

# CHAPTER-1

## INTRODUCTION

### 1.1 General Background

Maternal health care is defined as the care that women received during pregnancy, delivery and after delivery. Maternal health care is the major component of reproductive health. 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

Many women in the developing world 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 increasing the risk to both the mother and the newborn baby, resulting frequently an unhappy outcomes.

Maternity care is the major contributing factor for reducing maternal mortality rate. 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 1,00,000 live birth. However, small community based studies in some remote areas of Nepal have shown MMR of over twice of this figure. The most common direct causes of maternal deaths are hemorrhage, sepsis, toxemia, obstructed labour and consequences of abortion.

Among the indirect causes of maternal mortality, the quality and accessibility to maternity care services stand ahead. Most women in Nepal reside in rural areas where only basic health care services are available at the Health Post and Sub Health Post plus some community based services provided by trained TBAs or FCHVs. Maternity care services available at all these levels are usually inadequate in quality and accessibility. The knowledge and skills of health care provider are most significant in the provision of quality of care, essential to respond to the needs of pregnant woman. However, the capacity of the various health workers categories differ considerably but mostly are weak

and unable to respond to women's needs effectively. Further more, accessibility to health facilities is very limited due to difficult terrain, lack of roads and facilities.

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. Almost 415 mothers die per 100000 live births (MOH, New Era and on Macro, 2002) here because they don't get basic treatment before during and after delivery. The matter of involvement in safe motherhood is the most crucial aspect for saving women's life. Many of the women are compelled to die because of late transportation to health facility where they are in delivery problem.

Poor countries like Nepal are suffering from various reproductive health complication or problem, low level of practice of anti natal care, delivery care and postnatal care which are the major problems of maternal morbidity and mortality. The major responsible causes for such problems are lack of education, poor access of health services, water sanitation facilities, low per capita income and gender discrimination.

In regarding with the study area, the socio-economic status and literacy status of women is very poor. During delivery and postnatal visits are comparatively lower here with respect to others. Overwhelming majority of the births are delivered at home and very little of births are assisted by health professionals. Most of these people are dependent on agriculture followed by labour. Still they like fishing more. Most of these Danuwari people have been residing on the banks of TAWA and MARUNA river for many years. Most of them even an old people do not know where they arrived from and settled there. But it is true that Danuwar are the Adivashi of Kamala Khunj.

## **1.2 Statement of the Problem**

Maternal health care problem is one of the burning issues in Nepal. Maternal health care practice is an important component, which aims to save the mothers life and to improve the health status of women with special emphasis on reducing maternal and neonatal mortality and morbidity. The main strategies of this programme focus on improving the quality and coverage of maternity health are services to all women.

Women who are empowered are in a better position to access information, make decisions, and act effectively to address their own and their children's health.

The health status of mother depends on factors such as age at marriage, age at child birth, delivery, antenatal care and postnatal care. Along with these factors poverty, ignorance, lack of education, lack of power to make decisions about their own health also contribute a lot in determining the maternal mortality and morbidity. Various types of private and governmental health agencies have started to launch the programmes for improving the health status of mothers. But satisfactory results have not been achieved yet.

Women of Nepalese society have higher work burden compared to men. But the facilities provided to them are very low. Agriculture is the dominant sector of the economy of Nepal. More women than men are involved in this sector (91% and 64%, respectively). As expected, rural women are more likely than urban women to be employed in the agricultural sector. Ninety percent of rural women compared with 47 percent of urban women are involved in the agricultural sector (NDHS, 2006). Nepalese women pass through the situation of over work which caused negative impact on their health status, especially on maternal health issues. Hence the majority of women do not have access to maternal health care services due to social, economic and political reasons.

Nepal is a multi-ethnic nation with diverse languages, religions and cultural traditions. Danuwar is one of the 59 indigenous groups of Nepal. According to 2001 census, the total population of Danuwar is 53,229 in Nepal, comprises 0.23 percent of national population. There have been identified 92 mother tongues in the 2001 census. Most of the languages spoken in Nepal are still confined to their oral traditions. Each of them has a rich oral heritage down form parent to child over a long period of time. Danuwar has not developed its own script. The 2001 Census has recorded the total Danuwar population 6 years of age and above 44,056 and their literacy rate is 41.20 percent. Among 53,229 Danuwar people, 52,833 are Hindus followed by 141 Buddhist and 108 Christian.

One of the problem in the data collection and reporting is that population of mother tongue speakers is lower than that of total population size of the Danuwar people. According to 2001 census, out of 53,229 total Danuwar population, only 31,849 (i.e. 0.14%) people speak Danuwari as mother tongue. Over the generations, some groups may not even speak their own mother tongue and it is likely that such language may die

sooner or little later. Nearly 75 percent Danuwari people are literate which is lower than national average 53.8 percent (CBS, 2001).

Demographic and Health Survey, 2001 reported that one in two pregnant women received antenatal care. 28 percent of mothers received antenatal care either form a doctor (17 percent) or nurse or auxiliary nurse midwife (11%). Another 11 percent of mothers received antenatal care form a health assistant or AHW. VHWs provided antenatal care to 6 percent of women and MCHWs provided care to 3 percent of mothers. TBAs provided antenatal care to less than 1 percent of mothers. Nearly 90 percent of the births are delivered at home. Majority of delivers (56%) are assisted by relatives and friends whereas no one assisted 11 percent of the deliveries. A large proportion of mother (79%) who delivered outside the health facilities did not receive any postnatal check up.

Maternal health care practice of Danuwar community is influenced by their cultural practices. They have their own kind of perception about maternal care. They worship to their god for the better health of pregnant women and unborn child. They believe that this kind of worshipping keep the pregnant women and the unborn child healthy and secure. Even by the religion they believe that procreation of the children is supposed to be a religious duty and culture. Children are supposed to be the blessing of god. They have the concept that their children will take care of them in their old age.

Thus, this study attempts to find out level of knowledge, perception and utilization of maternal health care practices of Danuwari women in Katari VDC of Udayapur district. It is believed that these women have normal level of knowledge, perception and utilization of maternal health care practices because this community is socially indigenous and have low socio-economic status. Not any research has been done in this field. Therefore, Danuwar 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 Danuwar community.

On the basis of above discussion made in statement of the problems some of the research question can be formulated. This study has attempted to provide the answers of the following research questions.

- ) What are the socio-economic and demographic characteristics of Danuwar community that is likely to influence maternal health care practices?
- ) What is the condition of maternal health care practices in terms of behaviour, practices and attitudes of Danuwar community?

- ) What kind of relationship can we find between maternal health care practices and educational status of Danuwar women at Katari VDC of Udayapur district?

### **1.3 Objectives of the Study**

The overall objectives of this study is to identify the status of maternal health care practices in Danuwar community. The specific objectives of this study are as follows:

1. To find out the socio-economic and demographic characteristics among Danuwar community.
2. To find out the status of maternal health care practices in terms of behaviour, practices and attitudes of the community.
3. To examine the relationship between maternal health care practices and educational status of Danuwar women of Katari VDC of Udayapur district.

### **1.4. Limitations of the Study**

Following are the limitation of the current study:

1. This study is limited to the Danuwar community. The results cannot be generalized to other communities.
2. This study is based on sample population of Danuwar community of Katari VDC of Udayapr district. So, it may not represent for all areas of Nepal.
3. The target population of this study is married women aged 15-49 years who have had a child or currently pregnant.
4. This study covers only some variables of maternity care. Therefore, predictions for all components of reproductive health cannot be made from this study.

### **1.5. Significance of the Study**

This study mainly focuses on the important care that the pregnant women require i.e. antenatal care, delivery care and postnatal care and its relationship with the different background characteristics. Maternal health care practices have significant role in reducing the large volume of maternal mortality. This study also attempts to analysis the overall socio-economic and demographic variables and impact on maternal health care practices. This study will provide baseline information about the recent status of maternal

health. Generally, this study helps to the policy maker, programme planner in the following ways:

- ) This study will be useful to local people to develop awareness and knowledge towards maternal health care.
- ) It will help to formulate the safe motherhood programmes and help to the future researchers as a guideline in similar studies.
- ) The findings of this study will be useful for planners, policy makers to improve the health status of mothers and to reduce the maternal mortality rate in Danuwar community of Katari VDC.

## **1.6. Organization of the Study**

This study has been summarized into six chapters. The first chapter deals the introductory part of this study. This chapter includes background of the study, statement of the problem, objective of the study, limitations of the study, significance of the study and organization of the study. The second chapter deals with the literature review. The third chapter is concerned with the methodology of the study which includes the study area, site selection, source of data, sample design, data collection and data management.

Similarly, chapter four provides the background characteristics of the respondents which includes demographic and socio-economic characteristics. Chapter five deals about maternal health care practices. The final chapter has been used to present the findings, conclusions and recommendations.

## **CHAPTER- TWO**

### **LITERATURE REVIEW**

This chapter attempts to present some literatures related to maternal health practices in Nepal as well as global reference. Maternal health care is one of the major issues related to the maternal morbidity and mortality. After the initiation of world motherhood strategy 1987, this topic has got worldwide emphasize. Nepal established special safe motherhood task force in 1993 to develop a national plan of action.

#### **2.1. Lesson form the World**

The international conference on population and development (ICPD) held in Cairo in 1994 intensified worldwide focus on the reproductive health. So, ICPD is a mild stone to guide the efforts regarding the reproductive health of women. According to the ICDP document, the reproductive health is defined as:- "A state of complete physical, mental and social well being and not merely the absence of diseases or infirmity in all matters relating to its functions and process. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and they have capability to reproduce and the freedom to decide if when and how often to do so." (UN, 1994-95)

Similarly, reproductive health care is defined as the constellation of methods, techniques and services that contribute to reproductive health and well being through preventing and solving reproductive health problems. (UNFPA, 1997)

Reproductive health and Sexual health is right for men and women. Today, gaps and failure in reproductive health care, combined with women's long established inequality and the pressures of society and family keep people all over the world from exercising their sexual and reproductive rights. This means denial of human rights causes the deaths of millions of people every year and many more are prematurely injured or infected. Most of these are female deaths from developing countries (UNFPA, 1997)

There is still big problem of maternal health over the world. Almost 99 percent of these problem occur in the developing world. WHO, 1996 estimated that about 500,000 women die each year as a result of pregnancy and a child birth. Almost 99 percent of these deaths occur in the developing world. The result is not only a tragedy of the women concerned but their entire family. (MOH, 1988)

WHO introduced the mother baby package programme and describes it as each intervention needed to achieve safe motherhood in short term. The package describes simple interventions needed before and during pregnancy, during delivery and delivery for the mother and new born (WHO, 1988)

In less developed countries life time risk of dying due to maternal cause is 150 times greater than that in developed region (Robey et. at. 1999). It is estimated that 290,000 women die annually due to pregnancy and child birth related complications in Bangladesh, India, Nepal and Pakistan (Choudhari, 2000). According to him the maternal mortality ratio is about 330 per 100,000 live births in SAARC countries. Most of the SAARC region has failed to achieve the ICPD to maternal mortality ratio.

Maternal deaths and illness not only affect women but it also affects her spouse, children and communities in many ways. The economic cost of mother's death includes her lost contributions to the family and its survivals. It increases mortality among her children, increased burdens of home maintenance and child care to the survivors and additional impact on communities and society, children are more likely to die if their parents die but much more likely if it is the mother. (UNFPA, 2000)

Every year 210 million women become pregnant. An estimated 30 million or about 15 percent of these women develop complications. More than 99 percent of these maternal complications occur in developing countries. There are 430 maternal deaths per 100,000 live births. In developing countries the figure is 480 and in developed countries it is 2 percent only. (WHO, 1998)

The lifetime risk of dying from pregnancy of child birth related causes is 1 in 20 in developing countries where as 1 in 100 in some developed countries. Lifetime risk of maternal death in developing countries is almost 40 times higher than in developed world.

Every year almost 8 million babies die due to late in pregnancy at birth or soon after birth due to poor maternal care and inadequate management of pregnancy related complications (Safe Motherhood Network, 2000)

In South Africa alone there is one maternal death every two minutes. Over 80 percent of pregnant women in South Asia are anemic, severe anemia increase a women's vulnerability to infection during pregnancy and birth and increase her risk of death due to obstetric hemorrhage (UNICEF, 2000)

In developed and developing countries, many men abuse women physically and emotionally even when they are pregnant. Based on data from 35 countries, World Bank



has reported that between one-quarter and one-half of women are physically abused by partner. (Drennan, 1998)

In Bangladesh pregnancy is kept hidden from the public eye as long as possible. A women is not supposed to complain about her suffering during pregnancy to her husband or mother-in-law unless it becomes unbearable. (Huque et al, 1999)

In India and Pakistan, two thirds or more women require permission from their husbands to visit a health center. (Abouzahr, 1998)

Utilization of maternal care is influenced by the social, economic, demographic and cultural factors "Level of mother's education, status of women, rural/urban residence, ethnicity, age and parity of women" are identified as some important variables that effect use of maternal health care. (Khanal, 1998)

According to MOPE 1990, among the SAARC countries Nepal was the country having highest maternal death rate. Nepal 515 deaths per 100,000 live births, Bangladesh (468), India (376), Pakistan (300), Bhutan (380), Maldives (200) and Sri Lanka (only 40) deaths were accounted.

### **Experiences from Nepal**

Women constitute more than half of the total population in our country. However, females are dominated in various ways within a family or society. They do not have control over their own fertility. Female literacy rate is poor compared to male. Women's status has a direct effect on the health and nutritional status of women and children. Since women are the primary caregivers, their status can impact the health status and survival of the children. Women who are empowered are in a better position to access information, make decisions and act effectively to address their own and their children's health.

The safe Motherhood Program in Nepal has adopted two major strategies to improve maternal health provide around the clock essential obstetric services and ensure the presence of skilled attendants at deliveries, especially at-home delivers (Ministry of Health, 2001). In recognizing that the majority of women do not have access to maternal health care services due to social, economic and political reasons, the Ministry of Health is emphasizing a multi-sectoral approach that encompasses medical interventions and non health programme that promotes access to and utilization of services.

Nepal is committed to the Millennium Development Goal (MDGS) and has developed various policies and strategies to maternal health care. The MDG targets for a

there fourths reduction in maternal mortality by the year 2015. The Ministry of Health and Population is working together with WHO, UNICEF, UNFPA, DFID, USAID, GTZ and other NGOs toward better access and higher quality service to improve (SSMP) is designed to improve infrastructural development through comprehensive emergency obstetric care, basic emergency obstetric care, birthing centers and human resource development and upgrade the skills of SBAs. A maternity incentive scheme has been adopted since 2005 to increase the demand for maternity services along with a focus on improving access to such services.

Maternal health is an important part of the health care system aimed at reducing morbidity and mortality related to pregnancy. 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 the child. The prevailing high mortality is related to low access to antenatal care, inadequate emergency obstetric care and postnatal care. Mainly low access to antenatal care is occurring by three different delays.

- ) Delay in deciding to seek the care
- ) Delay in reaching a health situation
- ) Delay in receiving care at the health facility

Nearly 10 percent of maternal death is caused by above three delays in Nepal. (Choudhary, 2000). Choudhary (1999) has stated that currently married women in general tend to receive more antenatal care compared to older women. The proportion of currently married women seeking antenatal care is lowest in Pakistan (26%) followed by India (35%) and highest in Nepal (44%).

The maternal mortality rate is an effective index to the quality of maternity care services in any given country. A national survey conducted in 1991 estimated the MMR at 515 per 100,000 live births. However, small community based studies in some remote areas of Nepal have shown MMR of over twice this figure. The most common direct causes of maternal deaths are hemorrhage, sepsis, toxemia, obstructed labour and consequences of abortion. The main target of safe motherhood programme is to reduce MMR from 515 to 400 per 100,000 live births of 10<sup>th</sup> plan (2006) and 250 by 2017 and to reduce neonatal mortality rate from 39 to 32 per 1000 by the end of 10<sup>th</sup> plan and 15 by 2017. MOH (2001/2002). But CBS 2001 has recently published in its population profile published on world population day 2007 that MMR has declined from 539 in 2001 to 281 in 2006. Similarly TFR has declined from 4.1 to 3.1 in 2006. Likewise infant mortality

rate has declined from 64.4 in 2001 to 48 in 2006 (Population Profile of Nepal, Published on the World Population Day, 2007 by CBS, Kathmandu, Nepal).

Education is one of the most influential factors affecting an individual's attitude, knowledge and behaviour in various factors of life. Not surprisingly, educational attainment in Nepal is very low among women, who are much more disadvantaged than men. The overall literacy rate in 2001 was 54.1 percent for both sexes, 65.5 percent for males and 42.8 percent for females (CBS, 2001). Education has been found to influence reproductive behaviour, the use of contraceptives, the health of mothers and children and hygienic habits. The lower literacy rates among females are the result of a variety of historical, economic and social reasons. Social prejudices against female education, restriction on mobility of female, low social status granted to the females, the system of early marriage and low participation of females in formal education are the main reasons for low female literacy rate. But now the situation is rapidly changing. Females have now greater access to primary as well as upper levels of education. There is wide gap between urban and rural areas in educational attainment. 20 percent of males and 57 percent of females in rural areas have never attended school compared with 10 percent of male and 30 percent of females in urban areas. (NDHS, 2006)

There is positive association between educational attainment and age at marriage because educated boys and girls may also consider early age at marriage as an obstacle to achieve social and economic mobility and therefore may postpone their marriages until they have a stable career path and a permanent source of income. And this process could delay the age at marriage of educated boys and girls. For men the singular mean age at marriage is 21.2 for the illiterate and 23.6 for the literate. The corresponding figures for women are 17.6 and 20.8 respectively (CBS, 2001)

Historically Nepal is a multi-ethnic nation with diverse languages, religions and cultural traditions. 2001 census listed 103 ethnic/caste groups, technically only 100 groups are identified. The Hindu religion still represents more than 80 percent of the total population by the census 2001. There have been identified 92 mother tongues (barring some 'unknown' languages) in 2001 census. Since the restoration of democracy there has been continual increase in awareness among linguistic minorities (including indigenous people) about their mother tongues. The National Committee of Nationalities noted 59 district cultural groups as Janajati (published in Nepal Rajpatra, February 2, 2002).

The quality of ANC can be assessed by the type of provider, the number of ANC visits, and the timing of the first visit. 44 percent of mothers received antenatal care form

skilled birth attendants (SBAs), that is, from a doctor, nurse or midwife. 28 percent of mothers received ANC from trained health workers such as a health assistant, MCHW or VHW. Less than 2 percent of women received ANC from TBAs or FCHV. 26 percent of women received no antenatal care for births in the five years before the survey. (NDHS 2006)

Among mothers who received ANC 57 percent reported that they were informed about pregnancy complications during their antenatal care visits 59 percent took iron tablets and 20 percent took intestinal parasite drugs while pregnant with their last birth. Nearly four out of five mothers with a live birth in the five years preceding the survey were protected against neonatal tetanus. However, less than two-thirds of pregnant women received two or more tetanus injections during their last pregnancy. An overwhelming majority of births in the five years before the survey were delivered at home (81%). Thirteen percent of births were delivered in a public health facility, 4 percent in NGOs and 1 percent in a private facility. One third of women received postnatal care. (NDHS 2006) Postnatal care is uncommon in Nepal. Less than one in five mothers receive postnatal care within the first 24 hours after delivery. (NDHS, 2006, pp. XXVI)

Finding from the 2006 NDHS shows that knowledge of family planning is nearly universal among Nepalese women. Women in urban areas are more likely to use a family planning method than rural women. The contraceptive prevalence rate for modern methods is 54 percent in urban areas compared with 43 percent in rural areas. 28 percent of currently married women in Nepal had an unmet need for family planning services, 11 percent for spacing and 16 percent for limiting births. 39 percent of currently married women used a contraceptive method. Data from three DHS surveys conducted in Nepal over the (NDHS 2001) last decade show an impressive increase (70%) in the use of modern contraceptives.

According to NDHS 2006, 73 percent women aged 15-49 have heard of AIDS. Education and wealth are strongly associated with AIDS awareness. Knowledge of AIDS is universal among women with SLC and higher level of education compared with just half of women with no education. HIV/AIDS prevention programs focus their messages and efforts on three important aspects of behaviour: delaying sexual debut (abstinence), limiting the number of sexual partners, staying faithful to one uninfected partner and use of condoms. The 2006 NDHS shows that 20 percent women have comprehensive knowledge of HIV/AIDS transmission. 7 percent of sexually active women and 2 percent

of sexually active men reported that they had had an STI and STI symptoms in the 12 months prior to the survey.

The 2006 NDHS indicates that there has been unprecedented decline in fertility from 4.6 in 1996 to 3.1 births per women in 2006. Fertility is considerably higher in rural (3.3 births per woman) than in urban areas (2.1 births per woman) NDHS 2006 shows a steady decline in the mean ideal number of children among currently married women over the past ten years, from 2.9 children in 1996 to 2.6 children in 2001 and to 2.4 children in 2006. These findings could also explain the declining total fertility rate in Nepal.

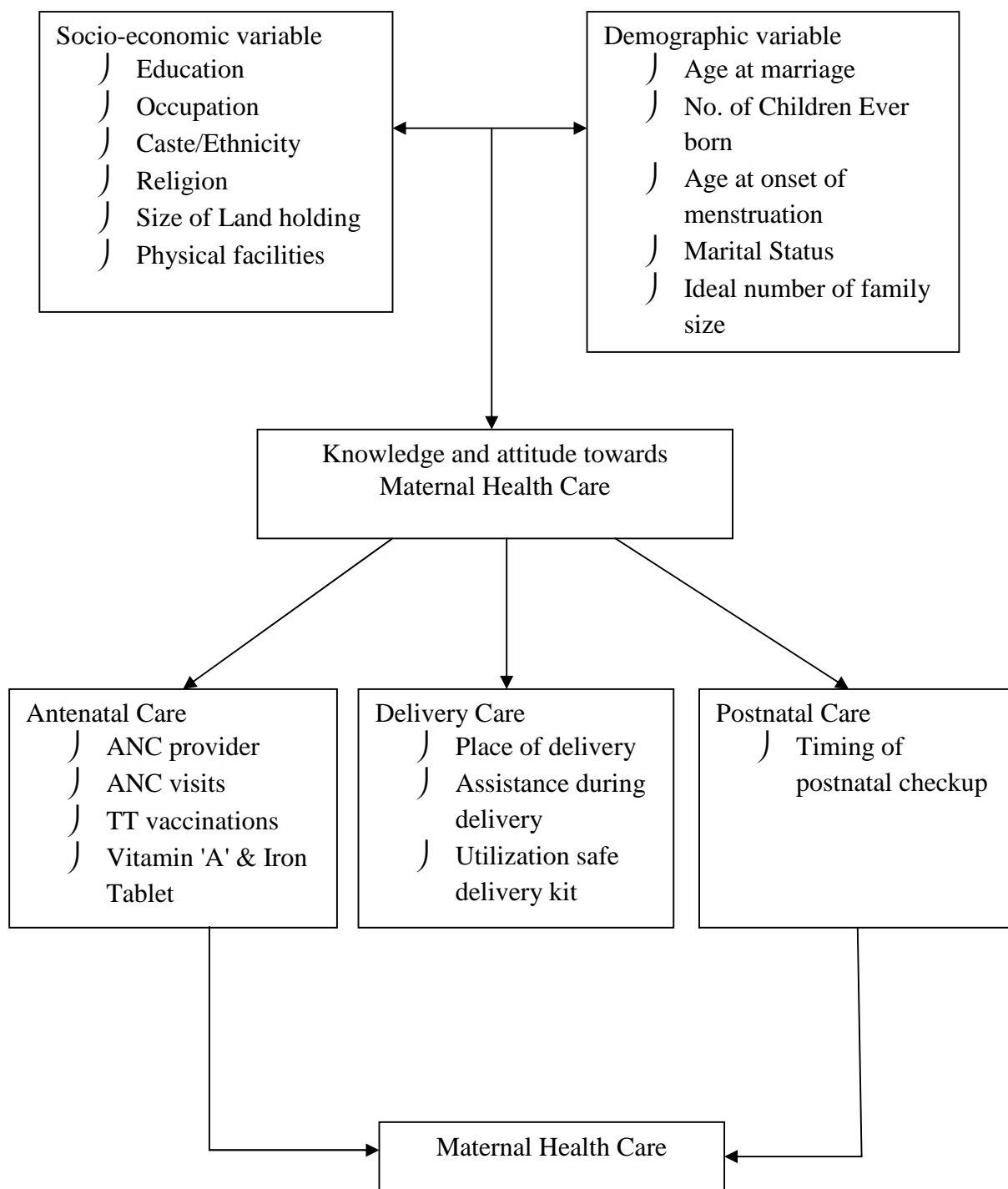
At current mortality levels, one in every 21 Nepalese children dies before reaching age one, while one in every sixteen does not survive to the fifth birth day. Data from the 2006 NDHS show that infant mortality has declined from 82 to 48 deaths per 1000 live births. Under five mortality has gone down from 117 deaths per 1000 live births to 61.

The wanted fertility rate in Nepal is 2.3 births per women (a decline from the 2001 level of 2.5 children per women), 0.8 children less than the actual total fertility rate. This implies that the total fertility rate is 34.7 percent higher than it would be if unwanted births were avoided. The gap between wanted and observed fertility rate is wider among rural women than among urban women. An increase in women's status and empowerment may lower fertility through a negative association with ability to meet family size and a positive association with ability to meet family-size goals through the effective use of contraception. If all unwanted births were prevented, the total fertility rate would fall to 2.3 births per women. (NDHS 2006, pp. 119)

## **Conceptual Framework**

The conceptual framework includes socio-economic and demographic variables as independent variables for determining the person's attitude towards maternal health care (dependent variable). It should be noted that the effect of these two variables on maternal health care practices through the knowledge and access of health services.

## Conceptual Framework for the study of Maternal Health Care in Nepal



## CHAPTER-THREE

### METHODOLOGY OF THE STUDY

Researcher can use various types of research methods to collect reliable data from research area. Methods may be different form one problem to another. This is descriptive type of research design. The following section describes the methodology adopted in the study.

#### 3.1. The Study Area

The Danuwar community living in Katari VDC of Udayapur district is purposively selected which lies in Sagarmatha zone, eastern part of Nepal. Sindhuli district lies in the western side of this VDC. This VDC has been extended to Risku VDC in the East, Hardeni VDC in the north and Tribeni VDC in the south. Katari VDC is situated on the banks of the Tawa river. It is surrounded by the rivers Tawa, Maruwa and Kakaru from three sides.

The main caste/ethnic composition of this VDC are Brahmin, Chhetri, Tamang, Limbu, Rai, Sunwar, Shah, Jaisawal, Thakur, Shing, Muslims, Damai, Kami and Danuwar etc. Proper market area has been extended within ward no. 4. Mainly Madhesi people and Newari people have followed business as their main occupation and they have been living in the market area. This study has been conducted specially in Danuwar community in order to identify the maternity care practices, behaviours and determinants variables. But it is surprise that not a single household of Danuwar community is living in the market area, ward no. 4. Most of the Rai, Danuwar are concentrated in ward no. 5, 6, 7, 8 and 9. But other kinds of Danuwar are living in ward no. 1, 2 and 3. There are facilities of electricity, transportation and telephone in this VDC. There are three secondary schools. Among them one is government school and other two are private boarding schools. There are 8 primary school out of which two are boarding schools.

Agriculture is the main occupation of the people living in rural area except ward number 4. Most of the cultivated land is irrigated. Paddy, maize and wheat are the main agriculture products of this VDC.

### **3.2. Site selection and Target population**

Katari VDC except ward no. 4 is the main study area. The study is based on the information from ever married women of age group 15-49 years who have experienced child birth or pregnancy- specially of Danuwar community at Katari VDC of Udayapur district.

According to census, the total population of this VDC was enumerated 16957. Among them 8560 were males and 8397 were females. There are 3007 households in total at Katari VDC with 5.6 TFR. Sex ratio of this VDC is 101.9.

### **3.3. Sources of Data**

The source of the data for this study is based on the primary data. This data was found by using direct interview among married women having at least one child of reproductive age of the above mentioned Danuwar community.

The survey was conducted through structured interview, the household type information was collected from the member of the household who had at least one child. The individual questionnaires were administered among women of reproductive age having at least one child and living with their husband and these questionnaire cover the information about antenatal, delivery and postnatal care as well as age, marital status, number of children they had, their age at child bearing and marriage and many other demographic and socio-economic characteristics.

### **3.4. Sample Design**

The data for this study have been collected from "Danuwar" women of age group 15-49 years who had at least one child. There are 3007 households throughout the Katari VDC. Danuwar settlement has been scattered in all wards of Katari VDC except ward no. 4. Such settlement has been condensed mostly in some certain wards like ward no.1,2, ward no.3, ward no.5 and ward no.6, ward no.7, ward no.8 and ward no.9.

The total sample of the study was 29 percent of total households of Danuwar from each ward whereas the total household of Danuwar is 12.86 of the total households of that VDC.



**Table 1: Distribution of Population by Wards and Danuwari HH**

W.N.	Total HH of Ward	Total Population of ward	Total Male	Total Female	Total HH of Danuwar	Total Populaton of Danuwar	Sample size (29%)
1	210	1338	674	664	59	254	17
2	182	1119	572	547	5	23	2
3	209	1237	644	593	60	245	17
4	379	2083	1075	1008	-	-	-
5	362	2104	1063	1041	49	211	14
6	229	1353	692	661	65	330	19
7	190	1240	582	658	5	19	2
8	838	4362	2238	2124	75	343	22
9	408	2121	1020	1101	69	288	20
Total	3007	16957	8560	8397	387	1713	113

Source: Field Survey, 2007.

The systematic sampling procedure was used for sample selection of respondents. The respondents for the study were selected from different households in each interval of 3. For this, households were imaginatively numbered and respondents were ranked in the interval of 3. If there was either of respondents in the ranking households, or respondents not living with their household, the nearest, household was taken for interview.

### 3.5. Data Collection

Quantitative techniques of data collection have been used. Questionnaire is the main tool of obtaining the information from research area and respondents. So, questionnaire is designed to obtain two types of information i.e. household information and individual information. These two types of questionnaire were administered among the respondents. Individual questionnaire was designed to obtain the information on maternal health care practices and educational status of women. on the other hand, household questionnaire was designed to obtain the information on age, sex, education and demographic characteristics of the household members.

In the field survey a few case histories have been conducted to obtain in depth information on their past and present experiences of maternal health care practices faced

in their life. And some key informant interview was also done for information on how social norms and behaviour affect towards maternal health care practice in Danuwar community and to know the attitude and behaviour towards maternal health care practices.

### **3.6 Data Management**

The study is based on primary data. Quantitative data have been used to complete this study. Data for this study have been collected from field observation. After completion of information collection from field visit, the collected information was processed myself without using SPSS in computer. It was very tedious and time consuming work to manage the collected questionnaires. Different types of dummy tables were used for the data analysis. Data were classified and tabulated in the designed model and then interpretation of tables was done based on cases count, percentage distribution and frequency tables.

## CHAPTER - FOUR

### DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS OF THE STUDY POPULATION

This chapter presents the socio-economic and demographic characteristics of Danuwar Community at Katari VDC in Udayapur district. Demographic and socio-economic characteristics play vital role in the development of society. Socio-economic characteristics include household composition, educational attainment, occupation, sources of drinking water and size of land holding. Demographic characteristics include age-sex structure of household population marital status, age at marriage of respondents, CEB and ideal no. of children.

In case of Danuwar many of them hid their own caste identity, either putting the surname of the high cast Hindu-groups. For example Adhikari-Danuwar, Tharu Danuwar, Kunwar-Danuwar, Choudhare-Danuwar and Rai-Danuwar etc. to which CBS labeled them as another category. Hence their population size appears 'small' on the whole in the country. A significant size of Danuwar people reported Nepali as their mother tongue because of their continuous interaction with the hill Nepali language speakers.

Danuwar people consist of two variations:

Danuwar: Adhikari, Gaurung, Patwari, Tharu, Dhimi, Bihari, Kunwar, Goreit, Raut, Singh, Choudhari etc.

Rai-Danuwar: Bakultare, Tamagade, Pangoltare, Sipali, Mandane, Nayagaule, Pandagaule, Jartare, Khampure, Pipaltare etc.

Their own socio-cultural values do not allow to marry them among Danuwar and Rai-Danuwar. But nowadays these socio-cultural values have been flexible and is being changed. Now, we can find rare examples of being crossed to each other.

#### 4.1 Demographic Characteristics

##### 4.1.1 Age sex structure of Study Population

Age sex composition plays an important role in determining the population dynamics. The population of study has been classified into five years age group. In the study area of Katari VDC, 113 households of Danuwar Community were selected at

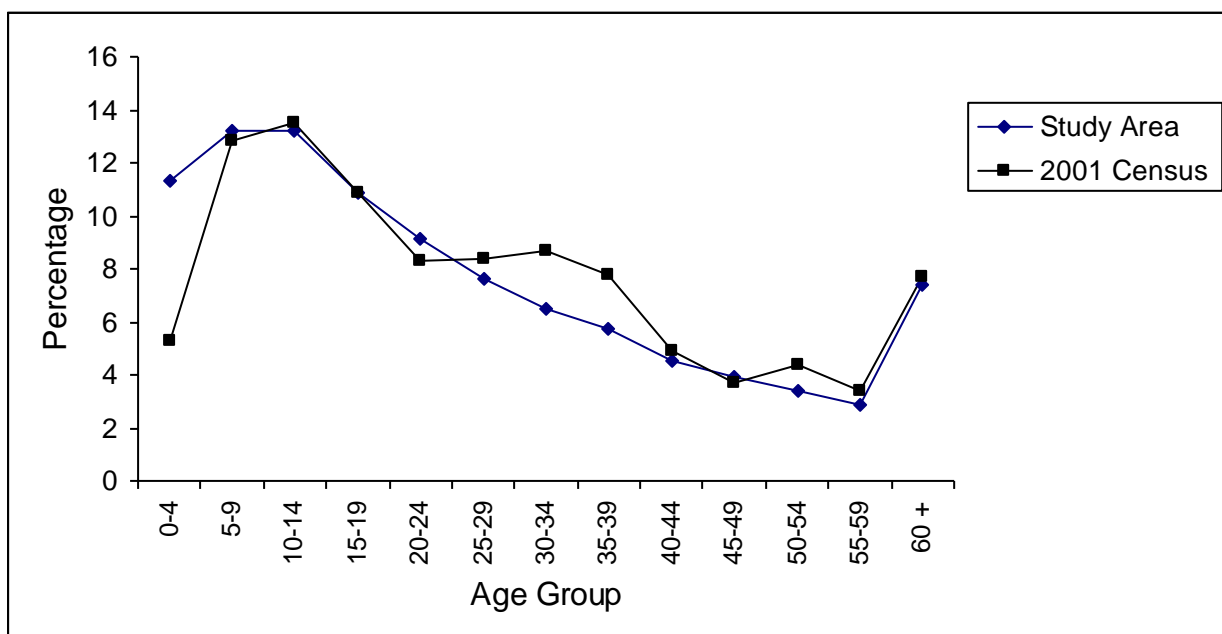
random sample out of 387 households of Danuwar community. Total population of Danuwar of Katari VDC is 1713. Out of them 49.3 percent were male and 50.6 percent were female. The sex ration of the study population was 97.3 which is lower than national figure 98.8. Table 2 shows the distribution of population according to age group and sex which indicated highest number in the age group 5-9 in female and 10-14 in male which is different to the national figure of Census 2001. The lowest percent of male and female were found in the age group 55-69 for both male and female. The sex ratio according to the age group was highest for the age group 55-59 and lowest for the age group 20-24.

**Table 2: Distribution of Sample Population by Age-Sex Composition**

Age group	Male		Female		Total		Census 2001	Sex ratio
	No.	%	No.	%	No.	%	%	
0-4	34	11.8	32	10.8	66	11.3	12.1	106.3
5-9	40	10.9	39	13.2	79	13.2	14.1	102.3
10-14	39	13.6	38	12.8	77	13.2	13.1	102.6
15-19	31	10.8	33	11.2	64	10.9	10.5	93.9
20-24	24	8.4	29	9.8	53	9.1	8.9	82.7
25-29	21	7.3	23	7.8	44	7.6	7.6	91.6
30-34	18	6.3	20	6.7	38	6.5	6.5	90
35-39	16	5.6	17	5.8	33	5.7	5.8	94.1
40-44	13	4.5	13	4.4	26	4.5	4.8	100.0
45-49	12	4.2	11	3.7	23	3.9	4.1	109.0
50-54	9	3.0	10	3.4	20	3.4	3.4	90.0
55-59	9	3.0	8	2.7	17	2.9	2.6	112.0
60+	21	8.1	22	7.4	43	7.4	6.6	100.0
Total	287	49.3	295	50.6	582	100.0	100.0	97.3

Source: Field Survey, 2007.

**Figure 4.1: Percentage Distributions of Study Population by Age and Sex**



#### 4.1.2 Marital Status of the Household Population

Marriage is one of the major components of population dynamic. It is universal in Nepal. Still early marriage is in practice in Nepalese society. Early marriage has become one of the threatening factors of maternal health. Women who marry early have a high risk of becoming pregnant and higher fertility in a society.

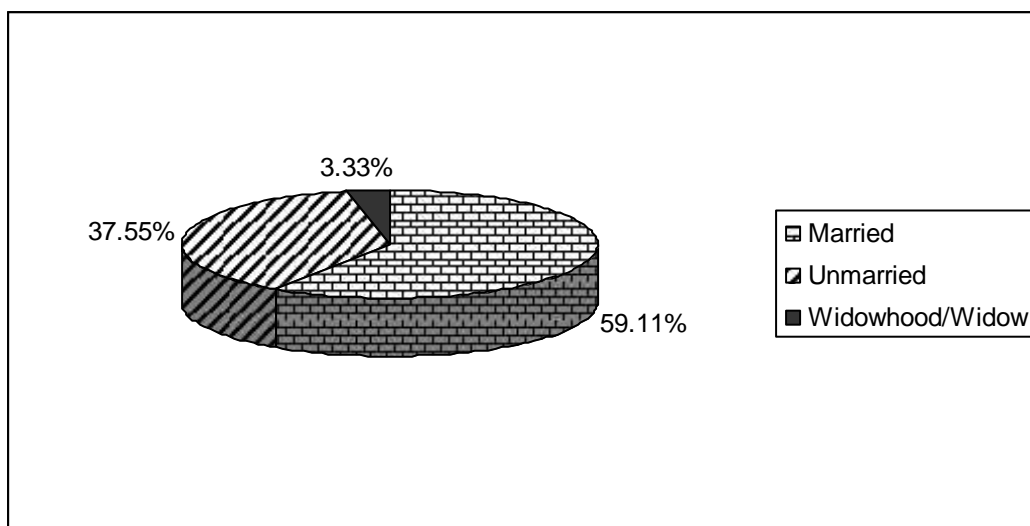
**Table 3: Percentage Distribution of Household Population of Age 10 Years and above by Marital Status and Sex**

Marital Status	Male		Female		Total	
	No.	%	No.	%	No.	%
Currently married	131	59.3	135	58.96	266	59.11
Unmarried	86	38.9	83	36.24	169	37.55
Widowhood/Widow	4	1.8	11	4.80	15	3.33
Total	221	100.0	229	100.0	450	100.0

Table 3 shows that the total population counted for marital status was 450 from the 113 households excluding those below 10 years. Among them 59.3 percent male and 58.96 percent female were currently married. The unmarried percent of male was little higher than female (i.e. 38.9 percent of male and 36.24 percent of female). The

percentage of widow was higher than that of widowed i.e. 4.8 percent for female and 1.8 percent percent for male.

**Figure 4.1.2: Percentage Distribution of Study Population Aged 10+ years by Marital Status**



#### 4.1.3 Age of Respondents

The respondents of this study are currently married women of reproductive age (15-49 years). This age composition of female population is one of major demographic indicators for fertility performance. If the population is higher in the middle age group 20-35 the fertility rate might be higher because it is considered as the most fertile period of reproductive span.

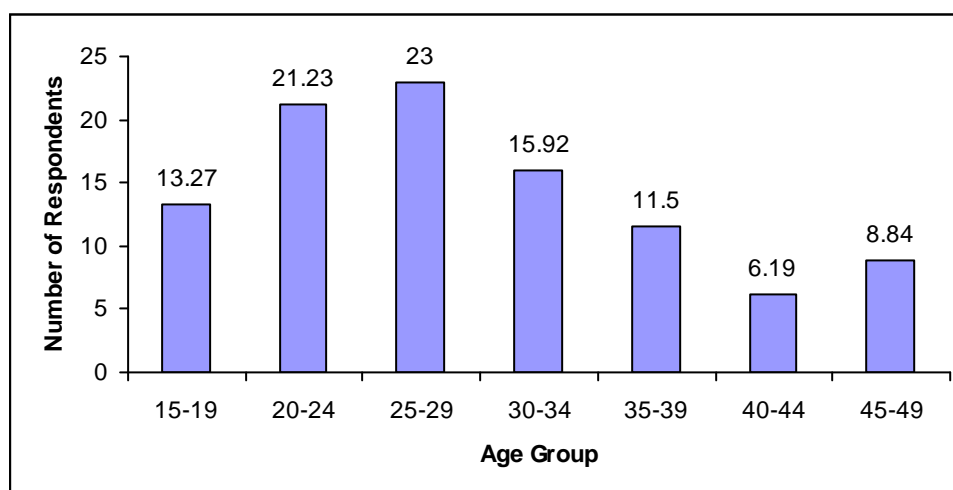
**Table 4: Percentage Distribution of Respondents by Age**

Age group	No. of Respondents	Percentage
15-19	15	13.27
20-24	24	21.23
25-29	26	23.00
30-34	18	15.92
35-39	13	11.50
40-44	7	6.19
45-49	10	8.84
Total	113	

Source: Field Survey, 2007.

Table 4 shows that the highest proportion of respondents were found in age group 25-29. The percentage of the respondents of this age group was 23 percent. It is followed by 20-24 age group i.e. (21.23%), 30-34 age group (15.92%), 15-19 age group (13.27%), 35-39 age group (11.5%).

**Figure 4.1.3: Percentage Distribution of Respondents by 5 Year Age Group**



#### 4.1.4 Age at marriage of Respondents

Age at marriage for women is another important factor which affects fertility performance as well as the use of maternal health care practices. Still Nepalese society practices early marriage. The mean age at marriage of women under study population was found very low i.e. 15 years. This low age at marriage may be due to various social, cultural and economic background of the community.

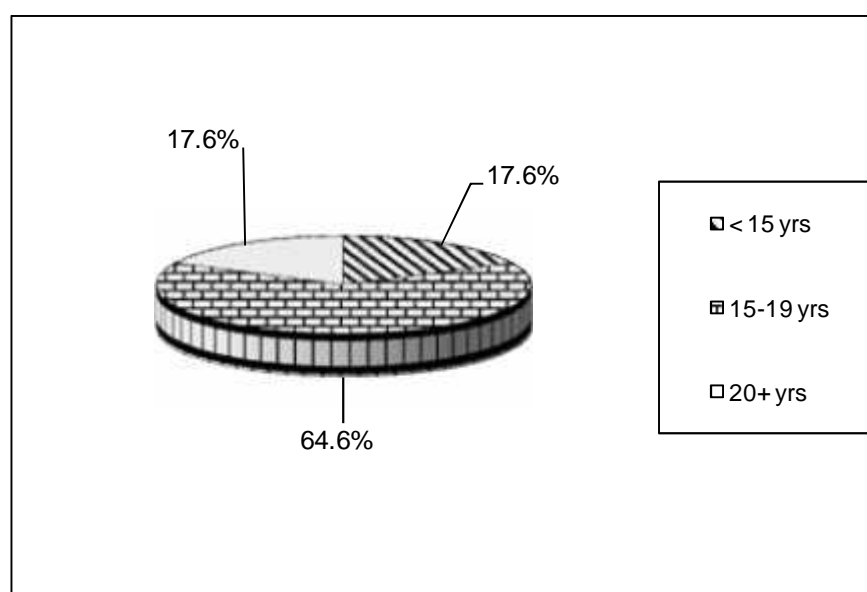
**Table 5: Age at Marriage and Level of Education of Respondent Women (15-49 yrs)**

Level of Education	Age at Marriage				Average Age at Marriage
	< 15 yrs	15-19 yrs	20 + yrs	Total	
No Education	6	18	4	28	16.0
Literate only	4	16	3	36	16.9
Primary	4	15	5	23	17.0
Secondary	-	1	1	24	17.5
SLC and above	6	23	-	2	19.4
Total	20 (17.6%)	73 (64.6%)	20 (17.6%)	113 (100%)	16.9

Source: Field Survey, 2007.

Table 5 presents that the mean age at marriage of respondents was found almost 17 years which is lower than the national average of 2001 CBS. This shows that most of the marriage occurred around 17 years age. Out of total respondents 17.6 percent were married before the age of 15 years, 64.6 percent were married within the age 15-19 years. Similarly, 17.6 percent were married above the age 20+. Women with no education tend to marry two years earlier than women with some secondary education. There is a strong positive relationship between education and age at first marriage.

**Figure 4.1.4: Percentage distribution of respondents (15-49 years) by Age at marriage**



#### 4.1.5 Children Ever Born

CEB is another demographic characteristic of any population. In this study most of the women were interviewed below the age of 40 years.

**Table 6: Number of Children Ever Born by Level of Education**

Level of Education	No. of CEB			Total No. of Respondent	Mean CEB
	1-2 children	3-4 children	5+ children		
No Education	8	15	5	28	3.5
Literate only	12	19	5	36	3.4
Primary	8	12	3	23	3.2
Secondary	8	13	3	24	3.0
SLC and above	2	-	-	2	2.8
Total	38 (33.6%)	59 (52.2%)	16 (14.1%)	113 (100.0%)	3.3

Source: Field Survey, 2007.



Table 6 shows that 33.6 percent women had ever born 2 children. It is followed by 14.1 percent women had ever born 5 or more than 5 children. Majority of women (52.2%) had ever born 3-4 children. The mean number of children ever born for all women is 3.3 which is higher than nation figure 2.7 (NDHS, 2006). The respondents with no education have highest mean CEB 3.5 whereas the respondents with SLC and above have lowest no. of CEB 2.8. It is found that as the women's level of education increases, their number of children ever born decreases because educated women in Nepal are more likely to prefer a small family size.

#### 4.1.6 Ideal No. of Children of Respondents

Both women and men in Nepal prefer a small family size with only marginal differences between them in the ideal number of children. Three out of five women and men preferred an ideal family size of two children with only 8 percent of women and 6 percent of women favouring less than two children. The mean ideal number of children is 2.3 among all women and 2.4 among currently married women (NDHS 2006). By knowing total fertility and an ideal family size, unwanted birth can be calculated. Unwanted births are those that exceed the number mentioned as ideal by the respondent.

The wanted fertility rate in Nepal is 2.3 births per women. But the total fertility rate is 3.1 (NDHS 2006). This implies that the total fertility rate is about 35 percent higher than ideal family size. So if unwanted births were avoided the level of fertility would decrease by 39 percent (NDHS 2006).

**Table 7: Ideal Number of Children by Level of Education**

Level of Education	Ideal No. of Children			Total No. of Respondents	Mean Ideal No. of Children
	< 2 children	2-3 children	4+ children		
No Education	1	21	6	28	3.5
Literate only	4	28	4	36	3.2
Primary	3	18	2	23	3.0
Secondary	3	19	2	24	2.0
SLC and above	1	1	-	2	2.0
Total	12 (10.6%)	87 (77.0%)	14 (12.4%)	113 (100.0%)	

Source: Field Survey, 2007.

Table 7 shows that the mean ideal number of children for all women in the study area is 2.9 which is higher than national figure 2.3 (NDHS, 2006). Majority of respondents (i.e. 77%) have two to three ideal number of children. Respondents with no education have highest mean ideal number of children 3.5 but the respondents with SLC and above have the lowest ideal number of children (i.e. 2.0). There has been a steady decline in the mean ideal no. of children among educated women. The findings show that higher the level of education lower the level of ideal no. children.

## 4.2 Socio-Economic Characteristics

### 4.2.1 Educational Status of Respondents

It is very important to examine the educational status of respondents because it effects to the personal perception of the mother. Many mothers are unknown about their personal hygienic activities. It is considered that educated mothers are more aware on the issue of maintaining the quality of their health and their children than non educated.

Table 8 shows the educational status of respondents.

**Table 8: Percentage Distribution of Educational Status of Respondents**

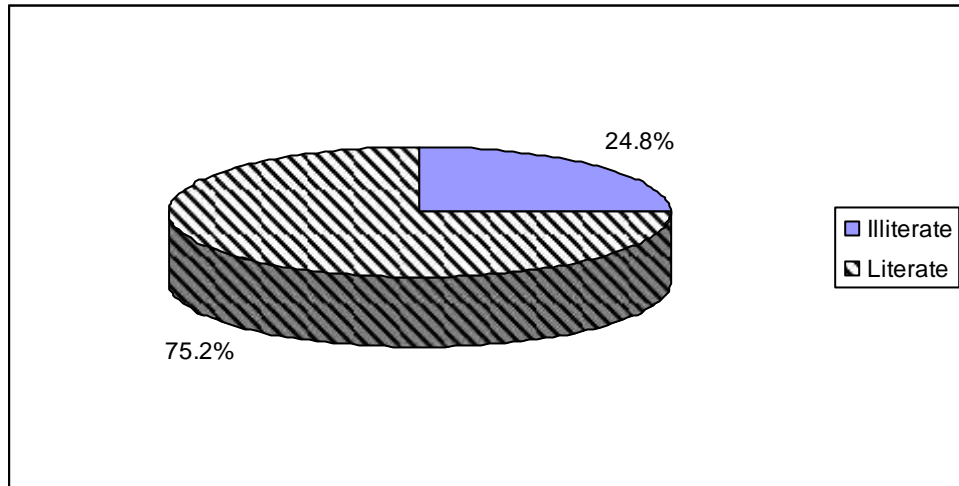
Educational Status	No. of Respondents	Percentage
Illiterate	28	24.8
Literate	85	75.2
Total	113	100.0
<b>Level of Education</b>		
Primary Level	23	27.0
Lower Secondary Level	16	18.8
Secondary Level	8	9.4
SLC and above	2	2.3
Literate only	36	42.3
Total	85	100.0

Source: field Survey, 2007.

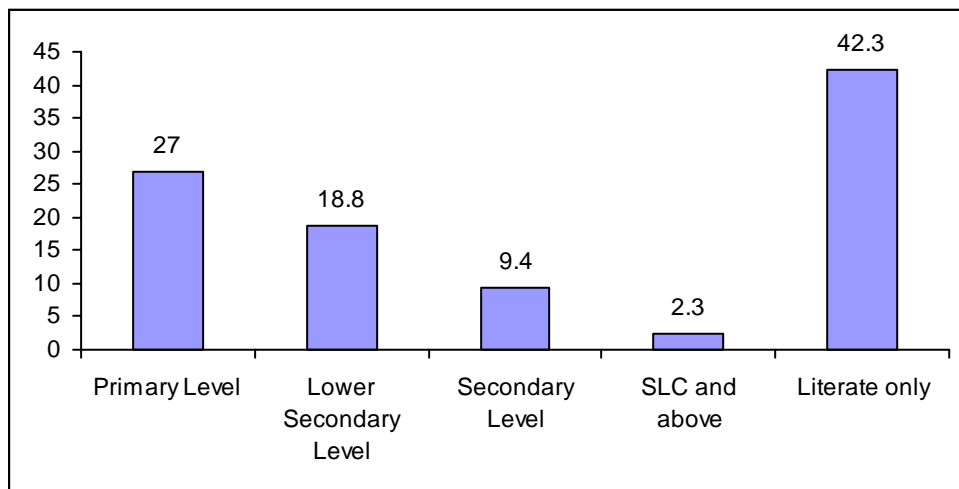
Table 8 shows that higher percent of respondents are (75.2%) are literate followed by primary level of education (27%) and lower secondary level (18.8%). We conclude

that as the level of education increases the no. of respondent decreases. Number of respondents varies inversely with the level of education.

**Figure 4.2.1 (a): Percentage Distribution of Respondents by Literacy**



**Figure 4.2.1 (b): Percentage Distribution of Respondents by Level of Education**



#### **4.2.2 Distribution of Respondents by Source of Income**

Occupational status of households and quality of life has positive relationship with demographic indicators. Occupation is important factor which influence the social, economic, cultural, political and religious variables. Occupational status is associated with the life standard of individual. Occupational status plays vital role in promotion and protection of individual health as well as community health.

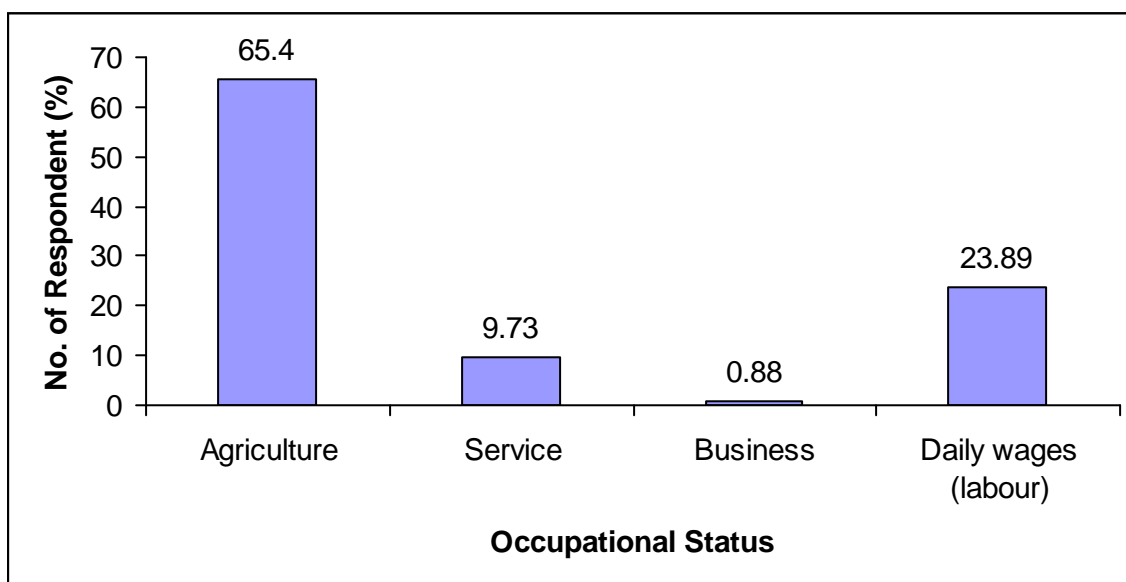
**Table 9: Percentage Distribution of Household Population aged 10 Years and Above by Major Occupation**

Major occupation	No. of Respondents	Percent
Agriculture	74	65.4
Service	11	9.73
Business	1	0.88
Daily wages (labour)	27	23.89
Total	113	100.00

Source: Field Survey, 2007.

Table 9 shows that highest percent of respondent (i.e. 65.4%) depend on agriculture. Although this figure is remarkably less than the national average. Since Danuwar community is living very near from the market i.e. Katari Bazar and college named Udayashree Campus, agriculture dependency is being decreased. The second largest source of income for 23.89 percent respondents is daily wages as labour force. Only 0.88 percent people are dependent on Business.

**Figure 4.2.2: Percentage Distribution of Respondents (15-49 years) by Occupational Status**



### 4.2.3 Language

Nepal is a multi-religious and multi-ethnic society. Data on language spoken at home is usually analyzed through mother tongue. A mother tongue is defined as one spoken by a person in his/her early childhood. According to the interview results all enumerated household members used Danuwari language as their mother tongue but almost all of them can communicate Nepali fairly as well.

### 4.2.4 Religion

After 2<sup>nd</sup> revolution in Nepal, the kingdom of Nepal has not any it's own religion. Each people are free to select the religion. From the field survey in the study area, all the households in the sample are reported to have been Hindu religion.

### 4.2.5 Size of Land Holding

Nepal is a agricultural country where almost 80 percent people are dependent in agricultural sector (CBS 2001). Hence the size of the land holding also represents the level of economic status of people. Being marginalized from the major fertile land holding some of the caste/ethnic group like Danuwar community have hardly been able to safe their land. It is seen that majority of the household have been changed into landless people. The size of the land holding by the household under study is presented in the table.

**Table 10: Percentage Distribution of Cultivated Land among the Respondents**

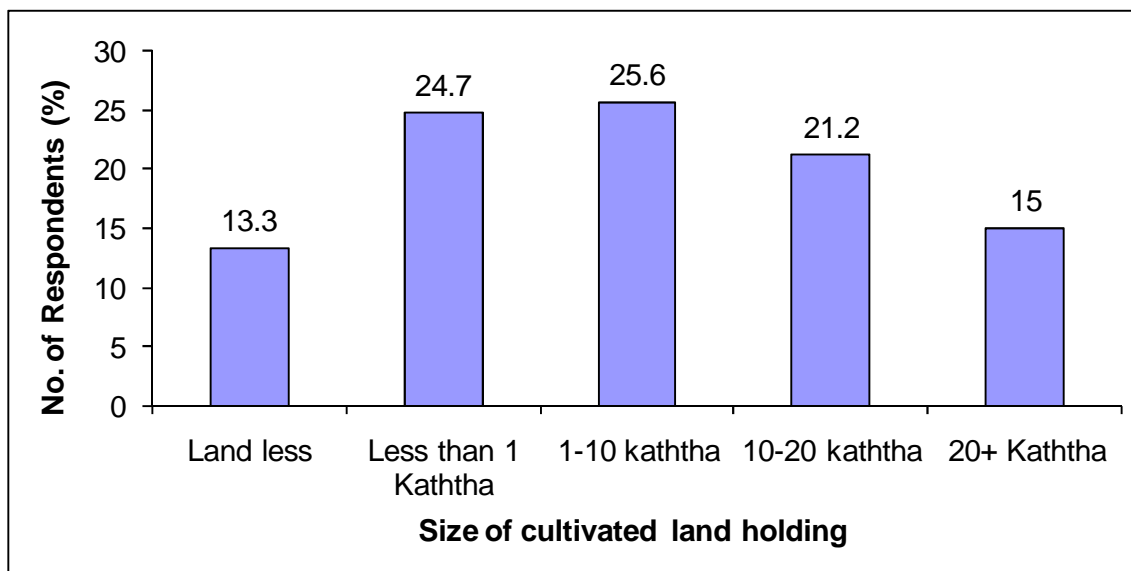
Size of Land	No. of Respondents	Percent
Land less	15	13.3
Less than 1 kaththa	28	24.7
1-10 kaththa	29	25.6
10-20 kaththa	24	21.2
20+ kaththa	17	15
Total	113	100.0

Source: Field Survey, 2007

Table 10 shows that there were still 13.3 percent people have no any land of their own. 24.7 percent people have land 1 kaththa or less than 1 kaththa where they have built

their small house made of bamboo, mud and wood. It is seen that majority of the people are still facing with poverty.

**Figure 4.2.5 Percentage Distribution of Cultivated Land by land ownership**



#### **4.2.6 Physical Facilities**

Physical facilities available in their household were observed in the study population. Respondents were asked about the source of light, communication media, source of drinking water, housing condition, toilet facilities etc.

Table 11 shows that 49.0 percent respondents have got electricity as a source of light. Radio and Tape-recorder is the main source of communication even there is available of electricity, facility of drinking water is considered better in the study area. But still 21 percent respondents are using well and 15 percent are using KUWA as the source of water.

Latrin facility is not good in most of the rural areas of Nepal. In study area also, they do not have any latrin facility. Very few people have used modern type latrin facility. This event clears that they must have been facing with their health and sanitation problem.

Physical facilities as explained above play an important role to indicate the social and economic status of people. Electricity and communication help the people to make them aware with the contemporary world. Scarce of source of drinking water and toilet facilities are the major cause of spreading communicable diseases. Water borne diseases and air born disease such as diarrhoea, dysentery, typhoid etc. spread through human

extra and dirty water. Proper management of safe and healthy toilet and clean drinking water play a positive role in enhancing the maternity and child health.

It is seen that a big proportion of households are still facing reported to have not any latrine facility. This is an indicator of weak health and sanitation condition in the Danuwar community.

**Table 11: Distribution of Physical Facilities Available in the Household**

<b>Facilities</b>	<b>No. of Respondents</b>	<b>Percentage</b>
<b>Source of Light</b>		
Kerosene lamp	54	47.78
Solar	3	2.65
Electricity	56	49.55
<b>Communication</b>		
Radio	50	44.24
Tape recorder	27	23.89
T.V.	15	13.27
None	21	18.58
<b>Source of Drinking Water</b>		
Piped water	27	23.89
Tubel	50	44.24
Well	21	18.58
Kuwa	15	13.27
<b>Type of Latrine</b>		
Traditional	36	31.87
Modern	15	13.27
None	62	54.8

Source: Field Survey, 2007.

This chapter IV concludes that Danuwar community is one of the socially marginalized and economically disadvantaged ethnic group residing in the inner Terai of Nepal. Literacy rate is observed satisfactory in this community. There is 75.2 percent women are literate. But among them majority of women 42.3 percent are only literate.

They have never been to school in their life. Most of these women have been literate by participating in a literacy program organized by non-government sector.

It is observed that the proportion of women working in fishing is being decreased. The highest percent of women 65.4 percent depend on agriculture followed by service 9.7 percent. Almost all of the women uses their mother tongue within the family and their own community but all of them can communicate Nepali fairly as well. All the household in the sample are reported to have been Hindu religion.

About 13 percent respondents are absolutely landless. Nearly 25 percent respondent have only 1 kaththa of land for residence.

Besides toilet facility, more than fifty percent women are facilitated with electricity, communication and clean drinking water.

Demographic indicators of Danuwari women were observed not satisfactory. The majority of women had got married in the interval of age group 15-19. Their average CEB was observed 3.3 but their ideal family size was 2.9. Among the female percentage of widow as higher than that of widowed (i.e. 4.8% for female and 1.8% for male). Nearly 36 percent female were unmarried during the survey.



## CHAPTER - FIVE

### MATERNAL HEALTH CARE PRACTICES

The provision of care for women during pregnancy and child birth is essential to ensure healthy and successful outcome of pregnancy for the mother and her new born infant. Many women in the developing world do not have the privilege or the access to basic health care services during pregnancy and child birth. Women often deliver in unhygienic surroundings without the help of trained birth attendant, increasing the risk to both the mother and the new born baby, resulting frequently in unhappy outcomes.

Maternal health care practices mean maintenance and promotion of maternal health status. This concept includes antenatal, delivery and postnatal cares. This chapter deals with the major aspects of maternal health care in the study area.

#### 5.1 Age of Respondents at Onset of Menstruation

Only women can conceive and give birth to children within the certain age limits. A female is considered biologically capable of bearing a child after menstruation. Her capacity to bear children comes to an end with onset of menopause.

**Table 12: Percentage Distribution of Respondent by Age at Onset of Menstruation**

Age at onset of menstruation	No. of respondents	Percentage (%)
12	18	15.9
13	69	61.0
14	24	21.2
15+	2	1.7
Total	113	100.00

Source: Field Survey, 2007.

Table 12 shows that 61 percent respondents had their menstruation at the age of 13 which was followed by 21.23 percent respondents at the age of 14 and 15.9 percent respondents at the age of 12. Very few (1.76%) respondents got their menstruation at the age of 15 and above.

## 5.2 Antenatal Care Practices

There are different components of maternal health care. Among them antenatal care is the important one. Antenatal Health Care Services are the health care facilities that a women gets during her pregnancy period. It can be defined as the care of mother before the delivery. Under antenatal health care, TT immunization receiving iron tablets, quality and frequency of food intake and physical work are included in this section.

### 5.2.1 Utilization of Antenatal Care Services

In this survey, 113 married women in age group 15-49 who had at least one child were eligible respondents and individual questionnaire was asked about the utilization of antenatal care services. Younger women are more likely to use antenatal services than older women. The utilization of antenatal care services is positively associated with mother's level of education. Antenatal care can be more effective in avoiding adverse pregnancy outcomes.

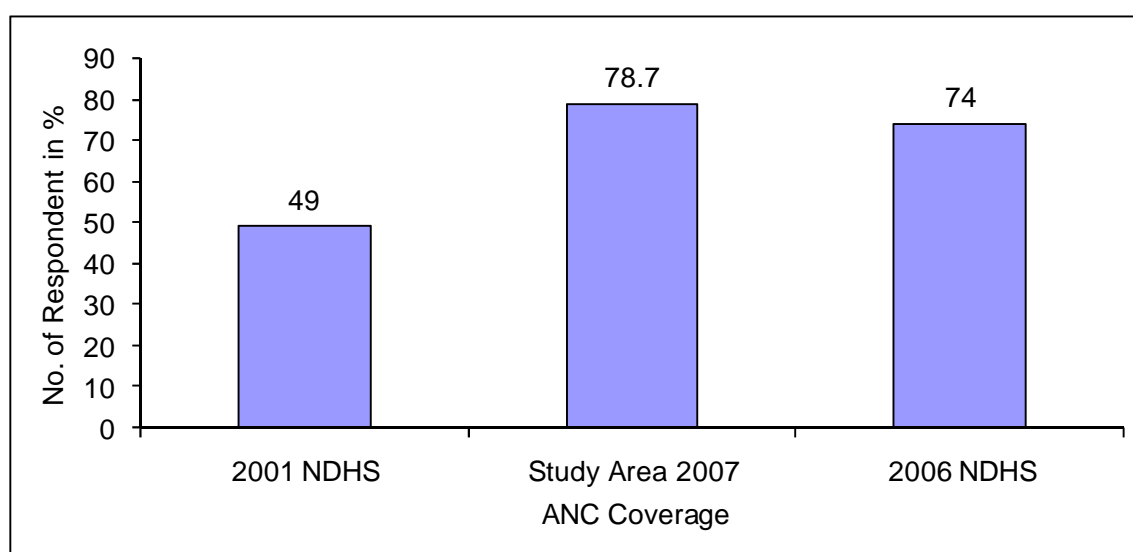
**Table 13: Percentage Distribution of Respondents by Utilization of Antenatal Care Services**

Utilization of ANC	No. of Respondents	Percentage (%)	NDHS 2006 (%)
Yes	89	78.7	74
No	24	21.3	26
Total	113	100.0	100

Source: Field Survey, 2007.

Table 13 shows that 78.7 percent respondents received antenatal service during pregnancy period. Similarly, 21.3 percent respondents did not receive antenatal care during pregnancy period. The study shows that there is some improvements in the utilization of antenatal services compared with the national average (50%). Observation indicates that most women who receive antenatal care get it at a relatively late stage in the pregnancy and do not make the minimum recommend number of antenatal visits. When the survey result is compared with the NDHS 2001 result 78.7 percent lies in between urban (84.6%) and rural (37.5%) women. The result shows that there is satisfactory improvement in the utilization of antenatal services because national figure of 2006 NDHS is also 74 percent only.

**Figure 5.2.1 : Comparing Distribution of Women of Study Area with NDHS by ANC**



### 5.2.2 Utilization of Antenatal Care by Education

Education is an important factor which motivates people to receive maternal care to protect them from arising danger sign. The utilization of antenatal care services is positively associated with mother's level of education. The different components of antenatal care received varies with women's level of education, with educated women much more likely to have received all components of antenatal care than uneducated women.

**Table 14: Percentage Distribution of Respondents by Utilization of ANC and Level of Literacy Education**

Literacy and Education	Utilization of ANC				Total	
	Yes		No		Number	Percent
	No.	Percent	No.	Percent		
Literate	69	61.1	16	14.2	85	75.2
Illiterate	20	17.7	8	7.1	28.0	24.8
<b>Total</b>	<b>89</b>	<b>78.8</b>	<b>24</b>	<b>21.3</b>	<b>113</b>	<b>100</b>
<b>Level of Education</b>						
Primary	18	21.2	5	5.8	23	27.0
Lower Secondary	12	14.1	4	4.7	16	18.8
L. Secondary +	10	11.7	-	-	10	11.8
Literate Only	29	34.1	7	8.3	36	42.4
<b>Total</b>	<b>69</b>	<b>81.1</b>	<b>16</b>	<b>18.8</b>	<b>85</b>	<b>100</b>

Source: Field Survey, 2007.

Table 14 shows that 75.2 percent respondents are literate. Among them 61.1 percent received ANC services out of 25 percent illiterate respondents 17.7 percent respondents received ANC. In total out of 113 respondents, 89 (i.e. 78.7%) respondents received ANC which is higher than national average (i.e. 74%) from NDHS 2006. Since, most of the illiterate respondents are residing very near from health post their percentage is higher than literate respondents regarding ANC visit.

### 5.2.3 Place Visited for ANC Services

Institutional deliveries are not common in Nepal. Antenatal Care Service can be received from hospital, primary health care centre, health post, sub-health post and private clinic. Nepalese children are delivered at home either without assistance or with the assistance of TBAs or relatives and friends. At the national level only 13 percent of births are delivered at health facilities compared with 81 percent at home and 1 percent in a private facility in 2006 NDHS.

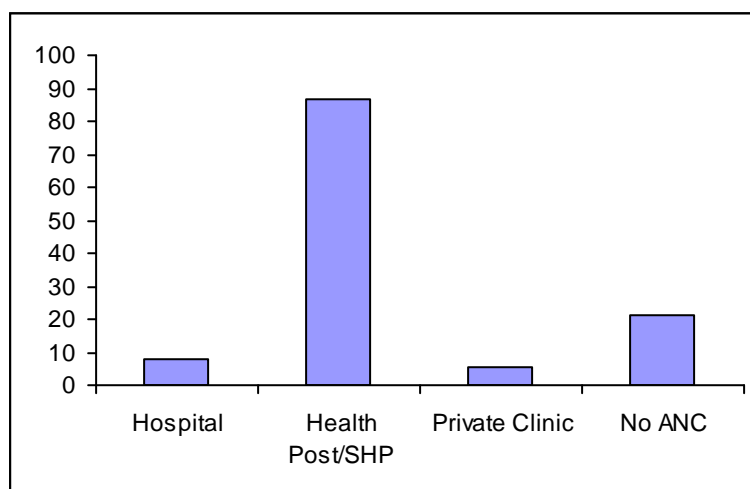
**Table 15: Percentage Distribution of Respondents by Place Visited For ANC Services**

Place of ANC Services	Respondents	Percent
Hospital	7	7.8
Health Post/SHP	77	86.5
Private Clinic	5	5.6
No ANC	24	21.2
Total	113	100.0

Source: Field Survey, 2007.

Table 15 shows that out of 113 antenatal care receivers 7.8 percent had received ANC from Hospital and 5.6 percent from private clinic. Majority of respondents (86.5%) had received the services from the HP/SHP. 21.2 percent respondents had received no antenatal care which is lower than national figure (25%) from NDHS 2006.

**Figure 5.2.3: Percentage Distribution of Respondents by Place Visited For ANC Services**



#### 5.2.4 ANC Care Provider

Institutional deliveries are not common in Nepal. Assistance by skilled health personnel during delivery is considered to be effective in the reduction of maternal and neonatal mortality. Births delivered at home are usually more likely to be delivered with assistance from a health professional, whereas births delivered at health facility are more likely to be delivered by health personnel with at least minimal training in the provision of normal delivery services.

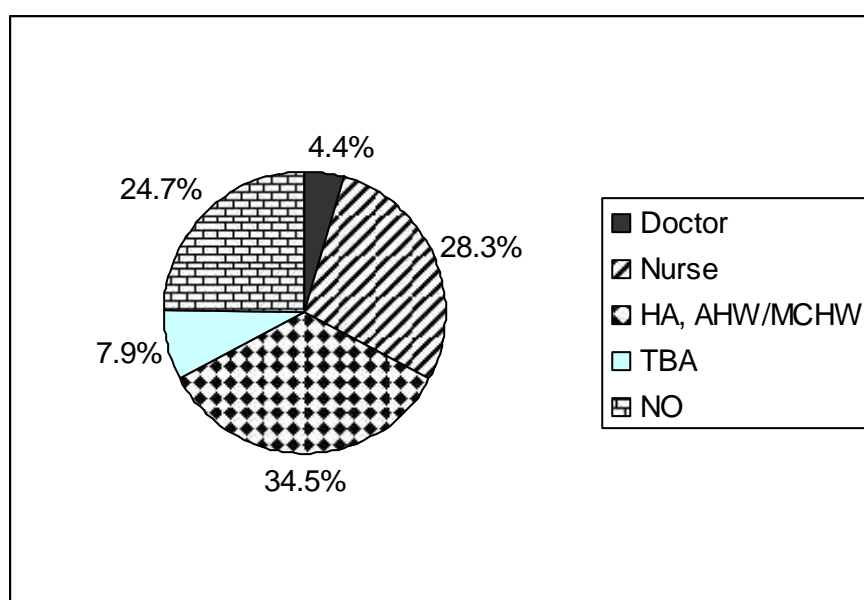
**Table 16: Percentage Distribution of Respondents by ANC Provider During Pregnancy According to Educational Status**

Service Provider Education	Doctors	Nurse/ Midwife	HA, AHW/ MCHW	TBAs	No one	Total	Percent
No Education	-	6	10	2	10	28	24.7
Literate only	2	10	5	3	16	36	32.0
Primary	-	8	11	2	2	23	20.3
Primary +	3	8	13	2	-	26	23.0
Total	5 (4.4%)	32 (28.3%)	39 (34.5%)	9 (7.9%)	28 (24.7%)	113 (100%)	100.0

Source: Field Survey, 2007.

Table 16 shows that 28 out of 113 respondents (i.e. 24.7%) of women received no antenatal care which is lower than national average (26%) in 2006, NDHS. 4.4 percent of mothers only received antenatal care from doctors in the study area which is lower than the value recorded by NDHS, 2006. According to NDHS 2006, 9.5 percent from no education, 24.1 percent from primary, 38.4 percent secondary, and SLC and above 69.4 percent received ANC from doctor. The women with no education and primary level have received no antenatal care from a doctor in the study area. Most of the women have received ANC from Nurse/midwife and HA, AHW/MCHW (i.e. 28.3% and 34.5% respectively).

**Figure 5.2.4: Percentage Distribution of Respondents by ANC Provider During Pregnancy According to Educational Status**



### 5.2.5 Frequency of ANC Visit

**Table 17: Percentage Distribution of Respondents by Frequency of ANC Visit**

Frequency of ANC visit	No. of Respondent	Percentage	NDHS 2006 for rural women
1	42	37.3	8.9
2-3	37	32.7	36.7
4+	10	8.8	26.0
None	24	21.2	28.3
Total	113	100.00	100.0

Source: Field Survey, 2007.

Table 17 shows that very few no. of pregnant (i.e. 8.8%) women make four or more antenatal care visit during their entire pregnancy which is lower than national average (26%) recorded by NDHS 2006. About 37 percent women made their first antenatal care visit before the fourth month of pregnancy which is higher than national average (8.9%) of NDHS, 2006. The result shows that mothers should be encouraged to make the minimum recommended number of ANC visits because the vast majority of women believe that it is not necessary to visit twice, thrice and more unless they feel any difficulty.

### 5.2.6 Reasons for not taking ANC

The main reasons for not taking ANC services were poor economic condition, cultural values and lack of knowledge about the services.

**Table 18: Percentage Distribution of Respondents by Causes of Not Taking ANC Services**

Causes	Respondents	Percentage
Poor economic condition	7	29.16
Cultural values	6	25.00
Lack of knowledge	11	45.8
Total	24	100.0

Source: Field Survey, 2007.

Table 18 shows that 29.1 percent respondents did not have ANC service because of poor economic condition. 25 percent respondents did not have ANC service due to cultural values of Danuwar community and 45.8 percent respondents do not have knowledge about ANC service.

### 5.2.7 Coverage of TT Vaccination

TT injection is given during pregnancy primarily for the prevention of neonatal tetanus. For full protection, it is recommended that a pregnant women should receive at least two doses of tetanus toxoid during her first pregnancy, administered one month apart, and a booster shot during each subsequent pregnancy. According to NDHS 2001, nearly one in two women did not receive any tetanus toxoid injection during her pregnancy.

**Table 19: Distribution of Respondents by TT Vaccination**

TT coverage	No. of respondent	Percentage	NDHS 2001 for rural women	NDHS 2006 for rural women
Yes	101	89.9	52.7	78
No	12	10.1	47.3	22
Total	113	100.0		
Frequency of TT coverage				
One	17	16.8	9.0	
Two	34	33.6	43.7	61.8
Three or more	50	49.6		
Total	101	100.0		

Source: Field Survey, 2007.

Table 19 shows that 89.9 percent respondent received TT injections during their pregnancy. Among those 16.8 percent received only one dose. 49.6 percent women received three or more doses of tetanus toxoid injection during their pregnancy. In the study area 9.7 percent didn't receive TT injection during her pregnancy which is lower than national average of rural women (i.e. 47.3%) in 2001 NDHS. Eighty four out of 113 women (about 74.4%) received two or more tetanus injections during their last pregnancy which is higher than national average 61.8 percent of rural women in 2006 NDHS.

### 5.2.8 Coverage of TT Vaccine

Mothers giving birth at a younger age and having lower birth order children are more likely to receive tetanus toxoid injections than older mothers and those with higher birth order children. Education of mother is strongly associated with tetanus toxoid coverage. Pregnant mothers with an SLC and above are twice as likely as mothers with no education to receive at least one dose of tetanus toxoid injection.



**Table 20: Percentage Distribution of TT Vaccination Coverage by Educational Status**

Educational Status of Respondents						
Literary and Education	TT Coverage					
	Yes		No		Total	
	No.	%	No.	%	No.	%
Literate	78	69.0	7	6.2	85	75.2
Illiterate	23	20.4	5	4.4	28	24.8
Total	101	89.4	12	10.6	113	100.00
Level of Education						
Primary	20	23.5	3	3.5	23	27.05
L. Secondary	14	16.4	2	2.3	16	18.8
Secondary	8	9.4	-	-	8	9.4
SLC and above	2	2.3	-	-	2	2.3
Literate only	34	40.0	2	2.3	36	42.3
Total	76	89.4	7	6.2	85	100.00

Source: Field Survey, 2007.

Table 20 shows that 89.4 percent receive TT vaccine. Among them 27.05 percent are primary level respondent. Out of which only 23.5 percent receive TT vaccine. Out of 113 respondent 69.0 percent literate received TT vaccine and 6.2 percent did not get TT vaccine.

### 5.2.9 Coverage of Iron Tablets

Iron prevents mother from diseases like anemia and malnutrition. Iron deficiency anemia has remained a public health problem in Nepal. In the study area, respondents were asked whether they had received iron tablet during pregnancy. Among total respondents 71.6 percent had received iron tablet and 28.3 percent have not received during their pregnancy period in the study area.

Education of mothers is strongly associated with the coverage of Iron Tablets. Educated women were expected to be more exposed to iron tablet acceptance.

**Table 21: Percentage Distribution of Iron Tablets Coverage by Educational Status**

Iron Tablet Coverage						
Literacy of Respondents	Yes		No		Total	
	No.	Percent	No.	Percent	No.	Percent
Literate	60	70.5	25	29.4	85	75.2
Illiterate	21	75	7	25	28	24.8
Total	81	71.6	32	28.3	113	100.00
Level of Education						
Primary	17	73.9	6	26.0	23	100.00
L. Secondary	12	75.0	4	25.0	16	100.00
Secondary	7	87.5	1	12.5	8	100.00
SLC and above	2	100	-	-	2	100.00
Literate only	22	61.1	14	38.8	36	100.00
Total	60	70.5	25	29.4	85	100.00

Source: Field Survey, 2007.

Table 21 shows that among the literate, 70.5 percent received iron tablet but only 75 percent respondents among the illiterate received iron tablet and 25 percent did not receive iron tablet. While distributing the mothers according to their education level, 38.8 percent respondents still are not receiving iron tablets among literate only. 73.9 percent mothers having primary level of education, 75 percent from L. Secondary level and 87.5 percent from secondary level received iron tablets respectively. 100 percent mothers received iron tablets whose level of education is SLC and above. The study shows the acceptance of iron tablets is positively associated with mother's level of education. In spite of the government's free distribution programme the study shows that 28.3 percent women who gave birth in the five years preceding the survey did not take iron/folic acid tablets during their pregnancy.

#### **5.2.10 Coverage of Vitamin 'A'**

The 2001 NDHS data shows that 20 percent women reported night blindness during pregnancy. Night blindness is an indicator of severe vitamin 'A' deficiency, from which pregnant women are especially prone to suffer. Overall, 10 percent of recent mothers received a vitamin 'A' supplement within two months postpartum. Younger

women and women with fewer children are more likely to receive vitamin 'A' postpartum. Women living in the Bazar area and educated women are more likely to take vitamin 'A' than other women.

**Table 22: Percentage Distribution of Respondents by Receiving Vitamin 'A' and Educational Status**

Coverage of Vitamin 'A'						
Literary Status	Yes		No		Total	
	No.	Percent	No.	Percent	No.	Percent
Literate	52	61.2	33	38.8	85	75.2
Illiterate	11	39.2	17	60.7	28	24.8
Level of Education						
Primary	13	56.5	10	43.4	23	100.0
L. Secondary	9	39.1	7	43.7	16	100.00
Secondary	7	87.5	1	12.5	8	100.00
SLC and above	2	100.0	-	-	1	100.00
Literate only	21	58.33	15	41.6	36	100.00
Total	52	61.2	33	38.8	85	100.00

Source: Field Survey, 2007.

Table 22 shows that 61.2 percent respondents received vitamin 'A' capsule among literate respondents but only 39.2 percent among the illiterate received vitamin 'A' capsule. The study shows that higher the level of education greater the utilization of vitamin 'A' capsule.

### 5.2.11 Work During Pregnancy

Agriculture is the dominant sector of the economy of Nepal. More women than men are involved in this sector. Women who are not employed or cannot earn money are not involved in the decision making. Her status within the house has a direct effect on her health condition. A pregnant women needs more rest than normal women. But in Nepal, due to poverty and low status of women in decision making she is compelled to do a hard work also which may arise dangerous situation. The study also shows majority of

respondents (66%) reported that they worked as usual during pregnancy and only 34 percent reported that did light work only.

**Table 23: Percentage Distribution of Respondents by Type of Work During Pregnancy**

Type of work	Respondent	Percent
Usual (Hard) work	75	66.37
Short period work	38	33.6
Total	113	100.00

Source: Field Survey, 2007.

### 5.2.12 Food-intake during pregnancy

Women's nutritional status is important both as an indicator of overall health and as a predictor of pregnancy outcome for both mother and child. Malnutrition is a direct result of insufficient food intake or repeated infectious diseases or combination of both. Balanced diet plays important role for the physical, mental and social well being for both pregnant mother and child. A pregnant women needs more extra nutritious food than normal women.

In the study area, respondents were asked whether they had taken extra nutritious food during pregnancy. Only 57.5 percent respondents had taken extra nutritious food and other 42.5 percent had taken usual food during pregnancy.

**Table 24: Percentage Distribution of Respondents by Type of Food Intake during Pregnancy**

Type of food intake	Respondents	Percent
Usual Food	65	57.5
Extra-Nutritious food	48	42.5
Total	113	100.00

Source: Field Survey, 2007.

### 5.2.13 Food Intake During Pregnancy by Education

Out of total literate respondents 54.1 percent were found to have eaten extra nutritious food and 45.8 percent had eaten usual food during pregnancy. The study also shows that among illiterate respondents, 35.7 percent had eaten extra-nutritious food and 64.2 percent had eaten usual food.

**Table 25: Percentage Distribution of Food Intake during Pregnancy by Education**

<b>Food Intake</b>						
Literacy of Respondents	Extra Nutrition		Usual Food		Total	
	No.	Percent	No.	Percent	No.	Percent
Literate	46	54.1	39	45.8	85	100.00
Illiterate	10	35.7	18	64.2	28	100.00
Total	56		57		113	100.00
<b>Level of Education of Respondents</b>						
Primary	14	60.8	9	39.1	23	100.00
L. Secondary	9	56.3	7	43.8	16	100.00
Secondary	6	75.0	2	25.0	8	100.00
SLC and above	2	100.00	-	-	2	100.00
Literate only	15	41.6	21	58.3	36	100.00
Total	46		39		85	100.0

Source: Field Survey, 2007.

The study shows that as the level of education increases number of nutritious food intake also increases.

#### **5.2.14 Smoking and Alcohol Habit During Pregnancy**

Tobacco smoking and alcoholism during pregnancy increases the risk of having a small or low birth weight baby. It may cause miscarriage a fetal loss during pregnancy. The use of smoking at other times also adversely affects women's health and may increase respiratory illnesses among children. Smoking is more prevalent among older women than among younger women.

**Table 26: Percentage Distribution of Respondents by Smoking and Alcoholism during Pregnancy**

Behaviour	Respondents	Percentage
Both alcohol & smoking	5	4.4
Only smoking	11	9.7
Only alcohol	6	5.3
Neither alcohol nor smoking	91	80.5
Total	113	100.0

Source: Field Survey, 2007.

Table 26 shows that 4.4 percent respondents had both smoking and alcoholism. About 10 percent respondent had only smoking. 5.3 percent respondents had only alcoholism behaviour. Out of total respondent 80.5 percent neither smoked nor drank alcohol.

### 5.2.15 Complication during Pregnancy and Its Solution

Due to weak and unhygienic practices women of rural area are prone to complications during pregnancy. Such complications may be minor or major. complications during pregnancy is a social, economic and demographic problem in any community.

Respondents were asked whether they experienced any complication during pregnancy. About 26 percent respondents reported that they experienced complication but the nature of complication was unidentified.

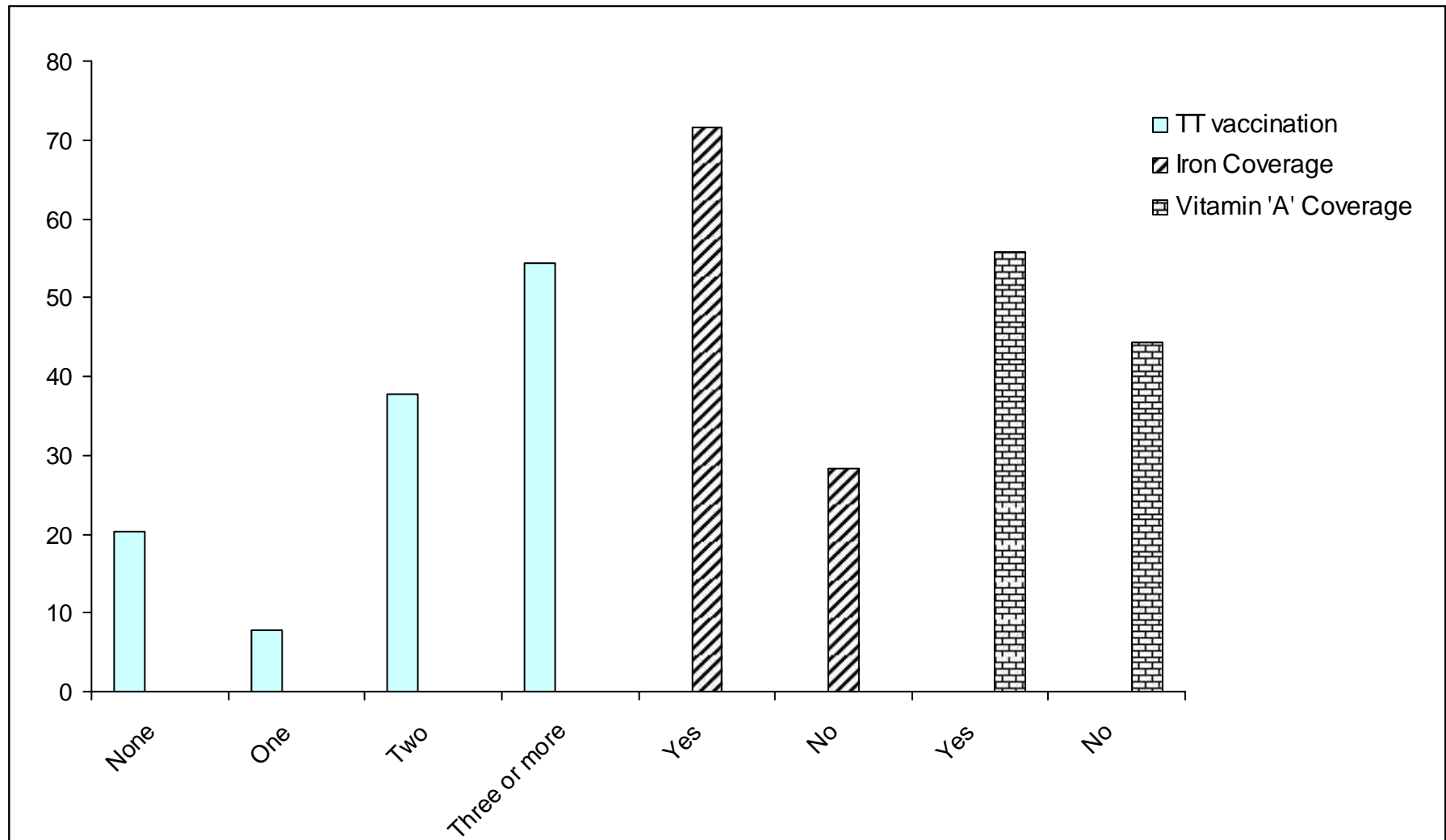
The study showed that out of total respondents, 25.6 percent replied that they faced complication during pregnancy. Among the total respondents who faced complication during pregnancy, they solved their problem by visiting hospital (55.2%), traditional local treatment (34.5%) and Dhama Jankri (6.9%) 3.4 percent didn't visit for any such services.

**Table 27: Percentage Distribution of Respondents by Complication during Pregnancy and its Solution**

Complication during pregnancy	Respondents	Percentage
Yes	29	25.6
No	84	74.4
Total	113	100.0
<b>Solution of Complication</b>		
Visited hospital	16	55.2
Local treatment	10	34.5
Dhama Jhankri	2	6.9
No-treatment	1	3.4
Total	29	100.0

Source: Field Survey, 2007.

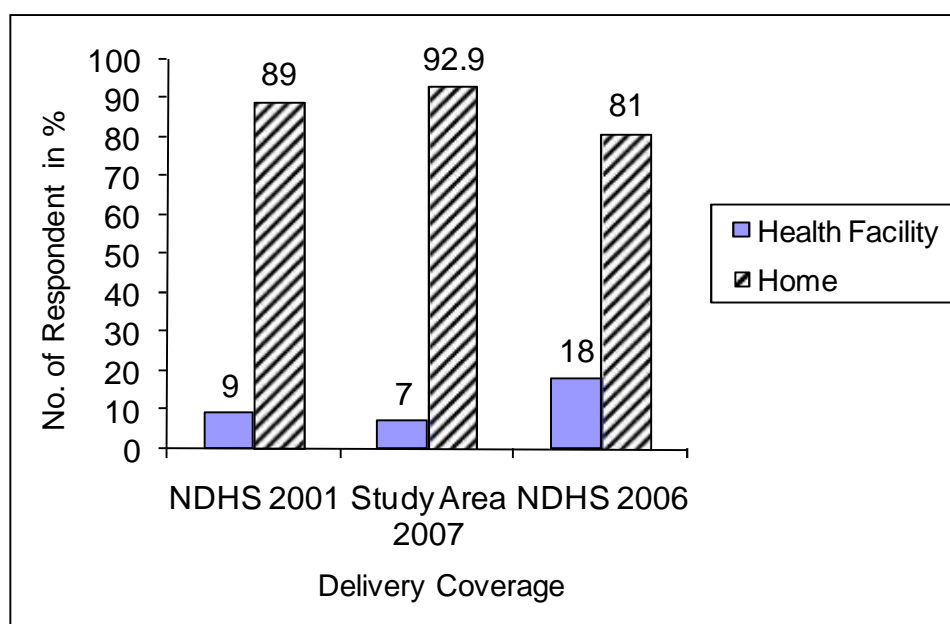
**Figure 5.2: Percentage distribution of women (15-49 years) according to background characteristics of the study area**



### 5.3 Delivery Practices

This objective of providing safe delivery services is to protect the life and health of the mother and her child by ensuring the delivery of a baby safely. Proper medical attention under hygienic conditions during delivery can reduce the risk of complications and infections that may cause death or serious illness either to the mother or the baby or both. This section includes the information on place of delivery, assistance during delivery and utilization of safe delivery kit during pregnancy.

**Figure 5.3: Comparative Study regarding percentage distribution of respondent women of study area with NDHS by delivery care**



#### 5.3.1 Place of Delivery

Place of delivery practice is a major component of maternity health care practice. Traditionally, Nepalese children are delivered at home either without assistance or with the assistance of TBAs or relatives and friends. Despite an increase in the number of health facilities offering delivery services, use of health facilities during deliveries is still minimal among most Nepalese women.



**Table 28: Percentage Distribution of Respondent Women (15-49 years) by Delivery Care According to its Background Characteristics**

<b>Background characteristics</b>			
Place of delivery	Number of respondents	Percentage	NDHS 2006
Home	105	92.9	81
Health facility	8	7.0	18
Total	113	100.0	
<b>Health facilities</b>			
Government Sector	8	7	13
Non-Government Sector	-	-	4
Private medical facility	-	-	1
<b>Delivery Assistance</b>			
Relatives/Neighbours	49	43.4	
TBAs	27	23.9	19
AHW/HA/ANM	6	5.3	
Nurse	2	1.8	
Doctor	-	0	
None	29	25.7	7
Total	113	100.0	

Source: Field Survey, 2007.

Table 28 shows that only 7 percent deliveries are assisted by health professionals, that is, doctor, nurses or ANMs, HAs or AHWs, MCHWs and VHWs. 43.4 percent of deliveries are assisted by relatives, neighbours and non-health personnel, while about 24.7 percent births are delivered without any assistance at all. 92.9 percent of deliveries are delivered at home which is higher than national average (91.0%) for rural women in 2006 NDHS. Only 7 percent are delivered in a public health facility which is lower than national average 13 percent in 2006 NDHS. There is not available of Non-government health facility in the study area. No one is reported to have been admitted in the private medical facility during delivery because of high poverty.

### 5.3.2 Utilization of Safe Delivery Kit During Pregnancy

The safe home delivery kit is very important component for safe and effective delivery to safe life of mother and newly born baby from tetanus and other infections. Since most babies are delivered at home with the assistance of elders or relatives and TBAs, use of clean home delivery kit could play an important role in reducing neonatal tetanus and other infection.

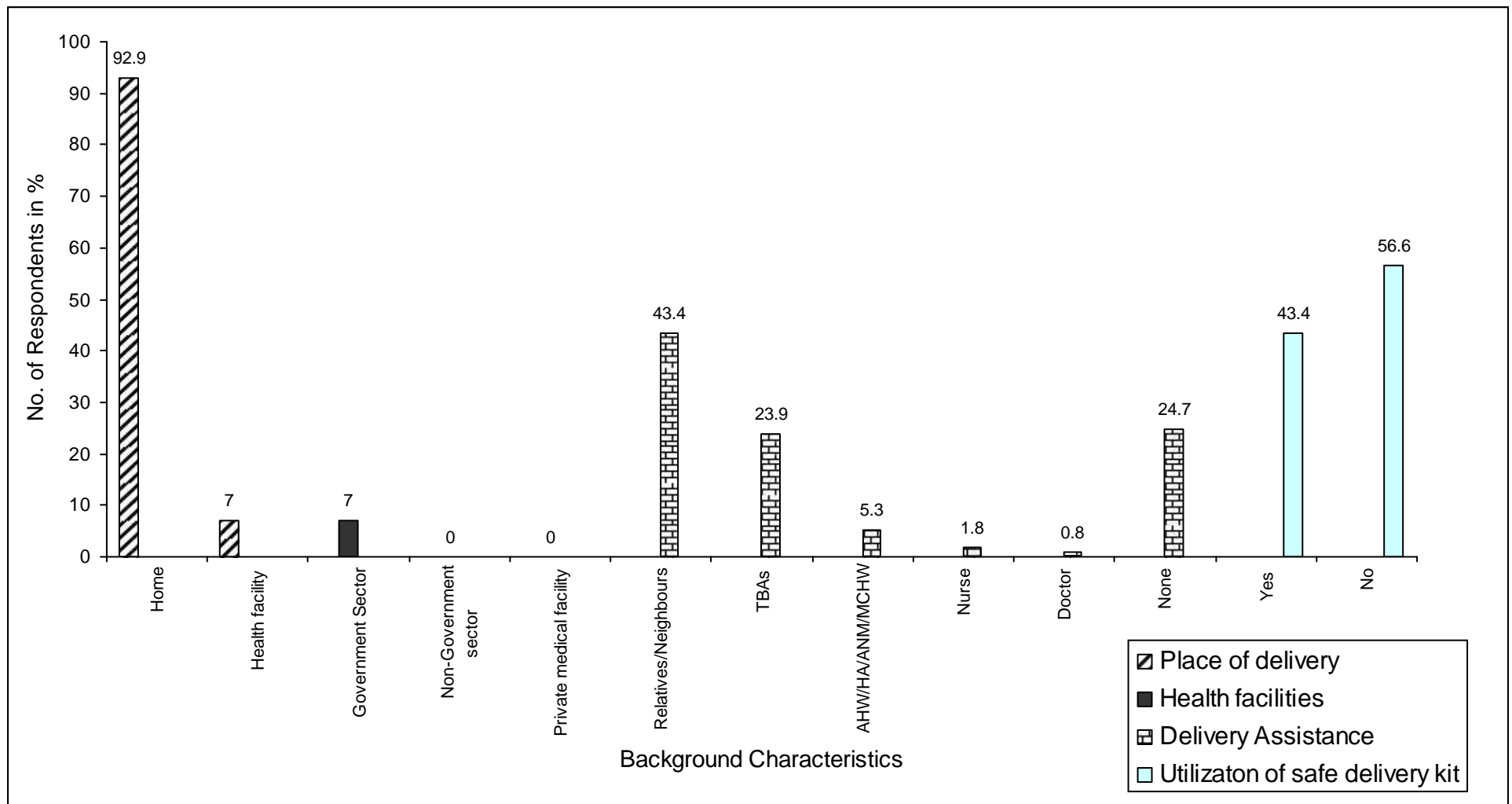
**Table 29: Percentage Distribution of Respondents by Use of Safe Delivery Kit by Literacy Status**

Utilization of safe delivery kit	Respondents	Percent	NDHS 2001 for rural women			
Yes	49	43.4	9.2			
No	64	56.6				
Total	113	100.0				
<b>Use of safe delivery kit by literacy status</b>						
	Yes		No		Total	
Literate	42	37.2	43	38.0	85	100.0
Illiterate	7	6.2	21	18.6	28	100.0
Total	49	43.4	64	56.6	113	100.0

Source: Field Survey, 2007.

The study shows that it has still not reached the bulk of Nepali mothers. Only 43.4 percent respondents used safe delivery kit. Among them only 37.2 percent respondents were literate. Among illiterate respondents only 6.2 percent used safe delivery kit. By the NDHS, 2001 only 9 percent mothers uses safe delivery kit in rural area where as it town 14 percent. Comparative study indicates that the use of clean delivery kits in home deliveries has improved over these days.

**Figure 5.3: Percentage distribution of women (15-49 years) by delivery care according to its background characteristics**



## 5.4 Postnatal Care Service

The postnatal care is uncommon in Nepal. The aim of postnatal care is to ensure the physical and psychological well being of the mother and the new born child in the 1<sup>st</sup> six weeks after delivery. The national safe motherhood program recommends that mothers should have a postnatal check up within two days of delivery. This recommendation is based on the fact that a large number of maternal and neonatal deaths occur during the 48 hours after delivery. The normal postnatal care includes care of the mother during immediate postnatal period and care during postnatal period, up to 6 weeks.

**Table 30: Percentage Distribution of Respondents who Received Postnatal Care by Educational Status**

	Postnatal Coverage					
	Respondents			Percent		
Yes	18			15.9		
No	95			84.0		
Total	113			100.0		
<b>Literacy of respondents</b>						
	Yes		No		Total	
	No.	%	No.	%	No.	%
Literate	16	15.3	69	82.4	85	100.0
Illiterate	2	7.1	26	92.8	28	100.0
Total	18		95		113	
<b>Level of Education</b>						
Primary	6	26.0	17	73.9	23	100.0
Secondary	7	29.2	16	70.8	14	100.0
SLC and above	2	100.0	-	-	2	100.0
Literate only	-	-	36	100	36	100.0
Total	16		69		85	100.0

Source: Field Survey, 2007

Postnatal care is higher for literate than illiterate respondents. Table 30 shows that 15.3 percent literate respondents had postnatal check up and 82.4 percent

didn't receive postnatal care. In case of illiterate respondents 7.1 percent respondent had received postnatal care and 92.8 percent respondent did not receive it. As the level of education increases percentage of respondents also increases (i.e. primary 26%, secondary 29.2% and SLC and above 100% respectively).

#### 5.4.1 Postnatal Care by Timing of Postnatal Checkup

The National safe motherhood program recommends that mothers should have a postnatal checkup within two days of delivery. A large no. of maternal and neonatal deaths occur during the 48 hours after delivery. To assess the extent of postnatal care utilization, respondents were asked whether they received a postnatal checkup after the delivery of their last birth.

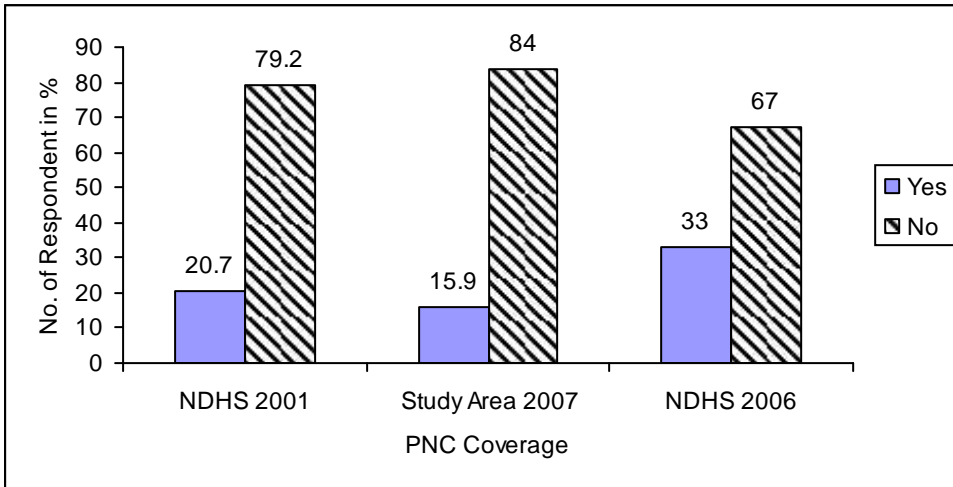
**Table 31: Percentage Distribution of Women by Timing of Postnatal Care**

Timing of Postnatal Checkup	Number of Respondent	Percentage	NDHS 2001 for rural women
Within 2 days of delivery	11	9.7	17.3
3-6 days after delivery	2	1.7	0.8
7-41 days after delivery	5	4.4	2.6
Didn't receive postnatal checkup	89	78.7	79.2
Total	113	100.0	100.0

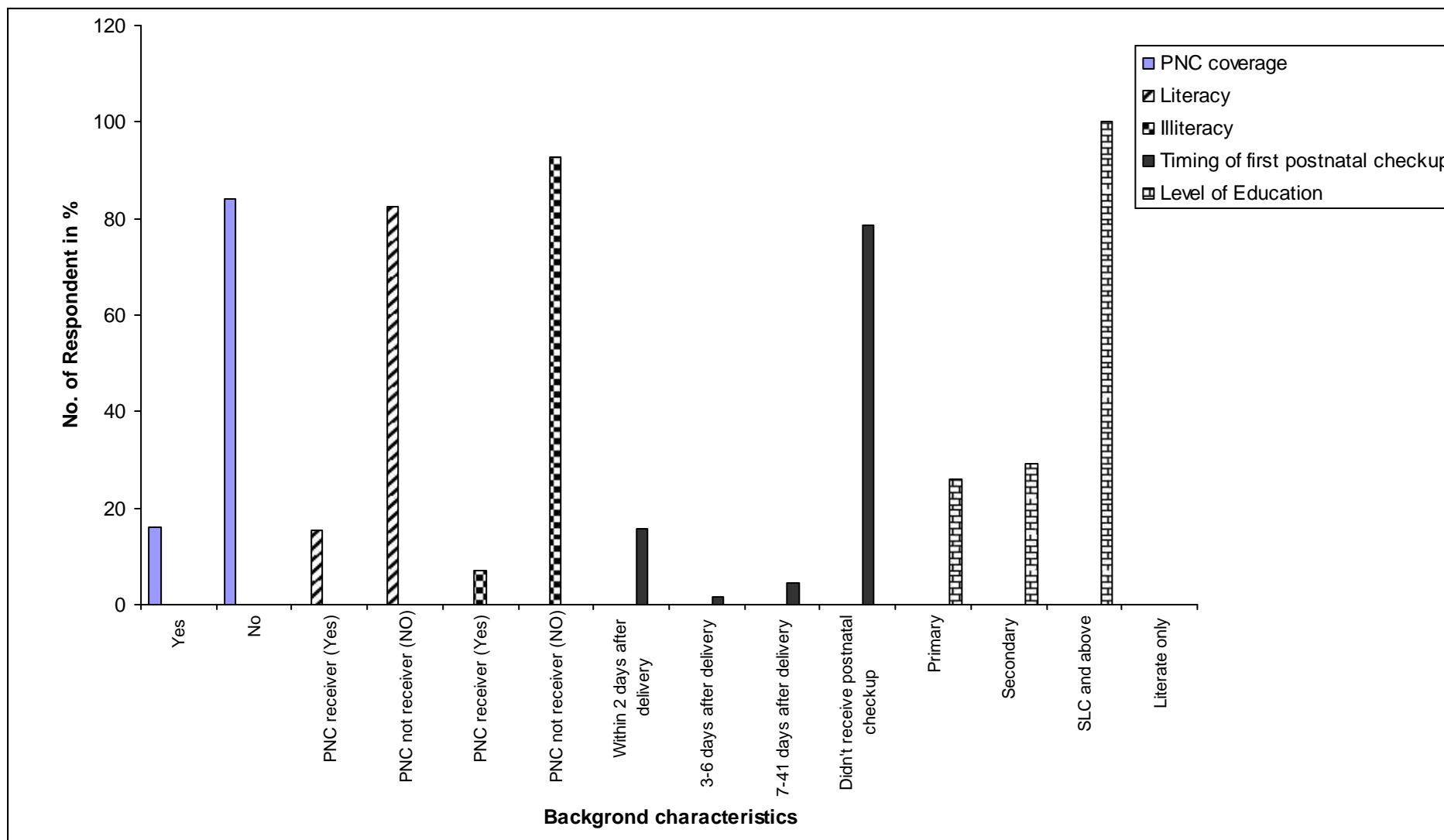
Source: Field Survey, 2007

Table 31 shows that 9.7 percent respondents received PNC within 2 days of delivery. Only 1.7 percent respondents received PNC within 3-6 days after delivery. 4.4 percent respondents received PNC within 7-41 days after delivery. Overwhelming majority 78.7 percent respondents received no postnatal checkup. It is observed that about 79 percent of mothers who delivered outside a health facility do not receive any postnatal checkup.

**Fig. 5.4 (a) : Comparative study regarding percentage distribution of respondents by postnatal care**



**Figure 5.4 (b): Percentage distribution of respondents (15-49 years) who received postnatal care by it's background characteristics**



## 5.5 Family Planning and Contraceptives Use

Family planning is an important aspect of reproductive health. It plays a critical role in promoting healthy pregnancy, reducing the change of high risk pregnancies. It helps to reduce maternal mortality and improving women's reproductive health, prevent unwanted and high risk pregnancies, reduce the need for unsafe abortion and space the birth. Findings from the 2006 NDHS show that knowledge of family planning is nearly universal among Nepalese women and men. A women's desire and ability to manage her fertility and her choice of contraceptive methods are in part affected by her status, self image and sense of empowerment. Women in urban areas are more likely to use a family planning method than their rural counterparts, reflecting wider availability and easier access to methods in urban areas than in rural areas, as well as the fact that urban women are more likely to be educated than rural women.

**Table 32: Percentage Distribution of Respondents by Use of Family Planning and Contraceptives Methods**

(Sterilization and Contraceptives	No. of Respondents	Percent
Users	91	80.5
Non users	22	19.4
Methods		
Male Sterilization	13	14.3
Female Sterilization	17	18.7
Condom	10	10.9
Depo-Provera	39	42.9
Pills	12	13.2
Total	91	100.0

Source: Field Survey, 2007.

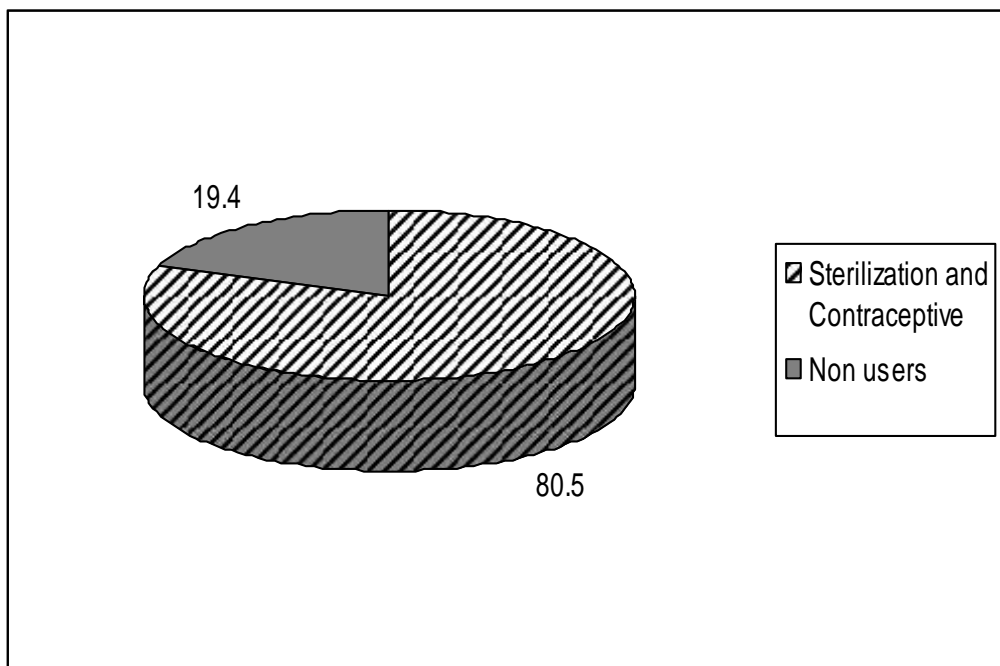
Table 32 shows that contraceptive users among couple of study area is found 53 percent. There has been an impressive increase in the use contraception in the study area when compared with the contraceptive prevalence rate among Nepalese women (i.e. 44%) according to NDHS 2006. The majority of couples almost 80 percent approved of family planning in the study area. condom use is much less



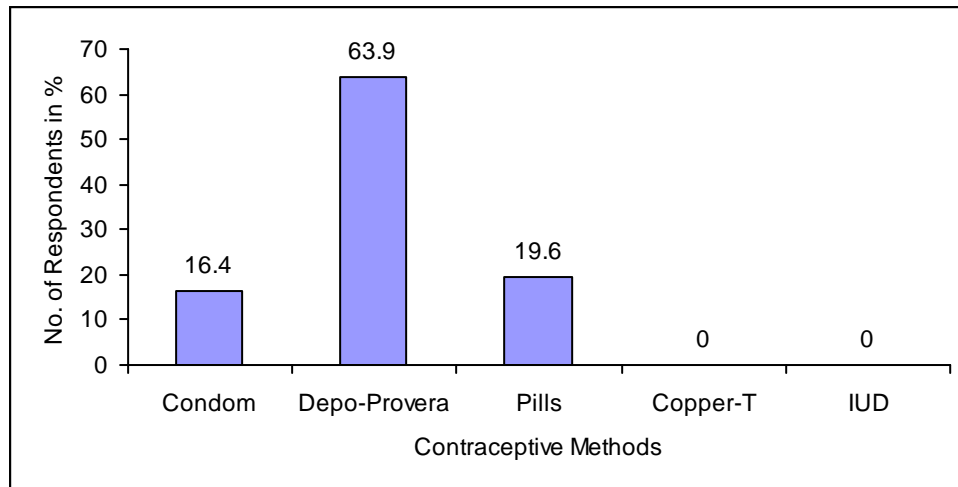
common in married couple (i.e. 10.9%) than depo-provera (i.e. 42.9%) in the study area.

There are mainly two reasons for not intending to use contraception among the currently married women are sub-fecundity/infecundity and fear of side effects. If all these women with unmet need who have confusion on the use of family planning methods were convinced to use it then the contraceptive prevalence rate would increase from 53.9 percent to satisfactory level. Knowledge of family planning and some contraceptives (i.e. sterilization, condom, pills and depo) is almost universal among respondents.

**Figure 5.5: (a) Percentage distribution of respondent women (15-49 years) by using family planning and contraceptive method**



**Figure 5.5: (b) Percentage distribution of respondent women (15-49 years) by using contraceptive method**

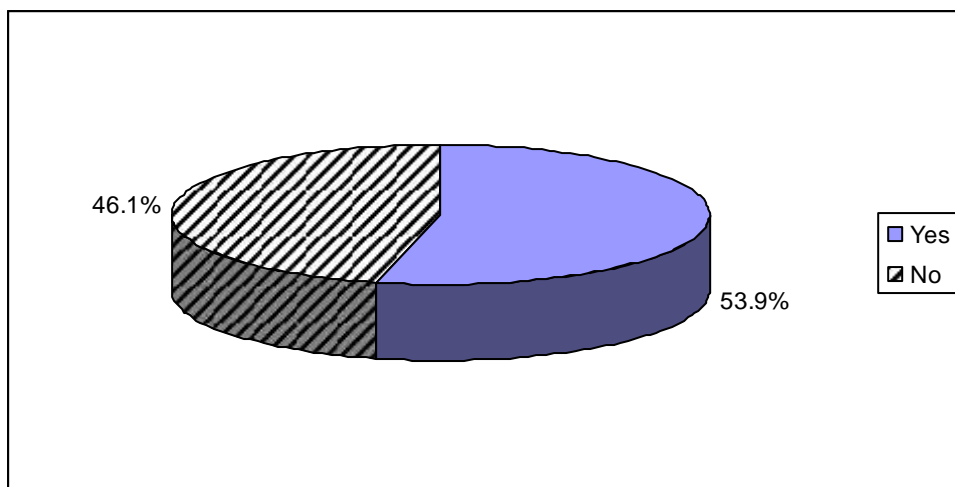


## 5.6 Knowledge of HIV/AIDS

AIDS was first recognized internationally in 1981. AIDS is caused by HIV, and when infected with HIV, a large proportion of people dies within 5-10 years (WHO, 1992). The HIV/AIDS pandemic is one of the most serious health concerns in the world today because of the high case fatality rate and the lack of curative treatment or vaccines. Epidemiological studies have identified sexual intercourse, intravenous injections, blood transfusions, and fetal transmissions from infected mothers as the main routes of transmission of AIDS. Studies have also indicated that HIV cannot be transmitted through food, water, insect vectors or casual contact.

The first HIV infection in Nepal was identified in 1988. The potential for the spread of HIV in Nepal is large because of extensive use of commercial sex workers, high rates of sexually transmitted diseases, low levels of condom use and pockets of intravenous drug users. One survey shows approximately 34,000 cases of HIV/AIDS infection in Nepal (UNAIDS) NCASC of the ministry of health and population estimated 2000 and average of 70,000 adult HIV positive people in Nepal (NCASC 2006)

**Figure 5.6: Percentage distribution of respondents (15-49 years) by knowledge of HIV/AIDS**



### **5.7 Knowledge of HIV/AIDS Prevention**

Information on the sexual behaviour of people is important for designing and monitoring intervention programs to control the spread of AIDS. Promotion of safe sex, encouraging monogamous relationship, discouraging multiple sexual partner and the promotion of condom use are important components of AIDS prevention programs. Sexual intercourse with non cohabiting partners carries a higher risk of HIV/AIDS transmission because such relationships are usually more temporary and are often associated with exposure to multiple sex partners. That is why AIDS prevention and control programs emphasize limiting sexual partners to one and using condoms, especially with non cohabiting partners.

In the study area only 53.9 percent women has heard of AIDS. The depth of women's knowledge of HIV/AIDS is also much lower than that of men. Younger respondents, those residing in market area and respondents with an SLC and above are more aware on HIV/AIDS prevention than their counterpart. To get an idea of the extent of knowledge about HIV/AIDS, respondents who had heard of AIDS were further asked whether they had knowledge of its transmission and prevention.

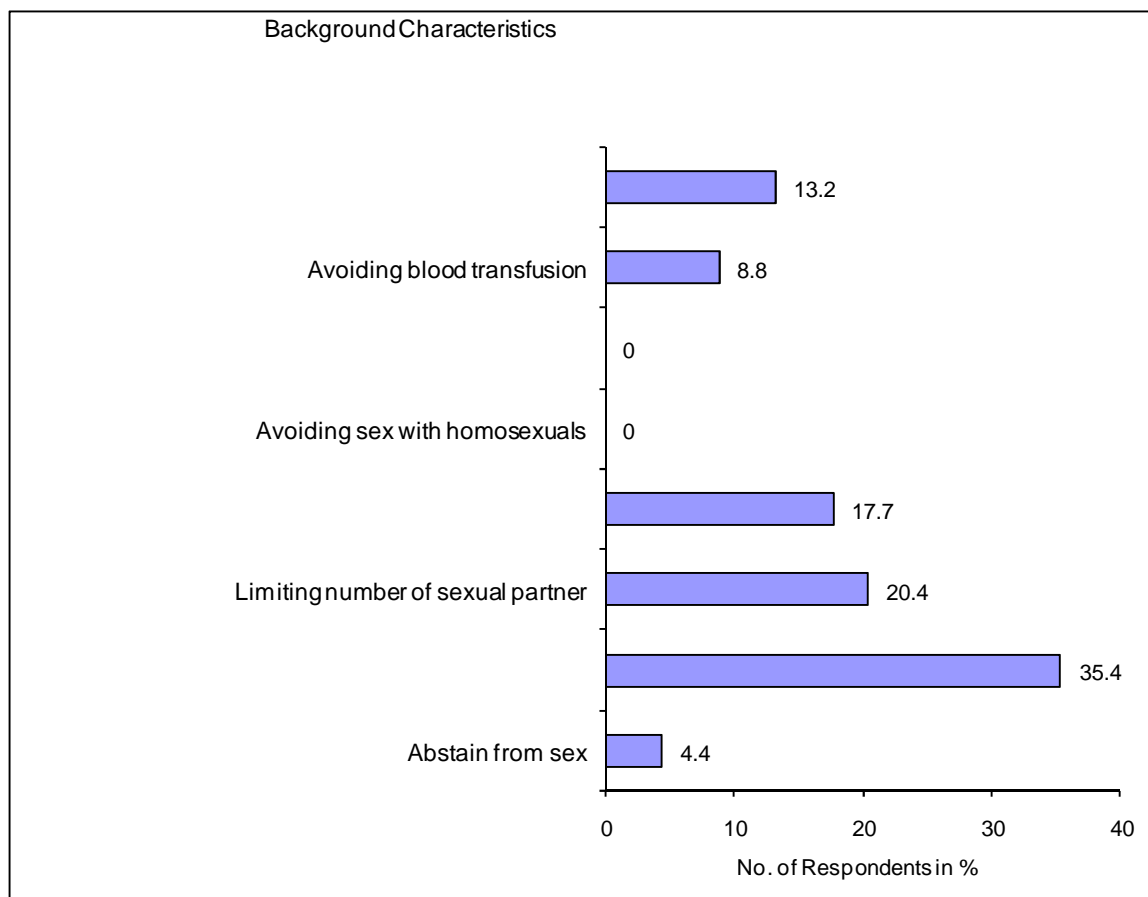
**Table 33: Percentage Distribution of Respondents who Spontaneously Mentioned Ways to Avoid HIV/AIDS**

Knowledge of HIV/AIDS and prevention				
Knowledge of HIV/AIDS	Number	Percent	NDHS 2001	NDHS 2006
Does not know of AIDS or if AIDS can be avoided	61	53.9	58.4	
Believes no way to avoid AIDS	12	10.6	3.2	
Ways to Avoid HIV/AIDS				
Abstain from sex	5	4.4	4.7	57.6
Use condoms	40	35.4	20.6	55.1
Limit number of sexual partner	23	20.4	12.9	61.5
Avoid sex with prostitutes	20	17.7	3.1	
Avoid with homosexuals	-	-	0.0	
Avoid sex with persons who inject drugs intravenously	-	-	0.9	
Avoid blood transfusion	10	8.8	4.7	
do not know	15	13.2	-	
Total	113	100.00		

Source: Field Survey, 2007.

Table 33 shows that 53.9 percent women have either not heard about HIV/AIDS or do not know whether the diseases can be avoided. Only 12 percent of women think that there is no way to avoid HIV/AIDS. 35.4 percent respondents say that AIDS can be avoided by using condoms. 20.4 percent of respondents stated that the disease can be avoided by limiting the number of sexual partner. The percentage of respondents who mentioned avoiding sex with prostitutes was 17.7 percent. Knowledge on HIV/AIDS prevention is comparatively low prevalent among the women of study area than national records from NDHS, 2001. A significant differences was also observed by respondents level of education.

**Figure 5.7: Percentage distribution of respondents (15-49 years) who spontaneously mentioned the ways to avoid HIV/AIDS**



From the whole Chapter-V we can conclude that 61 percent women had their first menstruation at the age of 13 years and followed by 21.2 percent at the age of 14 years. ANC coverage was observed more satisfactory than delivery care. Postnatal care was observed in last priority compared with ANC and delivery care. Nearly 79 percent women received ANC during pregnancies. Similarly, about 80 percent women received TT vaccine. Likewise, almost 72 percent women received iron tablets but only 61.2 percent respondent received vitamin A. Majority of respondents reported that they worked as usual during pregnancies and received usual food as before pregnancy. Nearly 5 percent respondents had habit of both smoking and alcohol. About 91 percent pregnancies are still delivered at home but only 7 percent pregnancies are delivered at public health facility. Nearly 44 percent women used safe delivery kit during delivery. Only 16 percent women received postnatal checkup. Overwhelming majority almost 81 percent respondents were either sterilized or contraceptive users. In the study area only 53.9 percent women has heard of AIDS.

## CHAPTER - SIX

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study is based on both quantitative and qualitative data. Primary data have been used to complete this study. Data for this study have been collected from field observation. This study has been designed to find out the status of maternal health care practices among the Danuwar community of Katari VDC of Udayapur District. Maternal health care practices is serious matter of overall reproductive health care practices.

#### 6.1 Findings of the Study

Following are the major findings of the study:

##### 6.1.1 Socio Economic and Demographic Characteristics of Households and Respondents in Study Area

- ) Out of 387 households 113 households were selected for the study. Total population of Danuwar at Katari VDC is 1713. But the sample population was 1582. Out of them 49.3 percent were male and 50.6 percent were female. The sex ratio was found 97.3.
- ) Highest proportion of sample population was found in age group 5-9 both in male and female
- ) Among total population of age 10 years and above by marital status 58.9 percent women were currently married. 4.8 percent of female were widow in the study population.
- ) The highest percent of respondents belong to age group 25-29 (i.e. 23.0%) and the lowest percent to age group 40-44 (i.e. 6.2%).
- ) The majority of respondents had got married in the interval of age group 15-19 (i.e. 64.6%).
- ) Nearly 37 percent of the respondents reported that average number of CEB is 3.
- ) Education varies inversely with the mean number CEB.

- ) Nearly 25 percent respondents were illiterate in the study area and 42.3 percent were literate only.
- ) The major occupation of this community is agriculture (65.4%) followed by daily wages labour (i.e. 23.9%).
- ) Almost all of the respondents can communicate Nepali as well except their mother tongue (Danuwari).
- ) All the respondents were reported to have been Hindu.
- ) About 13 percent people in the study area are landless 24.7 percent people had land less than 1 kaththa. 44.4 percent people had more than 30 kaththa of cultivated land.
- ) Almost half of the respondents had got electricity. 44.2 percent people had radio followed by 13.2 percent people had T.V.
- ) About 24 percent respondents were reported to have access of piped water. 44.2 percent respondents were reported to have been brought water from tube-well. 31.8 percent respondents reported to have traditional latrine facility, 13.2 percent modern latrine whereas 54.8 percent respondents were reported to have none.

### **6.1.2 Maternal Health Care Practices**

- ) Highest percent of respondents (61%) had their first menstruation at the age of 13 years, it is followed by 14 years (21.2%), 12 years (15.9%) and 15 years and above (1.7%).
- ) Majority of respondents (78.7%) received antenatal visit during pregnancy. Among them 81.1 percent were literate. Out of 28 illiterate respondents 82.8 percent received ANC. (Table 13)
- ) Out of 89 antenatal care receivers 7.8 percent received ANC from hospital, 5.6 percent from private clinic and majority of respondents (86.5%) from the HP or sub HP. (Table 15)
- ) Twenty eight out of 113 respondents (i.e. 24.7%) 24.7 percent respondents were illiterate. Among them 35.7 percent received ANC from none. 4.4 percent respondent received ANC from doctors, 28.3 percent from Nurse/midwife 34.5 percent from HA, AHW, MCHW. (Table 16)

- J Nearly one in ten (8.8%) pregnant women made four or more ANC visit where as 37.3 percent women made first visit only before the four month of pregnancy. (Table 17)
- J Out of 24 respondents who did not take ANC 29.1 percent respondents didn't have ANC because of poor economic condition. 25 percent did not have ANC visit due to cultural values and 45.8 percent respondents did not have ANC visit due to lack of knowledge. (Table 18).
- J About 80 percent respondents received TT vaccine during their pregnancy. 83 out of 113 women (i.e. 73.5%) received TT vaccine twice or more during their last pregnancy. (Table 19)
- J Among literate respondents 91.7 percent received TT vaccine from primary level 23.5 percent, from secondary 25.8 percent and from SLC and above 2.3 percent received TT vaccine respectively. (Table 20)
- J Out of 113 respondents 71.6 percent respondents received iron tablets. Out of 85 literate respondents only 70.5 percent received iron tablets but out of 28 illiterate respondents 75 percent respondents received iron tablet. (Table 21)
- J Out of 85 literate respondents 61.2 percent respondents received vitamin 'A'. Among primary, secondary and above 56.5 percent, 87.5 percent and 100 percent respondents received vitamin 'A' respectively. (Table 22)
- J Out of 113 respondents 66.3 percent respondents reported that they worked as usual during pregnancy and 57.5 percent respondents received usual food as before during pregnancy.
- J Out 113 respondents 4.4 percent respondents had habit of both smoking and alcoholism. 9.7 percent respondents had habit of smoking and 5.3 percent respondents had habit of alcohol.
- J Out 113 respondents 25.6 percent had faced complication during pregnancy. Among them 55.2 percent visited hospital 34.5 percent solved their problem by traditional local treatment and 6.9 percent from Dhami-Jhankri (Table 30)
- J An overwhelming majority (92.9%) delivery are delivered at home. Only 7 percent deliveries are delivered at public health facility. (Table 27)
- J Out of 113 respondents 43.4 percent respondents used safe delivery kit. (Table 28)



- J The majority of couples almost 81 percent approved for family planning in the study area. Among contraceptive user 63.9 percent used depo-provera followed by 16.4 percent condom.
- J Out of 113 respondents only 10.6 percent respondents think that there is no way to avoid HIV/AIDS. 35.4 percent respondents think that AIDS can be avoided by using condoms, 20.4 percent think by limiting sexual partner, 17.7 percent respondents think by avoiding sex with prostitutes.

## 6.2 Conclusions

The study focused on maternal health care practices in Danuwar community at Katari VDC, Udayapur concluded that the utilization of maternal health care practices is not satisfactory even the result in some background characteristics is better than national level. Danuwar community has its own culture and tradition. It is one of the disadvantaged ethnic group residing in the inner Terai of Nepal. This community is socially and economically disadvantaged ethnic group. They have strong beliefs on traditional activities. Agriculture is their main occupation. They like fishing in the river. They have been still following the fishing as their occupation for many years. Socio-economic and characteristics (Age-Sex structure, literacy, occupation, age at marriage) are poor. Sources of light (electricity) and schools are found more accessible in the study area. There is growing sense of awareness in this community. However satisfactory changes in the various aspects of life (i.e. political, academic and socio-economic aspects) have not been possible. The slogan of the government "education for all" is very limited here. No one student has entered into the bachelor level till now. There is less than one percent studying in the higher education. All round development of Danuwar community is not possible unless level of education increases. No bright future can be observed in different fields of life unless their tradition beliefs are modernized.

The study presents the experience of 113 married females. Cultural and social barriers are major obstacles for the development of individual's attitude. Nutrious food and use of facilities is almost difficult for the majority of women due to poverty. They are compelled to live a life of hope and dream. In the study area, all the indicators of maternal health care practices are poor. For example frequency of antenatal visit, iron tablet coverage, nutritional food intake, delivery care, postnatal

care and so on. These indicators prove that rural Danuwari women are facing a miserable life.

Following conclusions are drawn from the study:

- ) Socio-economic status of an individual plays a strong role in determining the health status and perception.
- ) Physical facility in the study area is not sufficient physical facilities have strong relationship to health attainment. Some physical facilities such as electricity, transportation, schools are essentially good but others are very poor.
- ) A positive relationship is observed between the level of education and maternal health care services. Educated women are much more likely to have the advantage of medically supervised delivery and antenatal care services.
- ) The regular care during pregnancy would also increase chances of giving birth to a healthy child. Prenatal care can reduce maternal and prenatal morbidity and help to prevent complication from becoming life threatening emergencies.
- ) There is strong positive relationship between education and age at first marriage. Women with no education tend to marry two years earlier than women with some secondary education and three years earlier than women with at least and SLC.
- ) It is necessary to educate mother to care for herself and for her newborn about the importance of postnatal care. Safe motherhood programme recommends that all women should receive at least two postnatal checkup and iron supplementation for 45 days following a delivery.
- ) Nearly all Nepalese women and men know of at least one method on contraception. Injectables, female sterilization, condoms, male sterilization and the contraceptive pills are known to most currently married women.
- ) About 46 percent of women have heard of AIDS. Minority of women have knowledge of HIV/AIDS transmission. They know that both condom use, limiting sex partners to one uninfected partner are HIV prevention methods; that healthy looking person also can have HIV.
- ) Many children (i.e. 25%) of this community have not yet joined in the school even various types of incentives are provided by the government to motivate

them. However, they are neither sensitive nor careful towards their responsibility which is really a serious problem existing with them.

- ) Early marriage plays a significant role in increasing the number of CEB but level of education is inversely co-related with number of CEB.
- ) Higher the level of income lower the CEB, which helps to improve maternity care.

### **6.3 Recommendations**

Following are the recommendations for the policy makers and planners:

- ) It is found that people of study area are much deprived of physical facilities. Therefore, planning should be made to increase such facilities.
- ) Danuwari women are much more sensitive towards their culture. Therefore, planners should be careful while preparing plans. The cultural aspects should be positively addressed.
- ) Strong positive association is observed between education and maternal health care. Therefore, quality and practical education from informal sector also should be enhanced in the study area.
- ) Economic crisis is one of the problems for low level of maternal and child health. Therefore, income generating activities should be launched for them.
- ) Public awareness programme to the parents of the study area should be launched seriously and the government should support economically to their child for study period. Different programmes like training, seminar and pictorial demonstrative programmes should be carried out by responsible authorities.
- ) Most of the women were found not practicing hygienic rules. therefore, information, education and communication (IEC) programme should be enhanced.
- ) The poverty alleviation programs should be launched. At least one member from each HH should be guaranteed for the job as this community is deprived and disadvantageous.
- ) Means of family planning should be made accessible to all in the study area.

- ) There must be reservation system in local level in every aspects of development including employment opportunities until they are assimilated into the main stream of a country with equal strength.

#### **6.4 Issues for Further Research**

Following are the issues for the further research.

- ) This study is confined to a VDC. A wide range of research covering different part of nation is essential.
- ) Very limited numbers of variables are included in the study. A wider research containing several variables are needed.
- ) This study is uni-sectional research. Multi-sectional research is more helpful to explore the facts.
- ) A research including other areas of reproductive health is more advantageous.

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**TRIBHUVAN UNIVERSITY**  
**Central Department of Population Studies (CDPS)**  
 (This information will be secrete, it will be used only for M. A. Thesis Purpose)  
**QUESTIONNAIRE DESIGN**

Name of the Village:-  
 Ward No.-  
 Respondent's Name.-

Respondent No.:-  
 Household No.:-  
 Types of Family: Nuclear/ Joint

**Household Questionnaire**

S. N.	To be asked all of the family members				To be asked for members above 5 years				Eligible women 9
	Name of Member 1	Relation with head of household 2	Sex 3	Age 4	Current occupation 5	Literacy 6	Education level 7	Marital status 8	

**Sex Code**  
 Male: 1  
 Female: 2

**Literacy Code**  
 Yes: 1  
 No: 2

**Education Code**  
 Non-formal Education: 98  
 Formal Education: 1 to 10  
 I. A.: 12  
 B. A.: 15  
 M.A.: 17

**Occupation Code**  
 Agriculture: 1  
 Home Industry: 2  
 Job/Service: 3  
 Trades: 4  
 Daily Wages: 5  
 Household Work: 6  
 Student: 7  
 Others: 98

**Marital Code**  
 Unmarried: 1  
 Married: 2  
 Widow/widower: 3  
 Divorce/Separated: 4

These questions were asked for only those women of aged 15-49 years who had at least one child.

### **Group 'A' Individual Information**

1. In what month and year were you born? .....
2. How old were you at your last birthday? ..... years
3. Have you ever attended school? .....
4. If yes, what was the highest grade you completed?
5. If not, what was the main reason, you stopped attending school?
  1. Got Pregnant
  2. Family needed help on Agriculture
  3. Could not pay fees (poverty)
  4. School not accessible too far
  5. Others
6. Can you read and write simple letter or newspaper?
  1. Yes
  2. No
7. What is your husband's occupation?
  1. Agriculture
  2. Business
  3. Service
  4. Labour (Daily wages)
8. What is the education of your husband?
  1. Grade
  2. No
9. Do you usually listen a radio?
  1. Yes
  2. No
10. If yes, which programme do you listen?
11. How old were you at menarche? ..... years
12. How old were you, when you get (first) married? ..... years
13. Are you currently pregnant?
  1. Yes
  2. No.

### **Group 'B' Respondent Background**

101. What is the main source of drinking water for your family?
  - a.
    1. Piped
    2. Well
    3. River
    4. Kuwa
102. How long does it take to get there, get water and come back?
  1. .... hr.
  2. .... min





207 (b) In total how many children have you had? .....

208 How many sons have died? And how many daughters have died?

1. Sons ..... 2. Daughters .....

209 Any abortion or miscarriage events?

1. Yes 2. No

210 If yes how often?

### **Group 'D' Family Planning**

301. Have you heard about family planning?

1. Yes 2. No

302. How did you hear? by means of

1. Radio/TV 2. Friends 3. Health personals  
4. Others

303. Are you using such devices now?

1. Yes 2. No

304. Can you name please?

305. Why do you use that FP devices?

1. Spacing/controlling child 2. Maintain own health  
3. For safe sex 4. Other reasons

306. If no, had you ever used in the past?

307. If yes, which one you feel better?

308. Who advised you to first use this method and which one?

309. Is it easy or difficult to get there?

1. Easy 2. Difficult 3. Don't know

310. What is the main reason that you are not using the method of contraception to avoid pregnancy?

1. Not accessible 2. Don't like 3. Don't know 4. Side effect

### **Group 'E' (HIV/AIDS)**

401. Have you ever heard about HIV/AIDS or STDS?

1. Yes 2. No.

402. How did you come to know about it?

1. Radio/TV 2. Health workers 3. Family members

4. Neighbours/friends      5. Others

403. Have you ever heard or seen the patient of AIDS/STDS anywhere?  
1. Yes                              2. No
404. If yes, who is he/she?
405. Where did he live in the past?  
1. Home                      2. City within the country                      3. Foreign country
406. From where did you know about HIV/AIDS?  
1. Media                      2. Health workers                      3. Family members  
4. Neighbours/friends                      5. Others

**Group 'F': Antenatal Care Services**

501. (a) What was your age when you got menstrual ? ..... years  
(b) What was your age at first conception? ..... years
502. When was your last child? ..... years ..... months
503. Did you visit antenatal care?  
1. Yes                              2. No
504. How many during pregnancy ? ..... times
505. Where were the visit?  
1. Health Center                      2. Hospital  
3. Clinic                              4. Others
506. Who provided the antenatal care?  
1. TBA                      2. MCHW                      3. AHW/HA  
4. Doctors                      5. Others
507. Have you received TT vaccine during pregnancy?  
1. Yes                              2. No
508. If yes, how many times? .....
509. Did you take iron/folic tablets?
510. Have you taken calcium/vitamin during pregnancy?
511. When you were pregnant with, did you suffer from night blindness?  
1. Yes                      2. No                      3. Don't know
512. How long did you continue working during pregnancy?
513. Where did you give birth to?  
1. Home                      2. In health facility



606. If yes, what were the problems?  
1. Prolonged labour                      2. Obstructed labour  
3. Excessive bleeding                      4. Others

607. How many hours/days was the labour lasted?  
1. Long                                      2. Short

608. What was the size of baby at birth?  
1. Very big                                      2. Big                      3. Normal  
Small                                      Very small

### **Group 'H' :Postnatal Care**

701. Did you take postnatal care service?  
1. Yes                                      2. No

702. Where did you visit for PNC?  
1. Home                      2. Hospital                      3. Health post                      4. Others

703. Whom did you visit?  
1. Doctor                      2. Nurse                      3. HA/AHW  
4. TBAs                      5. Others (Dhami/Jhankri)

704. How many days after did you take the service?

705. Did you receive checkup within 24 hours following delivery?  
1. Yes                                      2. No

706. How soon after the birth of child were you given any things to eat?  
1. Hours .....                      2. Days .....                      3. Month .....

707. What was the frequency of meal per day after delivery?  
1. Two times                      2. Three times                      3. Four and more times

708. Did you receive a checkup within 6 weeks following delivery of your last child?  
1. Yes                                      2. No

709. Did you get any health problem to your last child after the delivery?  
1. Yes                                      2. No

710. If yes, what were the problems?  
1. Jaundice                      2. High fever                      3. Dihearroea                      4. Others

711. How long have you been breast feeding since?  
1 ..... months                      2 ..... years

