and why mother should take it, where further asked the reason to ANC service. This question was asked in order to explore the actual knowledge with them about ANC service.

Table 5.4: Distribution of Respondents by Knowledge on Advantages of ANC service

Importance	No. of Respondents	Percent
For mother's betters health	14	23.7
To safe from complication of delivery	23	38.9
For healthy birth	17	28.8
Others	5	8.5
Total	59	100.0

Source: Field Survey, 2009

In the study area, the highest percent of respondents (38.9%) reported that it is necessary for safe from complication of delivery, followed by for

healthy birth 28.8 percent and 23.7 percent of respondents reported for mother's better health.

5.3.3 Place of health check-up

Respondents were further asked whether they went for ANC service. The study area is rural area, so it can be said that the highest percent of respondents visit ANC services from health post.

Table 5.5: Percentage Distribution of Respondents by Place of Health Check-up

Place in check-up	No. of Respondents	Percent
Hospital	4	6.8
Private clinic	4	6.8
Health Post	51	86.4
Total	59	100.0

Source: Field Survey, 2009

In the Rai community, the high numbers of respondents (86.4%) to visit the health posts for PNC check up and 6.8 percent seemed to follow hospital and private clinic visiting. It is because the study area is rural area.

5.3.4 Frequency of Antenatal visit

According to the WHO standard, a mother should visit health facilities for health check-up at least four times during pregnancy. Frequency of antenatal visits often shows the awareness of mother her reproductive health. The average visit of respondents in the study area is found less than who stand. This shows that most of the women are not aware of ANC services where as these who are aware of ANC services, are not taking adequate services.

Table 5.6: Percent Distribution of Respondents by time of Antenatal Visits

Time of ANC visit	No. of Respondents	Percent
One	1	1.7
Two	11	18.6
Three	21	35.6
Four	26	44.1
Total	59	100.0
Average ANC	3.2	

Source: Field Survey, 2009

Table 5.6 shows that the lowest number of respondents visited health facilities for one to two times. Highest percent (44.1%) respondent visited health facilities for four times.

5.3.5 Tetanus Taxied and Iron tablet coverage

Tetanus taxied and iron tablets are important for Antenatal care service. Due to various socio-economic factors, in rural area women often do not take TT vaccine and Iron tablets.

Table: 5.7 Percentage Distribution of Respondents by Tetanus Taxied and Iron Tablet Coverage

TT coverage	No. of Respondents	Percent
Yes	57	51.8
No	53	48.2
Total	110	100.0

Frequency in Dose

1	3	5.3
2	28	49.1
3	18	31.6
4 and more	8	14.0
Total	57	100.0

Iron tablet coverage

Yes	58	52.7
No	52	47.3
Total	110	100.0

Source: Field Survey, 2009

Table 5.7 shows that 51.8 percent of total respondents have taken TT injection and 48.2 percent of total respondents do not have taken. The respondents taking only one dose is the lowest percent (5.3%) and the respondents taking two doses is the highest percent (49.1%) of total respondents. On the other hand, 52.7 percent of total respondents have taken Iron tablets and 47.3 percent of total respondents do not have taken.

5.3.6 Work during Pregnancy

During a pregnancy work burden plays a great role in maintaining

maternal and child health. Higher and risky work during pregnancy is risky to health morbidity. Simple work is needed for health maintenance but heavy works are dangerous. But in Nepal, very little number of rural women can manage enough and take proper rest during pregnancy.

Table: 5.8 Percentage Distribution of Respondents by working behavior

Work during pregnancy	No. of Respondents	Percent
Hard work	87	79.1
Normal work	23	20.9
Total	110	100.0
Nature of work		
Agricultural work	16	15.5
Carrying water	5	4.5
Household work	19	17.3
All of the above	70	63.6
Total	110	100.0

Source: Field survey, 2009

This table shows that 79.1 percent women do hard work during pregnancy and few women (20.9%) work normal work. It also shows that 63.7 percent of respondents work in agriculture, carrying water and household work. It clearly shows that almost Rai women do hard work during pregnancy.

5.3.7 Food Intake during Pregnancy

During pregnancy, food intake is very important as it supplies nutrition to mother and fetus. Nutritional food is very much essential in order to maintain the health status of mother during this period and relatively rich food should be served to mother. In Nepal, because of ignorance, sufficient food materials are not served to mother which have been resulting many mothers suffer from malnutrition and other nutrient deficient disease. These types of problems ultimately result in maternal and infant morbidity and mortality.

Table: 5.9 Percentage Distribution of Respondents by type of Food Intake during Pregnancy

Type of food	No. of Respondents	Percent
Usual food	104	94.5
Extra nutrition	6	5.5
Total	110	100.0

Source: Field Survey, 2009

This table shows that during pregnancy, large percent (94.5%)of respondents reported that they took usual food whereas 5.5 percent reported that they took extra nutrition. It is because; in the study area economic condition is poor, lack of health education and lack of health facilities.

5.3.8 Drinking Habit

Many surveys have found out that women with drinking habits have to suffer health hazards during pregnancy and delivery and after the delivery. In order to explore the relative habits affecting health, respondents were asked about their drinking habits. In this Rai community drinking alcohols and wine is culturally and socially acceptable. It is regarded as a part of culture. They keep on drinking in different festivals and ceremonies. So, it affects on both mothers and child health. It is because; the lack of knowledge Rai women practices it to great extent.

Table: 5.10 Percentage Distribution of Respondents by drinking habits during pregnancy

Drinking habits	No. of Respondents	Percent
Yes	96	87.3
No	14	12.7
Total	110	100.0

Source: Field Survey, 2009

In the study area, Rai community has its own culture and tradition, which have strong influence on maternal and child health. Highest percent of respondents (87.3%) are drinking alcohol. It is because in Rai community drinking habit is cultural values.

5.3.9 Complication during pregnancy

Due to weak and unhygienic practices, the women of rural area are prone to complications during pregnancy. Such complications may be either minor or major. Therefore, there should be immediate actions to reduce such complications.

Table: 5.11 Percentage Distribution of Respondents by complication during pregnancy and place of treatment

Complication during pregnancy	No. of Respondents	Percent
Yes	24	21.8
No	86	78.2
Total	110	100.0

Place of treatment

Hospital	8	33.3
Local treatment	10	41.7
Dhami /jhakri	5	20.8
No treatment	1	4.2
Total	24	100.0

Source: Field survey, 2009

Table 5.11 shows that 21.8 percent of total respondents had to face complication during pregnancy and 78.2 percent of total respondents did not have to face. Out of total respondents, 33.3 percent got treatment from hospital and the highest percent of respondents (41.7%) got traditional local treatment. On the other hand, 20.8 percent of total respondents have got treatment from Dhami/jhakri and the lowest percent of respondents (4.2%) did not have any treatment. It is because there are several factors for such types of belief, lack of reliable health facilities, distance to the health facilities, lack of competent service provider and costly service as well.

5.3.10 Deliveries and Post-natal Services

Many women die during delivery and post-natal period. There are several reason and conditions that take lives of mothers. Unsafe delivery practices, unhygienic place of delivery, use of unsafe delivery kit, incompetent delivery assistant and prolonged labour and other physical disorders are some of the major reasons that increase maternal morbidity

and mortality. Similarly, lack of nutritious food, post-partum hemorrhage, reproductive tract infections etc. are some of the factors affecting maternal morbidity and mortality. This study has focused on some of the major factors affecting maternal health.

5.3.11 Place of Delivery and Delivery Assistance

During delivery place is one of the most important factors affecting maternal health. In Nepal, large proportion of maternal deaths occurs at home, very little proportion of mothers die at health facilities. Ninety percent mothers deliver at home (MOH, 2001).

Table: 5.12 Percentage Distributions of Respondents by Place of Delivery and Delivery Assistance

Place of delivery	No. of Respondents	Percent
Health Institutional	23	20.9
Home	87	79.1
Total	110	100.0
	Delivery Assistance	
Relatives	70	63.6
Nurse	18	16.4
Doctor	5	4.5
TBAS	11	10.0
None	6	5.5
Total	110	100.0

Source: Field Survey, 2009

Table 5.12 shows that 79.1 percent of respondents delivery at home and low percent of respondents (20.9%) delivery at health institutional. The highest percent (63.6%) delivery with the help of relatives' assistance, 16.4 percent of total respondents delivery with the help of nurses and 4.5 percent delivery with the help of doctors. TBAs delivery system followers are 10.0 percent of total. About 5.5 percent respondents reported that no one assisted them during delivery. This study shows the difficult condition of Rai women. Very few women were assisted by doctors and nurses.

In fact, place of delivery and delivery assistance is not found better in the study area. This has been proved as one of the major factors to

deteriorate the maternal and child health. Therefore, efforts should be made to improve the status.

5.3.12 Use of Delivery Kit

The use of delivery kit accounts a large number of maternal morbidity and mortality due to the lack of access to safe delivery kit and traditional systems. Women do not use them and as a result they suffer various health problems.

Table: 5.13 Percentage Distribution of Respondents by use of safe Delivery Kit.

Use of delivery	No. of Respondents	Percent
Yes	23	20.9
No	87	79.1
Total	110	100.0

Source: Field survey, 2009

A very few respondents (20.9%) were using delivery kit. It shows that rural women are still practising unsafe delivery. The major reasons are lack of information and accessibility to delivery kit.

5.3.13 postnatal care service

Postnatal care service refers to the service taken by mother up to 42 days after the delivery. Postnatal care is beneficial in many respects. But it is generally less popular than antenatal care. In our societies, visit to health facilities is done only in abnormal condition unless and until mother suffers from any type disorders they visit the health care centers.

Table: 5.14 Percentage Distribution of Respondents by postnatal care services

Postnatal service	No. of Respondents	Percent
Yes	74	67.3
No	36	32.7
Total	110	100.0

Source: Field Survey, 2009

In the study area, the highest percent (67.3%) of respondents to take postnatal services and low percent (32.7%) of respondents did not take

postnatal services. It is because; in the Rai community the health facilities are in increasing trend.

Chapter - Six

Relationship between Education and Maternal Health Care Practices

Maternal health care is the outcome of various socio-economic, demographic and cultural factors. All factors should play a positive role in order to enhance the status of maternal health. This chapter examines the possible association of various factors with maternal health care practices. The relationship analyzed in this chapter is not so wide. But the most common and strong factors included education ANC service, intake and TT vaccine coverage practice and analyzed.

6.1 Education Level and Antenatal Care Visit

Education is important role in ANC. During pregnancy, who are educated they check-up but who are uneducated they don't know about the ANC. Educated women know about the health so they visit in health care centers during pregnancy.

Table: 6.1 Percentage Distribution of Respondents who Visited ANC by education status

Educational status	Visit antenatal care				Total	
	Yes		No			
	Number	%	Number	%	Number	%
Illiterate	10	20.0	40	80.0	50	100.0
NFE/Primary	20	69.0	9	31.0	29	100.0
Secondary (6-10)	23	92.0	2	8.0	25	100.0
SLC+	6	100.0	-	-	6	100.0
Total	59	53.6	51	46.4	110	100.0

Source: Field Survey, 2009

Respondents were asked to tell their experiences about visits. Very few respondents gave positive response to it. Table 6.1 represents that only 20% of total illiterate respondents have gone to antenatal visit which is the lowest percentage of all antenatal visitors. On the other hand, 100% of total SLC+ respondents have gone to antenatal visit which is the highest percentage of all antenatal visitors.

Reasons for not taking any ANC services are not explored in this study but the possible reasons are lack of information, lack of health facility and lack of co-operation in between family and service provider.

6.2 Education Level and place of Antenatal Care Visit

Place is also determined by ANC service. Hospital and private clinic give quality service. In the hospital, qualified and trained manpower provided the service. Educated women visit in the health center during delivery.

Table: 6.2 Percentage Distribution of Respondents of Education level and Place of Antenatal Care Visit

Level of education	Place of Visit						Total	
	Hospital		Private clinic		Health post			
	Number	%	Number	%	Number	%	Number	%
Illiterate	1	10.0	1	10.0	8	80.0	10	100.0
NFE/Primary	-	-	-	-	20	100.0	20	100.0
Secondary (6-10)	2	8.7	1	4.3	20	87.0	23	100.0
SLC+	1	16.7	2	33.3	3	50.0	6	100.0
Total	4	6.8	4	6.8	51	86.4	59	100.0

Source: Field Survey, 2009

Table 6.2 shows that the percentage of ANC visitors to the health post was highest (86.4%) and only 6.8% of total respondents visited to the private clinics and hospitals. The highest percent of illiterate women (80%) visited to health post for check up during delivery. Only 16.7% SLC+ respondents visited the hospital. It is because the hospitals and private clinics are far from the village. So, only few respondents seemed to visit the far distance health care centers.

6.3 Education level and TT injection coverage

Educated women are aware of individual health and likely to take all necessary actions in comparison to uneducated women. In this study, some trends have also been reflected. The trend is progressive with the level of education. For example, highest percent of women with higher education has received TT injection.

Table: 6.3 Percentage Distribution of Respondents of Education level and TT injection coverage

Level of education	Receive TT injection				Total	
	Yes		No			
	Number	%	Number	%	Number	%
Illiterate	11	22.0	39	78.0	50	100.0
NFE/Primary	17	58.6	12	41.4	29	100.0
Secondary (6-10)	23	92.0	2	8.0	25	100.0
SLC+	6	100.0	-	-	6	100.0
Total	57	51.8	53	48.2	110	100.0

Source: Field Survey, 2009

Table 6.3 indicates that (100%) SLC+ respondents have taken TT injection which is the highest percent compare to the uneducated. The lowest percent of illiterate respondents (22%) have taken TT injection. Hence, comparatively the percentage of taking TT injection (51.8%) is higher than not taking TT injection (48.2%) which is lower.

6.4 Education Level and Iron Table Coverage

Iron table is important vitamins for women health and child health during pregnancy. Educated women known about these vitamins table compare to uneducated women.

Table: 6.4 Percentage Distribution of Respondents of education level and iron tables coverage

Level of education	Take iron tablet				Total	
	Yes		No			
	Number	%	Number	%	Number	%
Illiterate	8	16.0	42	84.0	50	100.0
NFE/Primary	21	72.4	8	27.6	29	100.0
Secondary (6-10)	23	92.0	2	8.0	25	100.0
SLC+	6	100.0	-	-	6	100.0
Total	58	52.7	52	47.3	110	100.0

Source: Field Survey, 2009

In the study area, highest percent of respondents (52.7%) took iron tables during pregnancy. In Rai community, the low percent (47.3%) of respondents did not take iron tables. Likewise, 84 percent of illiterate

respondents did not take iron table and the highest educated percents (86.2%) took iron table during delivery. It is because study area is remote and all most of Rai women are uneducated.

6.5 Education Level and Food Intake during Pregnancy

Nutrition food is important for everyone but especially for women during pregnancy. Nutrition food maintains the health status of mothers. During pregnancy nutrition served to mothers life.

Table: 6.5 Percentage Distributions of Respondents by Type of Food Intake during Pregnancy

Level of education	kind of food at time of pregnancy				Total	
	Usual		Extra nutritious			
	Number	%	Number	%	Number	%
Illiterate	49	98.0	1	2.0	50	100.0
NFE/Primary	28	96.6	1	3.4	29	100.0
Secondary (6-10)	24	96.0	1	4.0	25	100.0
SLC+	3	50.0	3	50.0	6	100.0
Total	104	94.5	6	5.5	110	100.0

Source: Field Survey*, 2009*

Table 6.5 shows that, the highest percentage of having usual kinds of food at time of pregnancy was (98%) and having extra nutritious food was only (2%) both were illiterate respondents. The SLC+ respondents have taken (50%) usual food and (50%) respondents have taken nutritious food at time of pregnancy. Comparatively, (94.5%) respondents have taken usual kinds of food and (5.5%) respondents have taken extra nutritious food. In comparison of illiterate respondents, literate respondents seemed having extra nutritious food.

6.6 Education Level and Types of Work during pregnancy

Work plays a great role in maintaining maternal and child health during pregnancy. Risky and higher work is risky to health morbidity. Simple work is needed for health maintenance but heavy works are dangerous. Educated women known about balance of work compare to

uneducated women. So, education plays important work for work during pregnancy period.

Table: 6.6 Percentage Distribution of Respondents of education level and type of work

Level of education	Type of work during pregnancy				Total	
	Hard work		Normal work			
	Number	%	Number	%	Number	%
Illiterate	47	94.0	3	6.0	50	100.0
NFE/Primary	24	82.8	5	17.2	29	100.0
Secondary (6-10)	15	60.0	10	40.0	25	100.0
SLC+	-	-	6	100.0	6	100.0
Total	86	78.2	24	21.8	110	100.0

Source: Field, survey 2009

Above table shows that, the highest percentage of hard working respondents during pregnancy was of illiterates which is (94%) and only the (6%) illiterate respondents were in normal working. The SLC+ respondents were (100%) in normal working during pregnancy. If comparatively we see, the hard working respondents during pregnancy are more in percentage which is (78.2%) whereas only (21.8%) respondents seemed normal working. It is because Rai women depended on agriculture and study area is remote.

6.7 Education Level and Drinking Habit

Alcohol affects women health and child health during pregnancy. But study are majority of Rai community so all women drink alcohol. It is because in Rai community drinking is culturally approved.

Table: 6.7 Percentage Distribution of Respondents of education level and Drinking Habit

Level of education	Drinking alcohol during pregnancy				Total	
	Yes		No			
	Number	%	Number	%	Number	%
Illiterate	49	98.0	1	2.0	50	100.0
NFE/Primary	29	100.0	-	-	29	100.0
Secondary (6-10)	17	68.0	8	32.0	25	100.0
SLC+	1	16.7	5	83.3	6	100.0
Total	96	87.3	14	12.7	110	100.0

Source: Field Survey, 2009

Table 6.7 shows that (100%) NFE/primary graduate respondents have drinking alcohol during pregnancy. SLC+ graduate respondents have least drinking alcohol during pregnancy which is (16.7%) of total having drinking habit. It is clear that literate respondents take very few alcohol in comparison of illiterates ones. It is because drinking is culturally and social approved. It is regarded as a part of culture. They keep on drinking in different festivals and ceremonies.

6.8 Education Level and Complication during Pregnancy

Complication is risk for pregnancy. If complication is not solved, complication takes women life. Complication appears during delivery so we should care for during delivery.

Table: 6.8 Percentage Distribution of Respondents of Education Level and complication

Level of education	Complication during pregnancy				Total	
	Yes		No			
	Number	%	Number	%	Number	%
Illiterate	11	22.0	39	78.0	50	100.0
NFE/Primary	5	17.2	24	82.8	29	100.0
Secondary (6-10)	7	28.0	18	72.0	25	100.0
SLC+	1	16.7	5	83.3	6	100.0
Total	24	21.8	86	78.2	110	100.0

Source: Field Survey, 2009

This table shows that (22%) 0f illiterate respondents facing complication during pregnancy. The highest percent of secondary (6-10) graduates (28%) have facing complication during pregnancy. On the other hand, (16.7%)of total respondents facing complication was SLC+ graduate respondents. The lowest percent of secondary (6-10) graduates (72%) have not facing complication. Now, again we can conclude that the high level of education the low level of facing complication

6.9 Education Level and Place of treatment of complication

Complication is danger for pregnancy. It is determined by place. In hospital, treatment is better for complication during pregnancy. Hospital provides quality service. Educated women get treatment in hospital when they fell complication whereas uneducated women do not get such treatments from the hospital, private clinics, etc. Uneducated women believe local traditional treatment.

Table: 6.9 Percentage Distribution of Respondents of education level and place of treatment of complication

Level of education	Place of Complication treatment				Total	
	Health post		Local treatment			
	Number	%	Number	%	Number	%
Illiterate	1	8.3	11	91.7	12	100.0
NFE/Primary	-	-	4	100.0	4	100.0
Secondary (6-10)	6	85.7	1	14.3	7	100.0
SLC+	1	100.0	-	-	1	100.0
Total	8	33.3	16	66.7	24	100.0

Source: Field Survey, 2009

Table 6.9 shows that (100%) NFP/primary graduated respondents have got local treatment when they felt in complication. On the other hand, (100%) SLC+ graduated respondents have got health post treatment and lowest percent of illiterate respondents (8.3%) have got treatment from health post and highest percent of illiterate respondents (91.7%) have got treatment from local treatments when they felt complication during pregnancy. In this way, the higher education level of respondents seemed getting treatment from health post whereas low education level of respondents seemed getting local and traditional treatment. It is because

there are several factors for such type of beliefs, lack of reliable health facilities, distance to the health facilities, and lack of competent service provider costly service and lack of education.

6.10 Education Level and Place of delivery

The place of delivery is one of the most important factors affecting maternal health. In Nepal large proportion of maternal deaths occurs at home. Ninety percent mothers delivery at home.

Table: 6.10 Percentage Distribution of Respondent of education level and Place of Delivery

Level of education	Place of delivery				Total	
	Health Institutional		Home delivery			
	Number	%	Number	%	Number	%
Illiterate	4	8.0	46	92.0	50	100.0
NFE/Primary	4	13.8	25	86.2	29	100.0
Secondary (6-10)	11	44.0	14	56.0	25	100.0
SLC+	4	66.7	2	33.3	6	100.0
Total	23	20.9	87	79.1	110	100.0

Source: Field Survey, 2009

Table 6.10 shows that highest percent of illiterate respondents (92%) delivery at home and the lowest percent of illiterate respondents (8%) delivery at health institutional. On the other hand, SLC+ (33.3%) respondents delivery at home and (66.7%) delivery at health institutional. From this analysis of this date, we can conclude that the educated respondents delivery at health institutional whereas uneducated respondents delivery at home. This study shows that women of study area are passing through miserable conditions. Major reasons behind it are possibly the illiteracy and ignorance and lack of reliable health facilities.

6.11 Education Level and Use of delivery Kit

The objectives of using delivery kit are to safe women from maternal mortality and morbidity. Because of the lack of proper knowledge and education many women do not use delivery kit and as a result they use to be

suffered from various health problems. In comparison of uneducated women, the educated women can be conscious about using delivery kit.

Table: 6.11 Percentage Distribution of Respondents of education level and Use of delivery kit

Level of education	Use of delivery kit				Total	
	Yes		No			
	Number	%	Number	%	Number	%
Illiterate	1	2.0	49	98.0	50	100.0
NFE/Primary	6	20.7	23	79.3	29	100.0
Secondary (6-10)	10	40.0	15	60.0	25	100.0
SLC+	6	83.3	1	16.7	6	100.0
Total	23	20.0	87	80.0	110	100.0

Source: Field Survey, 2009

This table shows that, higher the education and higher the use of delivery kit. The highest percent of illiterate respondents (98%) reported that they did not use safe delivery kit. The lowest percent of respondents (20%) reported that they used safe delivery kit. The major reasons are lack of knowledge about safe delivery kit and accessibility to delivery kit.

6.12 Education Level and Postnatal Care Service

As mentioned previously, education is an important factor, which enhances the option for people. They want more facilities and conscious for betterment of life. Tendency of PNC services is slightly positive towards educated women than uneducated but the trends are not clearly pronounced.

Table:6.12 Percentage Distribution of Respondents of education level and postnatal Care Service

Level of education	postnatal care service				Total	
	Yes		No			
	Number	%	Number	%	Number	%
Illiterate	20	40.0	30	60.0	50	100.0
NFE/Primary	24	82.8	5	17.2	29	100.0
Secondary (6-10)	24	96.0	1	4.0	25	100.0
SLC+	6	100.0	-	-	6	100.0
Total	74	67.3	36	32.7	110	100.0

Source: Field Survey, 2009

This table shows that (60%) illiterate respondents have taken post-natal care services and the (40%) have not taken post-natal care services. On the other hand, (100%) SLC+ respondents have taken post-natal care services. In total (67.3%) respondents have taken PNC services and (32.7%) respondents did not have taken. By analyzing this table, we conclude that many literate respondents have taken PNC services whereas very few illiterate respondents have not taken. Therefore, as a whole we can say that the high level of education always have influence over illiterate women.

Chapter - Seven

Summary, Conclusion and Recommendation

The main objective of this chapter is to summarize the major summary, conclusion and recommendations of the study area about "Maternal Health Care Practice and Education Status of Rai Community of Chhinamakhu VDC". This study is based on primary data. The study area is selected from purposive sampling of Bhojpur district. Maternal health care practice is serious matter of overall reproductive health care practice in order to meet the objectives of the study.

7.1 Summary

The study is conducted from field survey based on the topic "Maternal Health Care and Education Status of Rai Community of Chhinamakhu VDC', Bhojpur. In this study Chhinamakhu VDC was selected under basis of the purposive sampling. From this VDC, 110 households were selected by using lottery method.

This study covered the total of 110 respondents of 110 household from this Rai community. In the study area total population was 512. Out of them, 47.9 percent are male and 52.1 percent are female. Highest percentage of both males and females are in 0-4 age (22.45%) and 20.97 percent which indicates that there is high level of fertility in the study area. Similarly, the lowest proportion of males is 1.22 percent 50-54 age group and the lowest proportion of female is 1.5 percent in age group 60+.

Among 110 respondents 45.5 percent are illiterate and 54.5 percent are literate. The highest 14.5 percent had an education only literate, and lowest 5.5 percent had up to post secondary level of education. Education condition is not good in the study area.

Agriculture is found to be as the major source of income, 74.5 percent respondents reported the agriculture as the main source of their income followed by daily paid labour 9 percent. Husband is the main earner in 84.5 percent respondents followed by 3.6 percent own self in the family.

Highest percent of respondents (43.6%) reported to have 10-19 ropani land followed by 29.1 percent reported to have 5-9 ropani and more 16.4 percent to have less than 5 ropani. Highest 98.2 percent of respondents in their house have radio facility, 81.8 percent have piped water and 23.6 percent have solar electricity.

Maternal Health Care Practice

- Highest percent of respondents 40 percent reported to be married in the age of over 20 years, followed by 18-20 years (35.3%). Twenty-four percent reported to be married before 18 years.
- Highest percent of respondents (62.7%) reported to have first child in the age of over 20 years, followed by 18-20 years (29.1%) and 8 percent reported to be before 18 years.
- Eighty-one percents of respondents have knowledge about antenatal visits. Of those 86.4 percent agree that health assistance should be visited for antenatal check-ups.
- Of those who received antenatal service (86.4%) respondents visited health post and only 6 percent respondents visited hospital.
- Fifty one percent respondents reported to take TT injection. Fifty two percent reported iron tablets.
- Seventy nine percent respondents reported to have worked during pregnancy. Sixty three percent reported to have done all type of works (collecting water, agriculture and household work.)
- Ninety four percent respondents reported to have taken usual food and only 6 percent respondents to have taken extra nutrition food.
- Eighty seven percent respondents reported that they have drinking habit during pregnancy.
- Twenty one percent respondents experienced complication during delivery and only eight respondents visited with doctor.
- A large majority of respondents 79 percent reported to delivery all birth at home. Highest percent of respondents 63 percent were assisted by relatives, followed by TBAS 10 percent. five percent respondents delivered without assistance, sixty seven percent reported to have taken PNC service.

Relationship between Selected Variables and Maternal Health Practices

- Highest percent of literate respondents have knowledge of an antenatal visit. Eighty three percent of literate respondents have known about antenatal care service whereas it is sixteen percent for illiterate respondents. Level of education and ANC and PNC service are positively related.
- Highest percent of house wife (78%) drink alcohol during pregnancy in the age group 40-44 years.
- Highest percent of literate respondents (72.9%) have taken ANC services and 40 percent of only literate respondents have taken PNC services.

7.2 Conclusion

The study was conducted to find out the maternal health care and education status of Rai community in Chhinamakhu VDC, Bhojpur. The questions were asked to 110 women (15-49 years age group). The survey indicates that occupational and economic conditions play an important role to maternal health care practices.

The study found that, the study area is remote. Rai community has its own culture. It is one of the ethnic groups in Nepal. This community is socially and economically poor. Agriculture is main occupation of the respondents and their husband. Business and doing job are also their occupation. In this community, there are various health service centers in the distance of half an hour to one hour but there is no sufficient kind of health services, health workers and equipments.

The study result shows that, service received rate of antenatal, delivery and postnatal care is not satisfied. The level of taking delivery service is low and postnatal care is also low, it is highly depended on education, and other socio-economic and demographic factor. On the other hand, family member's education played important role in the utilization of maternal health care practice.

The study shows that 79.1 percent respondents delivered baby at

home without any assistance of health worker and utilization of delivery kit. TT injection, iron tablets and having balance diet rate is also some appreciative. These all indicators prove that rural Rai women are passing a miserable life.

On the basis of major findings, we can generalize that maternal health care practice and education status in Rai women are not satisfied.

7.3 Recommendations

Based on study and experience gained during the study of the Rai community in the areas of Chhinamakhu VDC Bhojpur district, the following points are recommended to be considered while talking some programs in the community and making policies to all the related government and non-governmental institutions.

Overall literacy rate the population of the Rai community is low. Especially, the literacy rate of women is very low in comparison to men. Some concrete efforts should be done quickly so as to improve their education status so that the problem of the community is facing at this date may not be further prolonged.

Most of the population of the study are engaged in agriculture and house work so they have low level of income.

To improve the socio-economic and demographic condition of Rai community reservation in education and employment, financial support for higher education and income generating activities, and subsidy should be done in health facilities.

It is found that people of study area are deprived of toilet, communication and such types of physical facilities. Therefore, planning should be made to increase such facilities.

Maternal health care practices are highly influenced by education, socio-economic status, age at marriage and role of media. These all indicators are used at low level. So, different programmers like training, seminar and pictorial demonstrative programs should be carried out by

responsible.

A strong tie is found between education and health. Therefore, quality and practical education should be enhanced in the study area.

Due to the lack of information, many respondents were found not practicing hygienic rules. Therefore, information education and communication programs should be enhanced.

Role of the husband and other family member are very important for women's health. If they are aware and motivated about maternal health, it is very easy to take service to women. So different kinds of targeted programmed (awareness and legal) to these male should be implemented.

The national and international nongovernmental organizations are working in districts should also mobilize for the implementation of maternal health care programmers.

7.4 Issues for further research

This study is confined to a VDC. A large scale of research covering different parts of nation is essential. Very limited numbers of variables are included in this study. A wider research containing several variables is needed. A research including other areas of reproductive health is more advantageous.

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Appendix

Sample of Questionaire

Tribhuvan University

Central Department of Population Studies

Kirtipur, Kathmandu

"Survey for Maternal Health Care Practice and Education Status of Rai Community"

Introduction

District---------- VDC/ Municipality

Ward No:---------- Tole :----

Religion: ---------- Caste:---------

1) Can you provide me the following information?

S.N.	Name of HH member	Relation to HH (3)	Sex 1.Male 2.Female	Age	Education (7)	Occupation (8)	Marital status married unmarried
1							
2							
3							
4							
5							
6							
7							
8							

Code for col. (3)	Code for col. (7)	Code for col. (8)
01. HH	00. Illiterate	01. Agriculture
02. Husband/wife/spouse.	01. NFE/ Primary level	02. Service
03. Son/daughter	02. secondary (6-10)	03. Business

04. Father/mother-in-low	03. SLC+	04. Weaving
05. Sister/brother- in- low		05. Daily wage
06. Father/mother		06. Housewife
07. Nephew		07. Student
08. Relatives		08. Relatives

2) What is the main source of income in your family?

Agriculture	1
Business	2
Service	3
Cottage industry	4
Others	5

3) Who is the main earner of your family?

Husband	1
Self	2
Father/mother - in -low	3
Brother/sister -in-low	4

4) How much cultivatable land does your household own has ropani ?

---

5) What types of house do you have?

Stone	1
Cottage	2
Wooden	3
Others	4

6) Which source of light do you use in your household?

Electricity/solar	1
Kerosene	2
Fire	3
Others	4

7) Do you have following communication facilities?

Radio	1
Telephone	2
Television	3

Others 4

8) What is the main source of drinking water for members of your households?

Well 1
Piped water 2
Stream/River 3
Others 4

9) How long distance to water source.

---

10) What type of the toilet facility does your household have?

Modern 1
Traditional 2
No toilet 3

11) What type of fuel does your household mainly use for cooking?

Bio gas 1
LPG gas 2
Electricity 3
Fire wood 4

12) Do you have separate room for your children?

Yes 1
No 2

Individual information

1) How old were you at the onset of menstruation?

---

2) What was your age at first marriage?

---

3) What was your age at first conception?

---

4) How many live births? Have you had?(if no birth terminate go to the interview)

---

5) Are you currently married or are you widowed, divorced or separate?

Currently married	1
Divorced	2
Separate	3

6) If yes, are they all alive now?

Yes	1
No	2

7) How many of them have dead?

---

8) Are you currently pregnant?

Yes	1
No	2

9) If yes, what is the length of your pregnancy?

----------months.

10) Did you smoke during pregnancy?

Yes	1
No	2

11) Did you drink alcohol during pregnancy?

Yes	1
No	2

12) What type of work did you do during pregnancy?

Hard work	1
Normal work	2
No work	3

13) What kind of food did you take at the time of pregnancy?

Usual food	1
Extra nutritious	2

Others 3

14) Did you take antenatal care services?

Yes 1

No 2

15) It yes, where did you visit?

Hospital 1

Private clinic 2

Health post 3

Others 4

16) What is the distance to the nearest health facility?

---

17) Who provided the service?

Doctor 1

Nurse 2

Health assistance 3

TBA 4

Others 5

18) How many times did you receive ANC service during this pregnancy?

No. of times----------

19) How many months pregnant were you the last time received antennal care?

---

20) Did do the following activities during pregnancy?

Measure weight 1

Check blood pressure 2

Measure height 3

Urine sample 4

Blood sample 5

21) Did you face any complication during pregnancy?

Yes 1

No 2

22) If yes, how was complication solved?

Visited hospital	1
Traditional local treatment	2
Dhami /jhakri	3
No treatment	4
Others	5

23) Did you receive TT injection

Yes	1
No	2

24) If yes, how many times?

.....

25) Did you take iron tablet?

Yes	1
No	2

26) What was the frequency of meal per day at pregnancy?

Two times	1
Three times	2
Four and more times	3

27) What was the main reason of not taking ANC service?

Poor economic condition	1
Cultural values	2
Lack of knowledge	3
Others.....	4

28) Where did you deliver you last birth?

Home	1
Hospital	2
Health post	3
Relative's home	4
Others	5

29) Did you use delivery kit?

Yes	1
No	2

30) Who assisted during the delivery?

Doctor	1
Nurse	2
Health Assistance	3
TABs	4
Relative	5
No one	6

31) Did you take postnatal care service?

Yes	1
No	2

32) If yes, how many days after did you take the service?

---

33) Where did you visit for PNC?

Home	1
Hospital	2
Health post	3
Others	4

34) Whom did you visit ?

Doctor	1
Nurse	2
HA/AHW	3
TABs	4
Others-----	5

35) Did you receive vitamin capsule in two months after the pregnancy?

Yes 1

No 2

36) Did you husband co- operate for maternity care?

Yes 1

No 2