

CHAPTER – I: INTRODUCTION

1.1: Background of the Study

Pregnancy is the state of developing a baby inside a women's womb. It is a natural process of giving continuation of human generations on the earth. In other word, it is a reproductive function in women that begins at menarche and ends in menopause (15-49 years) (Dura, 2005:1).

Care of safe delivery begins soon after conception till the birth takes place. The provision of care during pregnancy and child birth is essential to ensure healthy and success outcomes of pregnancy for the mother and her new born infant. The maternal and infant mortality and morbidity are significant indicators of maternal and child health status.

Status of women is lower in most of the developing countries like Nepal. Low literacy rate, high fertility rate, high maternal mortality rate and high infant and child mortality rates are some indicators of lower status of women. Furthermore, they have no opportunities to get education, to have nutritional food, to make decisions, to represent at various social sectors due to lower status and inaccessibility to empower. Therefore, it can be said that women are discriminated. In developing countries like Nepal this position of women exists not only in pregnancy period but also during the time of pregnancy through delivery to postnatal period. It is obvious that women are less aware of their civil rights. Hardly a little number of women are aware and struggling for their rights and required services but it can't spread all over the country and village, as far remote and rural areas. The total fertility rate 4.1 per women in Nepal that was reported by 2001 census. Due to the lack of family planning knowledge, unwanted pregnancy is accepted as a additional burden by the mother. The percentage of economically active population of female age 10 years and above is seen 46.2, 45.5 and 55.3 in 1981, 1991 and 2001 census respectively (CDPS: Vol. II: 75).

Nepalese women of reproductive age constitute 24.6 percent of the total population and 49.2 percent of the total female population. About 18 percent of Nepalese women of reproductive age (15-49 years) have never married and

79 percent Nepalese women of reproductive age are currently married (CBS, 2003: 211).

If a slightly advanced situation observed Nepalese children are delivered at home with the assistance of TBAs or elders of the community. An important component of efforts to reduce the health risk of mothers and children is to increase the proportion of babies delivered under medical supervision. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother and/or the baby (NHS, 1996: 16).

The Fourth World Conference on Women (FWCW), Beijing 1995, Maternity Care Consultation, Colombo, 1997 and International Conference on Population and Development, Cairo 1994 have helped to focus and attempt problems of reproductive health as well as reproductive rights. All the participant countries are committed to adopt the policy and programme or action to their own country. Nepal has also agreed to these congeners.

A saying from United Republic of Tanzania mentioned in the resolution of FWCW illustrates the risk of delivery as: "I am going to the sea to fetch a new baby, but the journey is long and dangerous and I may not return." Therefore, maternity care is a crucial aspect of reproductive life (Beijing, 1995).

The above definition and the definition of reproductive health adopted on International Conference on Population and Development (Cairo, 1994) are strongly matched each other. The ICPD declares, "Reproductive Health is a state of complete, physical mental and social well being not merely the absence of disease or infirmity in all matters relating to the reproductive system and to its function and processes." Reproductive health implies that people are able to have a satisfying and safe sex life and they have the capability to reproduce with freedom to decide about the number and spacing of children. In order to exercise that freedom, reproductive health requires access to both family planning and related health care services (UN, 1994).

Nepal is a developing country. The delivery of topography, ethnicity and culture is the main characteristics of Nepal. It is located between India and china. Ecologically it is divided into three belts namely the Mountain, Hill and Terai. Almost 84 percent of 23.2 million people live in the rural areas. The rate of growing populations is 2.27 percent. Moreover, there are various obstacles and hardship entangled with education, health. The literacy status of women in Nepal is very 42.49 percent. Only the literacy is not significant to improve the health status. Socio-cultural customs and traditions are also responsible for affecting the health status of women and new born. The maternal mortality ratio (MMR) and Neonatal Mortality rate (NMR) are preventable by adopting the following appropriate approaches.

- Increase in women's education
- Improve social and cultural factors which have negative effects on health
- Use available resources
- Focus on the management of poverty in national health policy.

(Dura, 2005:2)

In the context of Nepal, more than 80 percent of women deliver their baby at home. Among them 90 percent of maternal deaths occurs in rural areas because of the complications during delivery. Similarly, every hour in Nepal 3-4 neonatal death occur because of the complications of pregnancy related causes and unsafe delivery practices. So, to improve the MMR and NMR in Nepal, these areas are essentially to be investigated, studied and analysed. After accomplishment of the study, acquired facts or data may assist for further researches as well as for policy intervention.

The WHO recommends the service of a skilled or trained birth attendant (TBA) at every birth, which can provide good quality care to the mother and child. Such a TBA is expected to perform hygienic, safe and sympathetic services and able to recognize and manage complications and refer promptly if more care is needed.

1.2: Statement of the Problem

A large proportion of population in the twenty first century, Nepal is still below even in the poverty line. Generally, people do not pay attentions towards health and health practices. Especially the women do not reveal or to tell their health problems even in serious conditions because of shyness and oppressive as well as patriarchal cultural norms.

It was estimated for 1999 that in every minute in developing countries 380 women became pregnant, 190 women faced an unwanted or unplanned pregnancy, 110 women experienced a pregnancy related complication, 40 women had an unsafe abortion and 1 woman died. These problems were not happening by the same rate in all countries. In Asia, the high rates of maternal mortality were estimated for Afghanistan, Bhutan and Nepal, whereas the ratio for Japan was less than 10 in mid 1990s (PRB, 1997). Maternal mortality rate in Nepal was accounted 1,500 per 100,000 live births whereas in developing countries it was 480 and in developed countries 27 per 100,000 live births (UNFPA, 1999). Later the MMRs in Nepal were estimated 850 in around 2000 and 439 in 2005. However there are less reasons to believe in dramatic improve of all these traumatic condition worldwide.

The 1996 survey revealed considerable malnutrition among children in Nepal. Forty-eight percent of children under age three were stunted, 11 percent were wasted, and 47 percent were underweight. Variation by place of residence was marked, with rural children living in the mountains and in the Far Western Region of Nepal were more likely to be malnourished than other children (NFHS Survey, 1996).

More than nine out of every ten births occurred at home, and many women even deliver alone. Traditional birth attendants (TBAs), both trained and untrained, are sometimes called in to attend the deliveries, but the majority of the women receive help only from relatives or friends. Traditional healers are usually consultate when problems arise. Births generally take place in a designated room, but often not in a clean environment. A variety of instruments are used for cord cutting, most of which are not sterilized before use (Safe Motherhood Newsletter, Kathmandu, 2003, Vol. 3: 4).

Use of clinical services is clearly low. In addition to cultural factors, which prevent women from seeking clinical care, a number of other factors influence the use of services. Few facilities provide essential obstetric care. Health services are often of poor quality. Access to appropriate facilities is poor. Long distances, poor roads and lack of transportation also keep women from using the facilities. For example, according to the Maternal Mortality and Morbidity Study (MMMS), less than four out of ten women have access to transportation. As a result of these factors, only eight percent of all deliveries in Nepal take place in health facilities. It is not surprising that more than two-thirds of maternal deaths occur at home. Another 11 percent take place during transport, while the remaining deaths (21%) occur at a variety of healthcare facilities (Safe Motherhood New Selter, Kathmandu, 2003, Vol. 3: 4).

The rural people generally do not visit the health post and 70 percent of births happen without any contact with a trained practioners. Health services in most of the rural areas are provided by Village Health Workers (VHWs), Maternal Child Health Workers (MCHWs), Female Community Health Volunteers (FCHVs) and Traditional Health Practioners (Population in Monograph, 2003: 301).

During pregnancy, labour and pureperium, Nepali women follow traditional techniques which have harmful effects on health. Moreover, women are more likely to have infections because of anatomical structures. One of the regions in the quality and accessibility to maternal care services in that most of the Nepali women reside in rural areas. In those areas, only basic health services are available in very limited areas. Though some community based services are provided by Trained Birth Attendants, female community, Health Volunteers and Maternal Child Health Workers for the welfare of mother's children but those services are usually in adequate because lack of transportations and lack of applications of national health policy equally. Above mentioned problems are maximum in rural and slum areas of Nepal (Dura, 2005). However, cultural factors can be accepted as strong risk factors which need interventions to improve the maternal and child health status. Therefore, this study is also to explore the knowledge and practices of mothers during pregnancy, labour and post natal periods, which are the

key points for safe delivery. Thus health educationists can teach to more vulnerable groups more effectively to bring the awareness in Nepali women.

Such health education is the cheap and cost effective means of reducing MMR and NMR in the context of Nepal. In this way, lack of awareness among mothers towards safe delivery has been a great problem of back ward communities of Nepal.

I selected FWDR for my study because I am a permanent resident of this region. It was more convenient for me to collect different raw data because of it's local language, the cultural, social, geographical situation that I'm know to much extent had been fruitful to me beside these reasons my expense also was reduced.

Mahendranagar Municipality in FWDR is density populated place where all kinds of people that I had to study about namely rich and poor, literate and illiterate, employed and unemployed, Brahmin, Chhetri, Tharu and all. Beside I wanted to highlight the CEB that is very poor in this region thinks that it might help in solving this problem in one way or the other.

1.3: Objective of the Study

The general objective of the study is to assess safe delivery practices in Mahendranagar Municipality in Nepal. However, the following are the specific objectives.

- To inaugurate practices of safe delivery differential by ethnicity.
- To examine the safe delivery practices by occupational differential.
- To assess the safe delivery practice by the level of education of mothers.
- To examine the safe delivery status by the level of availability of media related amenities in the household.

Besides, the study will utilize the information on age at marriage and CEB as cross variables to examine each objective and these will be further segmented by place of delivery.

1.4: Significance of the Study

The maternal mortality and neonatal mortality rate is higher in Nepal in the comparison of developed and other countries. So women's health is a relevant topic of study. Not only the illiteracy but also the different cultural, social, economic, political, geographical and religious beliefs are the factors affecting to the status of women health in Nepal. By and large women health is neglected by themselves, family and society. As a result, MMR and NMR in Nepal is higher in the comparison of developed countries. A number of researches have been conducted by many agencies but importance of mother's groups and socio-cultural aspects of health are less focused.

The findings of this study can be used by different levels of policy making and programme implementation. This study is based on the data collected in 19 wards of Mahendranagar Municipality. This area is economically backward than other Municipalities in Nepal. Likewise, poor literacy and low sources of income result in seasonable labour work in nearest Indian cities. Most of the women are depend on collection selling of fuel wood and part time work.

- will provide basic information on mothers.
- help improve cultural misconceptions and harmful practices.
- provide base line information for further researcher.
- help the national health policy makers.
- help reduce maternal mortality and child mortality.
- enhance awareness on the need for maternal health care of women in Mahendranagar Municipality.

1.5: Limitations of the Study

The study attempts to analyze perception towards the safe delivery of Mahendranagar Municipality of Kanchanpur district. Due to the nature of study and methodology, the study will be delimited on the following:

1. Confined in Mahendranagar Municipality of Kanchanpur district only.
2. The study will be based on reproductive mothers only.

3. This study doesn't include the information on migration which directly affects on fertility level of women.
4. Only a few qualitative and quantitative tools were used in this study.

1.6: Organization of the Study

This study is divided into six chapters. The first chapter is introductory which includes background of the study, statement of the problem, objectives of the study, limitation of the study and organization of the study. Similarly, the Second Chapter deals with literature review, in which theoretical literature, empirical literature, conceptual framework, variable considered, and formulation of hypotheses are described. The Third Chapter is concerned with methodology of the study, which includes sample size, questionnaire, design, field operation, data processing, analysis technique etc.

Similarly, Chapter Four provides is devoted the introduction to study population this chapter divided by three groups social characteristics, economic characteristics, demographic characteristics of the study area based on data from the survey.

Chapter Five presents the analysis and interpretation of data of selected dependent and independent variables related to safe delivery care and statistical analyses. Finally, the concluding chapter deals with the summary, conclusion and recommendation to policy implications and future area of research.

CHAPTER – II: LITERATURE REVIEW

2.1: Theoretical Literature

Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and process (UN, 1994: 45).

Implicit in this last condition are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility which are not against the law, and the right of access to appropriate healthcare services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant (UN, 1994: 45).

The Cairo Conference (1994) stated that man and women have access to safe effective affordable and acceptable method of family planning as well as method of their choice or regulation of fertility. Female will have the right of access to appropriate health care services, will enable them to go safely through pregnancy and child birth thus providing couples with the best chance of having a health infant (UNFPA, 1994: 33).

Delivery care refers to the place for delivery and under whose supervision the delivery occurred. A pregnant women should never be left alone to delivery by herself. The family members should request help from a trained health worker. Trained birth attendant auxiliary nurse mid wife and maternal and child health workers as soon as - labour beginnings if a trained health worker is unavailable, the family planning members should assist the mother child birth when labour begins (MoH, 1996).

In Nepal, the family plays a critical rules in prompting health pregnancies reducing the chance of high-risk pregnancies seeking routine maternity care and recognizing and taking immediate action for obstetric emergencies. The family should make sure the women rests during her pregnancy provide her with adequate food and help poor seeking assistance from a trained health worker during pregnancy and labour community - leaders and health

workers should promote the importance role of family in ensuring health pregnancy and child (MoH, 1996).

Hustain Jenifer and CNN on the study of labour care hand descriebd that women have delivered traditionally their babies at home in their own beds supported by their friends and family calling on the strength of the collective wisdom and experience of these who know birth. Women in child birth have been encircles by and honored by their knowledge or birth from generation to generation. They created their own rituals and shared powerful symbols of themselves of women for families who desire and choose there home is a safe and supportive place to give birth. Good prenatal care, healthy diet supports the safety of birth strength of the mother, computer attendants and appropriate use of technology during the pregnancy, labour and delivery further improve the chances of a positive out come (Dura, 2005: 8).

Labour is the physiological process by which the utrius expels the products of conception. In Nepal children are delivered in home with out assistance or with the assistance of TBAs or relatives or friends. At the national level 9 percent pregnancy is delivered under health facilities compared with 89 percent at home. Delivery care is provided to 9 percent by doctors or nurse 1 percent by MCHWs, 23 percent by TBAs, 56 percent by relatives or friends while 11 percent births took place without assistance (NDHS, 2001).

Many women prefer to give birth at home because they like the friendship and support from female relatives and neighbours. The government has committed itself to safe motherhood, however, of women dying pregnancy and child birth awarening among mother groups. In the same communities women are isolated in livestock, sheeds during child birth due to the belief that blood. Particularly, the blood of child birth is impure and it leads to tetanus and other infections (WHO, 2000).

The three elements of maternal health services according to World Health Organization are antenatal care, delivery care and postpartum care. Each element should consist of the following services as prescribe by WHO.

1. Antenatal Care: WHO recommends a pregnant women to get 4 ANC visits for health promotion, assessment, prevention and treatment.

2. Delivery Care: WHO recommends a skilled or trained birth attendant (TVA) at every birth. Who can provide good quality care to the mother and child such a TBA is expected to perform hygienic. Safe and sympathetic services and able to recognize and manage complications and refer promptly if more care is needed.
3. Postpartum Care: WHO recommends integrated postpartum care which includes identification and management of problems in mother and new born, counseling, information and services for family planning and health promotion for new born and mother (WHO, 1998: 3).

Sharma (2001) summarized on that there is influence of distance availability of proper transportation facility. Mother's education level, financial conditions of Nepalese mother and family decision maker.

Another study conducted by WHO and UNICEF showed that women plays an important role in society and as mothers from the nuclear and backbone of the family. Despite this role women were still accorded a low status in society in most developing countries like Nepal and their needs continue to remain unfulfilled (Dital, 1999).

According to FHD (1998) revealed that 46.3 percent deaths of mother were due to postnatal hemorrhage with or without retained placenta, non-recognition of danger sign of complication by families lack of transport and decision makers unavailability of trained health personnel with life saving is a reality in all place of this country. Emphasis must be placed on the family and community level to recognize complications and immediately upon reorganization of any danger sign to call for urgent assistance from the nearest trained service providers (FHD 1998).

One of the study conducted by WHO (1997-98) highlighted that pregnancies are considered high risk complicated. In these cases the pregnant women should get extra food and rest. The facility should ensure that she gets special care and help her to get access to it. The safe motherhood programs coordinated by the family health division and implemented a study at the community level i.e. on three district (Kailali, Rupandehi, Okhaldhunga) on

the study 640 deaths had screened and among them 132 were identified as maternal deaths that also 67.4 percent of had died at home and 11.4 percent had died on the way to health facility. Almost 90 percent maternal deaths to place in rural setting majority occur after delivery 62 percent less than 1 by 28.8 percent had attended antenatal care (WHO 1997-98).

A study observed that in rural area of Nepal, women aged 25-39 years, who came from high socio-economic household and belonged to high cast Hindu and Tibeto Mongolian ethnic groups were more likely to vaccinate their children. Similarly, he also found that the children's whose fathers with at least 8 years of schooling were two times more likely to be vaccinated compared to the no schooling groups (Acharya, 1998).

Nepalese women of reproductive age constitute 24.5 percent of the total population and 49.2 percent of the total female population. About 18 percent of Nepalese women of reproductive age (15-49) have never married and 79 percent Nepalese women of reproductive age an currently married (CBS, 2003: 211).

The NMC Guidelines mentioned that a pregnant women in Nepal should never be left alone to delivery by herself. The family members should request help from a trained health worker (trained TBA, ANM, MCHW) as soon as labour begins. If a trained health worker is unavailable, the family members should assist the mother during child birth. The guidelines has from some perception that when labour begins the family should:

- Call a trained birth attendant. If a available.
- Encourage the pregnant women to drink enough fluids to prevent dehydration.
- Encourage the pregnant women to empty her bladder frequently and provide a pot so she does not to go outside.
- Encourage the pregnant women to empty her bowel in early labour.
- Clean the room for the delivery, avoiding the use of cow dung.
- Encourage the labouring women to take a bath or at least wash her genitals with water and soap (NMC Guidelines, Nepal: 4).

Institutional deliveries are about five times more common among births to mothers who had four or more antenatal checkups (40%) than among births to mothers who had one to three antenatal checkups (8%). Institutional deliveries are least prevalent (2%) among births to mothers who did not receive any antenatal checkups. Several factors are likely to contribute to this positive relationship between antenatal checkups and institutional deliveries. Women who have had contact with health facilities during pregnancy are more likely to subsequently deliver in an institution because of the advice and encouragement from health personnel. Women with pregnancy complications are more likely than other women to go for antenatal checkups and deliver in a health facility because they are more aware of the health risks associated with a complicated pregnancy. Women, especially the young, urban and educated, with knowledge of the benefits of modern medical care will choose to use both antenatal and delivery services (NDHS, 2001: 147).

In the case of Nepal, there is little variation in the utilization of reproductive health services by women's decision making autonomy. However, there is a positive relationship between utilization of reproductive health services and women's empowerment as measured by her attitude toward women's ability to refuse sex with their husband. For example, one in two women who believe that a women can refuse sex with her husband for three or four reasons receives antenatal care services, compared with only one in three women who believe a wife should refuse sex with her husband for any reason at all. There appears to be a mixed association between women's empowerment as measured by the number of reasons women believe that wife beating is justified and their care seeking behavior. For example, half as many women who believe that wife beating is not justified for any reasons a positive association. On the other hand, twice as many women in the former group receive delivery assistance from a health professional as women in the latter group a negative association (NDHS, 2001: 153).

2.2: Empirical Literature Review

World wide around 600,000 women die every year from complications of pregnancy and child birth. For every maternal death it is estimated that so to 40 women suffer from disabilities (Manandhar, 2005, Vol. 6: 6).

Young women below 15 and older women above 40 years are especially at high risk level that may be 10 to 15 times higher than women in their 20s. MMR is supposed to be the only "the single biggest in equity in global public health statistics" (WHO, 1992:28)

Insufficient maternal care during pregnancy and delivery is largely responsible for the appalling annual toll of 529,000 maternal deaths and the estimated 4 million neonatal deaths that occur within the first month of life. WHO recommends a minimum of four antenatal visits. Labour and delivery, too, should be supervised by doctors, midwives or nurses with the midwifery skills to handle normal deliveries safely and recognize the onset of complications beyond their capacity to handle, referring the mother for emergency care.

Women are most in need of skilled care during delivery and the immediate postpartum period, when roughly three quarters of all maternal deaths occur. Traditional birth attendants, whether trained or untrained, can neither predict nor cope with serious complications. The single most critical intervention for safe motherhood is thus to ensure that a competent health worker with midwifery skills is present at every birth, and transport is available to a referral facility for obstetric care in case of emergency.

Current estimates indicate that only 59 percent of births in the developing world are attended by a doctor, nurse or midwife.

Trend data on skilled attendants at delivery are not available for all developing countries. The information given for 74 developing countries where two or more surveys have been conducted in the past decade or so using similar estimation methods, primarily Demographic and Health surveys (DHS) and Multiple Indicator Cluster Surveys (MICS): overall, these 74 countries cover more than 79 percent of live births in the developing world. Projected figures for 1990 and 2004 were obtained from the trend lines indicated by these surveys.

The evidence in such improvements. In developing countries as a whole, the percent of births attended by a skilled health professional has increased by more than a third - that is, from 44 percent to 59 percent between 1990 and

2004. Unfortunately, in South Asia and Sub-Saharan Africa, where maternal mortality is highest, the levels have not improved substantially. More than half of all births in Sub-Saharan Africa and about two-thirds of births in South Asia are not assisted by skilled health personnel (<http://www.childinfo.org/areas/deliverycare>).

Sadly Nepal has the highest maternal ratio among the countries in the South East Asia Region. It is estimated that almost 5,000 mothers die every year due to pregnancy related causes. It is also estimated that 50,000 children under one year of age die every year, of which 30,000 die within 28 days of age and 20,000 among these die within the first week of life.

Most of these deaths occur due to the overall poor health status of women during pregnancy and due to the lack of access to quality maternal and newborn health care services. The difficult geographical terrain, poorly developed transportation and communication system, poverty, lack of education, poor nutritional status, low social status of women including traditional beliefs and harmful birthing practices are factors contributing to the high maternal and newborn death in Nepal. (Manandhar, 2005, Vol. 6: 6).

Data on place of delivery were also obtained using focus group protocol. Discussion in the focus group confirms the general pattern of delivery practices in Nepal. Multiple responses on place of delivery were obtained. It shows that 94.4 per cent of women deliver their babies at home followed by hospital (33.8%) health post/sub-health post (3.5%). Private clinics/hospitals account for 1.4 per cent of delivery and the same numbers reported to have called the health worker at home for delivery (CBS, 1997).

The level of assistance a woman receives during the birth of her child also has important health consequences for both mother and child. Births delivered at home are more likely to be delivered without professional assistance, whereas births delivered at a health facility are more likely to be delivered by trained medical person 9 per cent of births were delivered under the supervision of a doctor (6 per cent) or trained nurse or midwife (3 per cent). This has changed only slightly from 8 per cent reported in the 1991 NFHS. MCH workers and other health professionals (VHW, health assistant or health post staff) assisted in just over 1 per cent of births.

Traditional birth attendants assisted in 23 percent of births. While relatives and friends provided primary assistance in 56 percent of births. 11 percent of births were delivered without any assistance, which is about the same as was reported in the 1991 NFHS (10 percent) (NFHS, 1996: 11).

This study was conducted at the Western Regional Hospital (WRH), Pokhara, Nepal. We investigated the relationship between selected socioeconomic variables, pregnancy indices, birth weight, and maternal health in women of different ethnic origins. In our cross-sectional data set, 29.8 percent of infants were born with a low birth weight. Our data analysis showed Indo-Aryan and lower caste ethnic groups had significantly lower weight babies than Tibeto-Burman and Newar groups. Further analysis showed that the Tibeto-burman group received better care during pregnancy. Similarly, the Newar groups had significantly better nutritional intake than the Indo-Aryan and lower caste groups. The outcome of food restriction and antenatal care during pregnancy in specific ethnic groups has important implications for the health care delivery system. Health policymakers should target those ethnic groups and develop culturally based policies to reduce the incidence of lower birth weight in Nepal (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=retrieve&dopt=Abstract*list_uids=14742109&itool=iconabstr&query_hl=3&itool=pubmed_docsm).

Overall, one in two pregnant women received antenatal care. Twenty-eight percent of mothers receive antenatal care either from a doctor 17 percent or from a nurse or auxiliary nurse mid wife (11.0%). Another 11 percent of mothers received antenatal care from a health assistant (WA) or auxiliary health worker (AHW). Village health workers (VHWS) provided antenatal care to 6 percent of women and maternal and child health workers (Maternity Care Ws) provided care to 3 percent of mothers. Traditional birth attendants (TBAs) provided antenatal care to less than 1 percent of mothers (NDHS, 2001).

2.3: Selected of Study Variables

Following variables were identified for the present study. This is mainly based on the review of literature and the conceptual framework

There are three types of variables considered, which are independent variables, intermediate variables and dependent variables.

Independent Variables:

- Education,
- occupation,
- ethnicity,
- media exposure

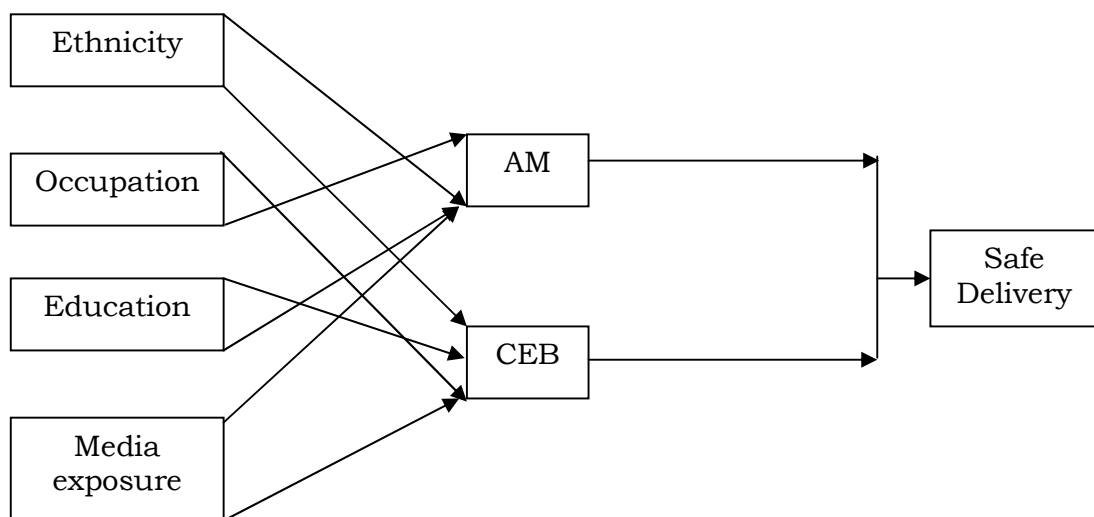
Intermediate Variables:

- Age at marriage
- Children ever born

Dependent Variable:

- Safe delivery

2.4: Conceptual Framework



2.5: Formulation of Hypothesis

On the basis of above literature review and conceptual framework adopted for this study following hypotheses could be formulated.

- Higher the ethnic hierarchy more will be the practice of safe delivery.
- More the non-agricultural occupation higher will be the safe delivery practices.
- Higher the level of education higher will be the safe delivery practices.
- Higher the use of media at household higher will be the use of safe delivery services.

CHAPTER - III: METHODOLOGY

The study has attempted to explore the mother's wisdom and experiences regarding safe delivery for this, data was collected with the help of District Public Health Office and Volunteers of those areas. The methodology of study is given below.

3.1: Sample Size

This study has concentrated on the women of the reproductive ages (15-49). They had experience of child birth. All of them were from Mahendarnagar Municipality. Since the researcher is from the same locality, it was not difficult to identify the study population. Therefore, random sampling method was used in research 228 respondents were taken from nineteen wards in the Mahendranagar Municipality. Among them twelve samples were taken from each ward.

3.2: Questionnaire Design

For the survey two types of questionnaires were developed which are as follows:

- a. The household questionnaires collect information on age, family size, caste/ethnicity, age at marriage, educational status and occupation.
- b. Individual questionnaire was designed for all women of reproductive ages who have experienced child birth. Information on the safe delivery, services like ANC, delivery care PNC services, delivery-assistance, delivery kits, opinion of delivery place, age of menstruation, numbers of children ever born, age at first pregnancy, age at first birth, Immunization times, types of problem, access to health post and type of household amenities and sources of drinking water.

3.3: Field Operation

The sampling was random. Due to the sensitive type of questions, the respondents were selected who were willing to response when asked. Only

the quantitative method was used. The researcher himself asked the questions to the respondents. All of the respondents were currently married and they have children.

3.4: Data Processing

Data processing is the process to change raw data into final usable data. This dissertation mainly based upon the primary data collected from Mahendranagar Municipality in Kanchanpur District. These raw data, collected from the study area, are processed by using computer software that is statistical package for social science (SPSS) according to the established objective. Frequency tables, mean cross table, descriptive statistics are the outcome of this software.

3.5: Data Analysis Techniques

Through this dissertation, collected data has been presented and analyzed by using subjective, as well as statistical techniques. Major statistical techniques used to achieve the objectives of this study are:

3.5.1: Frequency Tables

A frequency table is a series where a number of observations of similar or closely related values are put in separate group, each group being in order of magnitude in a series. In other words frequency distribution is a statistical table in which a set of distinct values are arranged in order of magnitude.

Different types of frequency tables are used to present the finding of the study.

3.5.2: Mean Cross Table

Unlike frequency tables, mean cross table is the presentation of two or more than two variables at a time in one table. This type of table is commonly used to see the relation among the variables and to derive the gap among them. Computer software SPSS has been used to process raw data into useable data and draw such mean cross tables.

3.5.3: Correlation Analysis

In a bi-variate distribution we are given a set of pairs of observations, one value of each pair being the values of each of the two variables.

We may be interested to find if there is any relationship between the two variables under study. The correlation is a statistical tool which studies the relationship between two variables.

To test significant:

If $r > 6 \text{ P.E.}(r)$ i.e., if observed value of r is greater than 6 times its P.E. then r definitely significant.

Where, P.E. = Probable error

P.E. is an old measure of testing the reliability of an observed value of correlation coefficient in so far as it depends upon the conditions of random sampling.

Probable error of the correlation coefficient is given by:

$$\text{P.E.}(r) = 0.675 \times \frac{(1 - r^2)}{\sqrt{n}}$$

r = Correlation coefficient

$$r = \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{[n \sum X^2 - (\sum X)^2][n \sum Y^2 - (\sum Y)^2]}}$$

n = Number of observations

X = Dependent variable

Y = Independent variable

CHAPTER - IV: INTRODUCTION TO STUDY POPULATION

This chapter deals with socio-economic and demographic characteristics of respondents.

4.1: Social Characteristics

Social characteristics include ethnicity, education, sources of drinking water.

4.1.1: Distribution of Respondent by Ethnicity

Table 1: Distribution of Respondents by Ethnicity

Ethnic group	No. of respondents	Percentage
Brahmin	56	24.56
Chhetri	99	43.42
Tharu	23	10.087
Dalits	44	19.298
Others	6	2.63
Total	228	100.0

Source: Field Survey, 2006.

It was found about the ethnicity of the respondents. The total respondents fall in to five ethnicity groups. Among them highest no. of respondents were Chhetri (43.42%), Brahmin (24.56%), Dalits (19.29%), Tharu (10.08%) and others (2.63%) (Table 1).

4.1.2: Educational Status of Respondents

Table 2: Distribution of Respondents by Educational Status

Educational status	No. of respondents	Percentage
Illiterate	68	29.8
Literate to 7	31	13.6
Grade 8 to 10	16	33.3
SLC plus	53	23.2
Total	228	100.0

Source: Field Survey, 2006.

Education is one of the most important factors that directly affect the level of safe delivery. As shown in Table 2, among the total 228 respondents, 68 (29.8%) were illiterate and 160 (70.2%) were literate. Among the literate population, 13.6 percent have passed up to 7 class, 33.3 percent have passed class 8 to 10 and 23.2 percent have completed SLC plus.

4.1.3: Sources of Drinking Water

Table 3: Distribution of Respondents by Source of Drinking Water

Source of drinking water	No. of respondents	Percentage
Piped	209	91.7
Tube well	5	2.2
Open well	2	0.9
Others	12	5.3
Total	228	100.0

Source: Field Survey, 2006.

Among total respondents, around nine in ten respondents used piped water followed by tube well (2.2%). Only one percent of respondents used water of open well (Table 3).

4.2: Economic Characteristics

4.2.1: Landholding Status of Respondents

Table 4: Distribution of Respondents by Landholding Status

Landholding	No. of respondents	Percentage
No land	20	8.8
Upto 10 kaththa	84	36.8
11-20 kaththa	80	35.1
21 and more kaththa	44	19.3
Total	228	100.0

Source: Field Survey, 2006.

It was found from table (4) that the distribution of respondents by their land ownership. Highest percentage of respondents (36.8%) reported that they have up to 10 kaththa land, followed by 11 to 20 kaththa (35.1%) and more than 21 kaththa (19.3%) whereas 8 respondents reported as landless (Table 4).

4.2.2: Occupational Status

Table 5: Distribution of Respondents with Their Occupational Status

Occupational status	No. of respondents	Percentage
Household jobs	115	50.4
Agriculture	77	33.8
Wage labour	10	4.4
Service	19	8.3
Trade & commerce	7	3.1
Total	228	100.0

Source: Field Survey, 2006.

Majority of the female population in Nepal is based on household jobs and agricultural occupation. Table 5 showed that more than 50 percent of respondents were involved in household job followed by agriculture (33.7%) only 4.4 percent of respondents are involved in wage labour and 3.1 percent were involved in trade and commerce (Table 5).

4.2.3: Household Amenities Status of Respondents

Table 6: Distribution of Respondents by Household Amenities

Household amenities	Yes		No	
	No.	P	No.	P
Electricity	200	87.7	28	12.3
Gobar gas	85	37.3	143	62.7
Telephone	69	30.3	159	69.7
Radio	129	56.6	99	43.4
Television	156	68.4	72	31.6

Source: Field Survey, 2006.

The respondents were asked to specify whether they have used any type of household facilities such as electricity, Gobar Gas, radio and phone or not.

It was found that the distribution of respondent by of availability of the household facilities, it was seen that nearly 88 percent of respondent have electricity at their household and 68.4 percent have television. Similarly, 56.6 percent of the respondents reported that they have radio at their home whereas 37.3 percent have gobar gas and 30.3 percent have telephone at their home (Table 6).

4.3: Demographic Characteristics

4.3.1: Distribution of Respondent by Age Group

Table 7: Distribution of Respondents by 5 Year Age Group

Reproductive age group of women	No. of respondents	Percentage
15-19	18	7.9
20-24	117	51.3
25-29	63	27.6
30-34	18	7.9
35-39	7	3.1
40-44	3	1.3
45-49	2	0.9
Total	228	100.0

Source: Field Survey, 2006.

It was found that the age group 20-24 years occupied the highest position i.e. (51.3%) and followed by 25-29 (27.6%), 15-19 (7.9%) respectively and the lowest no. of respondents from the age group (0.9%) (Table 7).

4.3.2: Distribution of Respondent by Age at Menstruation

Table 8: Distribution of Respondents by Age at Menstruation

Age at menstruation	No. of respondents	Percentage
14 and below	67	29.4
15 and above	53	23.2
Not stated	108	47.4
Total	228	100.0

Source: Field Survey, 2006.

It was clear from table (8) that the menstruation age is highest (29.4%) in the age group below 14 years and the lowest (23.2%) menstruation age in the group above 15 years and 47.4 percent respondents were not stated (Table 8).

4.3.3: Distribution of Respondent by Age at Marriage

Table 9: Distribution of Respondents by Age at Marriage

Age at marriage	No. of respondents	Percentage
12 to 15	35	15.4
16 and 17	53	23.2
18 only	70	30.7
19 and 20	43	18.9
21 plus	18	7.9
Not stated	9	3.9
Total	228	100.0

Source: Field Survey, 2006.

It was found that the age marriage at the age of 18 occupied the highest percentage (30.7%) and followed by age of 16 and 17 (23.2%), age 19 and 20 (18.9%) respectively and the lowest percentage of respondents from the age of 21 plus (3.9%) (Table 9).

4.3.4: Distribution of Respondent by Children Ever Born

Table 10: Distribution of Respondents by Children Ever Born

No. of CEB	No. of Respondent	Percent
1	91	39.9
2	83	36.4
3	34	14.9
4	15	6.6
5	5	2.2
Total	228	100.00

Source: Field Survey, 2006

Number of parity is inversely related to the health status of mother and infant as well as better health is inversely related to number of children. Mothers with higher parity have poor health, its impact is on the CEB also there is a decreasing trend in fertility performance. Table 10 shows that the CEB for the highest percentage respondent (39.9%) is 1 followed by 2 CEB (36.4%) and approximately 6.6 percent of respondents have reported 4 CEB and 2.2 percent by 5 CEB.

CHAPTER - V: SAFE DELIVERY AMONG WOMEN

Safe delivery care begins soon after conception till the birth takes place. The provision of care during pregnancy and child birth is essential to ensure healthy and successful outcomes of pregnancy for the mother and her newborn infant. The maternal infant mortality, morbidity and significance indicates of maternal and child health status. This chapter deals with the major aspects of safe delivery care in the study area.

5.1: Mean Table

Table 11: Mean Number of CEB and Mean Age at Marriage, According to Background Characteristics

Background characteristics	Mean CEB	Mean Age at Marriage	Total	
			N	P
Caste/Ethnicity				
Brahman	1.6	20.6	56	24.6
Chhetri	1.8	20.0	99	43.4
Tharu	2.6	17.3	23	10.1
Dalits	2.3	18.4	44	19.3
Others	1.3	18.0	6	2.6
Educational Level				
Illiterate	2.6	18.4	68	29.8
Literate to 7	1.9	18.3	31	13.6
Grade 8-10	1.6	20.0	76	33.3
SLC Plus	1.6	20.9	53	23.2
Occupation				
Agriculture	2.1	19.5	77	33.8
Trade/Business	1.6	20.8	7	3.1
Service	1.7	20.6	19	8.3
Wages	2.1	18.3	10	4.4
Household Jobs	1.9	19.5	115	50.4
Media Exposure				
Telephone				
Yes	1.6	20.3	69	30.3
No	2.1	19.2	159	69.7
Radio				
Yes	1.8	20.1	129	56.6
No	2.3	18.3	72	31.6
Television				
Yes	1.8	20.1	156	68.4
No	2.3	18.3	72	31.6
Total	1.9	19.6	228	100.0

*Source: Field Survey, 2006
(N = Number, P = Percentage)*

It was found that the Brahmans whose educational level found the highest among the respondents their mean age at marriage was also highest (20.6 years) followed by Chhetri (20 years). The Tharu ethnic group that was

lowest educated, their mean age at marriage was also lowest (17.3 years). The findings were same for the mean CEB. Brahman has the lowest and the Tharu has the highest CEB.

Likewise, those who were less educated and engaged in agricultural occupation have low mean age at marriage and high CEB. The respondents who were educated to SLC and above have 20.9 years mean age at marriage where as the illiterate have 18.4 years as mean age at marriage. Similarly, women who reported trade and business as their occupation have low (16 years) mean CEB but those who reported agriculture as their occupation have high (2.1 years) mean CEB.

It was found that the exposure of media has considerable effect on CEB and mean age at marriage. Those who were equipped with telephone, radio and television facilities have high mean age at marriage and low mean CEB. The respondents with telephone facility have 1.6 as mean CEB followed by 1.8, those who have radio and television. Similarly, 20.1 year was the mean age at marriage for the women who were equipped with radio and television followed by the women who have telephone facility and their mean age at marriage was 20.3 years (Table 11).

5.2: Place of Delivery

Health center/doctor clinic and health professionals are considered as the best places to visit for check up health status as well pregnancy. The places and persons have essential equipments and knowledge for such services. Among the respondents of four different castes and other castes are given by following table.

Table 12: Percent distribution of respondents giving live births by place of delivery according to Ethnicity in Mahendranagar Municipality

Ethnicity	Place of Delivery							
	Home		Hospital		Other		Total	
	N	P	N	P	N	P	N	P
Brahman	10	17.9	44	78.6	2	3.6	56	100.0
Chhetri	24	24.2	75	75.8	-	-	99	100.0
Tharu	19	82.6	4	17.4	-	-	23	100.0
Dalits	18	40.9	25	56.8	1	2.3	44	100.0
Others	3	50.0	3	50.0	-	-	6	100.0
Total	74	32.5	151	66.2	3	1.3	228	100.0

Source: Field Survey, 2006
(N = Number, P = Percentage)

It is found that most of the Brahmin women were delivered in hospital (78.6%) followed by Chhetri women (75.8%). Among 23 persons Tharu's only 17.4 percent (4) went hospital in the case of delivery. Similarly out of 44 Dalits only 40.9 percent were delivered at home and 56.8 percent were in hospital (Table 12).

5.2.1: Educational Level and Place of Delivery

There is close interrelationship between educational level and place of delivery. So, the respondents were asked their educational status and the place of delivery at the time of survey. The following table includes educational level of respondents and their place of delivery.

Table 13: Percent distribution of respondents giving live births by place of delivery according to Education Level in Mahendranagar Municipality

Education Level	Place of Delivery							
	Home		Hospital		Other		Total	
	N	P	N	P	N	P	N	P
Illiterate	40	58.82	26	38.24	2	2.94	68	100.00
Literate to 7	11	35.48	20	64.52	0	0.00	31	100.00
Grade 8-10	11	14.47	65	85.53	0	0.00	76	100.00
SLC Plus	12	22.64	40	75.47	1	1.89	53	100.00
Total	74	32.46	151	66.23	3	1.32	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

Among the 68 illiterate women only 38.24 percent had delivery in hospital and majority of the illiterate women delivered at home that percent is 58.82. Similarly, out of 228 respondents literate to grade 7 women were 31. Among them majority of respondents delivered in hospital which percent is 64.52 and 35.48 percent for women who delivery at home. Out of 53 respondents who have passed class 8 to 10 only 22.64 percentage of respondents place of delivery was at home (Table 13).

5.2.2: Occupation and Place of Delivery

Occupation is also another determining factors of the safe delivery. It is known as who are involved in any service, they have safe delivery. The table 14 shows the status of occupational and their place of delivery.

Table 14: Percent Distribution of respondents giving live births by place of delivery according to Occupation in Mahendranagar Municipality

Occupation	Place of Delivery							
	Home		Hospital		Other		Total	
	N	P	N	P	N	P	N	P
Agriculture	21	27.27	55	71.43	1	1.30	77	100.00
Trade/Business	1	14.29	6	85.71	0	0.00	7	100.00
Service	3	15.79	16	84.21	0	0.00	19	100.00
Wages	8	80.00	2	20.00	0	0.00	10	100.00
Household Jobs	41	35.65	72	62.61	2	1.74	115	100.00
Total	74	32.46	151	66.23	3	1.32	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

It was found that majority of the respondents' place of delivery was in hospital. Out of 228 respondents, 77 were involved in agriculture occupation. Among them 21 women were delivered at home and 71.43% were delivered in hospital. Similarly, 7 respondents occupation was trade and business. Among 7 women who involved in trade and business, majority of the respondents were delivered in hospital, 85.71 percent and only 14.29 percent women had delivery at home. Likewise, majority of the respondents occupation was household job. Out of 228 respondents, 115 respondents involved in household job. Among them, largest number of respondents were delivered in hospital which percent was 62.61. Similarly only 19 women were involved in service occupation. Out of 19 respondents who were involved in service, only 3 respondents were delivery at home (Table 14).

5.2.3: Mass Media and Place of Delivery

Mass media is the most important determining factor of safe delivery. Communication plays vital role to determine safe delivery. Therefore, respondents were asked question about mass media and their place of delivery. While taking the information about mass media, different options are observed at the time of survey. Respondents were asked, if they have radio, telephone, television etc family at home or not.

Table 15: Percent distribution of respondents by place of delivery according to exposure to Mass Media in Mahendranagar Municipality

Exposure	Place of Delivery							
	Home		Hospital		Other		Total	
	N	P	N	P	N	P	N	P
Telephone								
Yes	1	1.14	67	97.10	1	1.14	69	100.00
No	73	45.91	84	52.83	2	1.26	159	100.00
	74	32.45	151	66.22	3	1.32	228	100.00
Radio								
Yes	18	13.95	110.00	85.27	1.00	0.78	129.00	100.00
No	56	56.57	41.00	41.40	2.00	2.02	99.00	100.00
	74	32.46	151.00	66.20	3.00	1.32	228.00	100.00
Television								
Yes	27	17.31	128.00	82.05	1.00	0.64	156.00	100.00
No	47	65.28	23.00	31.94	2.00	2.78	72.00	100.00
Total	74	32.46	151.00	66.23	3.00	1.32	228.00	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

It was found that majority of the respondents have safe delivery who have good facility of exposure of media at home. In the above table only 30.3 percent respondents have telephone facility at home, among them majority of the respondents had delivered in hospital, they were 97.10 percent. Among the respondents with radio facility, only 13.95 percent women were delivered at home and 85.27 percent women were delivery in hospital as they have at least radio facility at home. Likewise, another determining factor of safe delivery is television facility at home. Out of them, majority of respondents used safe delivery or were delivery in hospital (82.05%). But who haven't television facility at their house, they haven't used safe delivery. Significantly, majority of the respondents delivered at home who haven't television facility at home (65.28%). Hence it is clear that mass media is the most important determining factor of safe delivery (Table 15).

5.3: Deliver Assistance of the Respondents in Mahendranagar Municipality

To minimize the complication at the time of delivery, trained health professional are needed. In this study, situation of birth attendants at the time of survey is presented as following tables.

Table 16: Percent Distribution of respondent by person providing Assistance during Delivery, according to Ethnicity in Mahendranagar Municipality

Ethnicity	Delivery-Assistance											
	Doctor		Nurse		TBA		Health Worker		Relative n Friends		Total	
	N	P	N	P	N	P	N	P	N	P	N	P
Brahman	4	7.14	32	57.14	9	16.07	2	3.57	9	16.07	56	100.00
Chhetri	7	7.07	50	50.51	15	15.15	9	9.09	18	18.18	99	100.00
Tharu	0	0.00	3	13.04	4	17.39	4	17.39	12	52.17	23	100.00
Dalits	3	6.82	9	20.45	1	2.27	6	13.64	25	56.82	44	100.00
Others	1	16.67	1	16.67	2	33.33	0	0.00	2	33.33	6	100.00
Total	15	6.58	95	41.67	31	13.60	21	9.21	66	28.95	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

Among the whole respondents, 56 respondents were Brahman, 99 respondents were Chhetri, 23 were Tharu, 44 were Dalits and 6 were other. Among Brahman respondents 7.14 percent took delivery assistance by a doctor followed by 57.14 percent, 16.07 percent by TBA, 3.57 percent by health worker and 16.07 percent took delivery assistance by nurse from relatives friends respectively.

Similarly, among Chhetri respondents 7.07 percent took delivery assistance by a doctor, 50.51 percent by a nurse, 15.15 percent by TBAs, 9.09 percent by health worker and 18.18 percent received delivery assistance from relative friends respectively.

Likewise, among Tharu respondents 13.4 percent by a nurse, 17.39 percent, by TBA, 17.39 percent by health worker, 52.17 by friend/relative and no help from a doctor.

Thus, this table clearly shows that highest percentage of Chhetri women took birth assistance of doctor (Table 16).

Table 17: Percent distribution of respondents by person providing assistance during delivery, according to Educational Level in Mahendranagar Municipality

Educational Level	Delivery-Assistance											
	Doctor		Nurse		TBA		Health Worker		Relative n Friends		Total	
	N	P	N	P	N	P	N	P	N	P	N	P
Illiterate	3	4.41	8	11.76	12	17.65	5	7.35	40	58.82	68	100.00
Literate to 7	1	3.23	11	35.48	5	16.13	6	19.35	8	25.81	31	100.00
Grade 8-10	0	0.00	51	67.11	8	10.53	5	6.58	12	15.79	76	100.00
SLC Plus	11	20.75	25	47.17	6	11.32	5	9.43	6	11.32	53	100.00
Total	15	6.58	95	41.67	31	13.60	21	9.21	66	28.95	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

It was found that majority of literate respondents received delivery assistance during pregnancy, were doctor, TBA, nurse and health worker. Out of 228 respondents, 68 were literate. Among the whole respondents 68 respondent were illiterate, 31 respondent were literate to 7, 76 respondents had education level grade 8-10, 53 respondents had education level SLC plus. Among illiterate respondents 4.41 percent took delivery assistance by a doctor by TBA, 7.35 percent by health worker and 58.82 percent took delivery assistance from relative and friends.

Similarly, among the respondents who were literate up to 7, 3.23 percent took delivery assistance by a doctor, 35.48 percent by a nurse, 16.13 percent by TBA, 19.35 percent by health worker and 25.81 percent received delivery assistance from relative and friends.

Likewise the respondents who had their education level grade 8-10, 67.11 percent by a nurse, 10.53 by TBA, 6.58 percent by health worker and 15.79 percent took delivery assistance by their relatives and friends.

Finally the respondents who had educational level SLC plus, 20.75 percent received delivery assistance by a doctor, 47.17 percent by nurse, 11.32 percent by TBA, 9.43 percent by health worker and 11.32 percent took delivery assistance by their relatives and friends.

Thus, this table clearly shows that as the education level goes higher, the birth attendance turns safes and safety (Table 17)

Table 18: Percentage Distribution of women by person providing assistance during delivery, according to occupation in Mahendranagar Municipality

Occupation	Delivery-Assistance											
	Doctor		Nurse		TBA		Health Worker		Relative n Friends		Total	
	N	P	N	P	N	P	N	P	N	P	N	P
Agriculture	3	3.90	30	38.96	12	15.58	7	9.09	25	32.47	77	100.00
Trade/ Business	1	14.29	3	42.86	0	0.00	3	42.86	0	0.00	7	100.00
Service	1	5.26	16	84.21	0	0.00	1	5.26	1	5.26	19	100.00
Wages	0	0.00	0	0.00	2	20.00	1	10.00	7	70.00	10	100.00
Household Jobs	10	8.70	46	40.00	17	14.78	9	7.83	33	28.70	115	100.00
Total	15	6.58	95	41.67	31	13.60	21	9.21	66	28.95	228	100.00

Source: Field Survey, 2006

(N = Number, P = Percentage)

The majority of the respondents have household jobs. Out of 228 respondents 115 were involved in household job. Among the total respondents (228), they were involved in different occupation as 77

respondents were involved in agriculture, 7 respondents in trade/business, 19 respondents in service, 10 respondents in wages and 115 respondents in household jobs. Among the respondents who were involved agriculture 3.90 percent took delivery assistance by a doctor which was followed by, 38.96 percent by nurse, 15.58 percent by TBA, 9.09 percent by health worker and 32.47 percent took delivery assistance from relative and friends.

Similarly, among the respondents who were involved in trade/business 14.29 percent took delivery assistance by doctor. Which was followed by 42.86 percent by nurse, 0.00 percent by TBA, 42.86 percent by health worker and 0.00 percent took delivery assistance from relative and friends.

Likewise those respondents who were involved in wages, 0.00 percent received delivery assistance by a doctor which was followed by 0.00 percent by nurse, 20.00 percent by TBA, 10.00 percent by health worker and 70.00 percent received delivery by relatives and friends.

Thus this table clearly showed that maximum respondents who were involved in service received safe delivery assistance by nurse and not take safe delivery assistance by TBA. While the respondents who were involved in wages uses maximum safe delivery by relatives and friends and do not take safe delivery by doctors and nurses (Table 18).

Table 19: Percent distribution of respondents by person providing assistance during delivery, according to Exposure to mass media in Mahendranagar Municipality

Exposure	Delivery-Assistance											
	Doctor		Nurse		TBA		Health Worker		Relative & Friends		Total	
	N	P	N	P	N	P	N	P	N	P	N	P
Telephone												
Yes	8	11.59	47	68.12	9	13.04	3	4.35	2	2.90	69	100.00
No	7	4.40	48	30.19	22	13.84	18	11.32	64	40.25	159	100.00
Total	15	6.58	95	41.67	31	13.60	21	9.21	66	28.95	228	100.00
Radio												
Yes	10	7.75	72	55.81	20	15.50	8	6.20	19	14.73	129	100.00
No	5	5.05	23	23.23	11	11.11	13	13.13	47	47.47	99	100.00
Total	15	6.58	95	41.67	31	13.60	21	9.21	66	28.95	228	100.00
Television												
Yes	12	7.69	84	53.85	20	12.82	14	8.97	26	16.67	156	100.00
No	3	4.17	11	15.28	11	15.28	7	9.72	40	55.56	72	100.00
Total	15	6.58	95	41.67	31	13.60	21	9.21	66	28.95	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

It was found that majority of the respondent had television facility at home, they were 156 in number. Among them, 7.69 percent received delivery assistance by doctor which was followed by 53.85 percent by nurse, 12.82 percent by TBA, 8.97 percent by health worker and 16.67 percent took delivery assistance by relatives and friends. But who had not this facility, majority of the respondents assisted during delivery by relatives and friends, it is 55.56 in percentages.

Among the radio owners 7.75 percent took delivery assistance by doctor, this was followed by 55.81 percent by nurse, 15.50 percent by TBA, 6.20 percent by health workers and 14.73 took delivery assistance by relatives and friends. But who had not this facility, majority of the respondents assisted during delivery by relatives and friends, which was 43.42 percentage.

Among them who use telephone, 11.59 percent took delivery assistance by doctor, which was followed by 68.12 percent by nurse 13.04 percent by TBA, 4.35 percent by health worker and 2.90 took delivery by their relatives and friends. Out of 228 respondents, 159 respondents hadn't this type of facility at their home but maximum of them assisted by nurse (30%). This result showed that telephone has few impacts on safe delivery (Table 19).

5.4: Use of Delivery Kit

Use of safe delivery kit is very important idea/techniques to save and serve of the mother and child. Therefore, the question was asked about use of delivery kit, at the time of survey. The responses were presented in different cross tables as follows:

5.4.1: Use of Delivery Kit by Ethnicity

There were 4 and one other castes people that live in the study area. Among 5 caste, majority of them are Chhetri. Use of delivery kit by ethnicity is focused in following table.

Table 20: Percent distribution of respondents by use of delivery kit, according to ethnicity in Mahendranagar Municipality

Ethnicity	Use of Safe Delivery Kit					
	Yes		No		Total	
	N	P	N	P	N	P
Brahman	52	92.86	4	7.14	56	100.00
Chhetri	92	92.93	7	7.07	99	100.00
Tharu	16	69.57	7	30.43	23	100.00
Dalits	35	79.55	9	20.45	44	100.00
Others	4	66.67	2	33.33	6	100.00
Total	199	87.28	29	12.72	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

Among 56 Brahman respondents, majority of them used safe delivery kit, (92.86 percent). Similarly, majority of Chhetri respondents also used safe delivery kit (92.93 percent). Likewise, Tharu and Dalits used low rate of safe delivery kit which was 69.57 percent and 79.55 percent respectively.

Thus, this table clarifies that the use of safe delivery kit respondents were very high among the high caste in compared to the low caste (Table 20).

5.4.2: Use of Delivery Kit by Education

There is close interrelationship between education and use of delivery kit. So the respondents were asked their educational status and the use of delivery kit at the time of survey. The following table also indicates the educational level of respondents and their use of safe delivery kit.

Table 21: Percent distribution of respondents by use of safe delivery kit according to Educational Level in Mahendranagar Municipality

Educational Level	Use of Safe Delivery Kit					
	Yes		No		Total	
	N	P	N	P	N	P
Illiterate	52	76.47	16	23.53	68	100.00
Literate to 7	25	80.65	6	19.35	31	100.00
Grade 8-10	74	97.37	2	2.63	76	100.00
SLC Plus	48	90.57	5	9.43	53	100.00
Total	199	87.28	29	12.72	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

Among the total respondents (228), 68 respondents were illiterate, 31 respondents were literate up to 7, 76 respondents had education level up to grade 8-10, 53 respondents had education level SLC plus.

It was found that 68 illiterate respondents 76.47 percent use safe delivery kit while 23.53 percent do not use safe delivery kit.

Out of 31 respondents who had their educational level literate up to 7, 80.65 percent use safe delivery kit while 19.35 do not use safe delivery kit.

Out of 76 respondents who ha their educational level grade 8-10, 97.37 percent use safe delivery kit while 2.63 percent use unsafe delivery kit.

Out of 53 respondents who had their educational level SLC plus, 90.57 percent use safe delivery kit but 9.43 percent do not use safe delivery kit.

Therefore, this table clarifies that majority of educated women use higher number of safe delivery kits and illiterate women use lower number of safe delivery kit (Table 21).

5.4.3: Occupation and Safe Delivery Kit

Observation from the field showed that occupation plays the vital role to take safe delivery kit. Occupational status is one of the significant factor to measure the status of people. Therefore, the question was asked about safe delivery kit and occupation

Table 22: Percent distribution of women by use of delivery kit according to occupation in Mahendranagar Municipality

Occupational	Use of Safe Delivery Kit					
	Yes		No		Total	
	N	%	N	%	N	%
Agriculture	72	93.51	5	6.49	77	100.00
Trade/Business	6	85.71	1	14.29	7	100.00
Service	19	100.00	0	0.00	19	100.00
Wages	9	90.00	1	10.00	10	100.00
Household Jobs	93	80.87	22	19.13	115	100.00
Total	199	87.28	29	12.72	228	100.00

*Source: Field Survey, 2006
(N = Number, P = Percentage)*

From the above table it is clear that the majority of the respondents use safe delivery kit. Among 228 respondents, 199 used safe delivery kit. Only 12.72 percent women had not got opportunity to used safe delivery kit.

While talking about occupation and safe delivery, cent percent of respondents use safe delivery kit who were involved in service.

Similarly, majority of respondents (93.51%) used safe delivery who were involved in agriculture. But who were involved in household job, majority of them (19.13%) hadn't used safe delivery kit (Table 22).

5.4.4: Mass Media Exposure and use of Safe Delivery

Media is another determining factor to use safe delivery. Therefore, respondents were asked question about use communication marital and use of safe delivery. The responses and their percentage are mentioned in following table.

Table 23: Percent distribution of women by use of delivery kit according to exposure to mass media in Mahendranagar Municipality

Exposure	Use of Safe Delivery Kit					
	Yes		No		Total	
	N	P	N	P	N	P
Telephone						
Yes	67	97.10	2	2.90	69	100.00
No	132	83.02	27	16.98	159	100.00
Total	199	87.28	29	12.72	228	100.00
Radio						
Yes	121	93.80	8	6.20	129	100.00
No	78	78.79	21	21.21	99	100.00
Total	199	87.28	29	12.72	228	100.00
Television						
Yes	121	77.56	9	5.77	156	100.00
No	52	72.22	20	27.78	72	100.00
Total	199	87.28	29	12.72	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

It was found that out of 228 respondents, only 69 respondents used telephone at their home. Among them majority of respondents (97.10%) used safe delivery kit who have telephone facility at their home.

Similarly, 129 women had radio facility and 156 respondents had television facility. Among them more than half of the respondents had used safe delivery kit who have got those facilities in their house. While talking about radio facility and safe delivery kit only 21.21 percent had not used safe delivery kit. Likewise, 156 respondents had television. Among them 77.56 percent used safe delivery kit but it was

also noticed that 27.78 percent had not used safe delivery kit even they have television facility in their home.

Hence, it is obvious that mass media can play the vital role to increase the use of safe delivery kit (Table 23).

5.5: CEB and Place of Safe Delivery

5.5.1: Number of CEB and Place of Delivery

It is considered that higher the number of children ever born lower would be the safe delivery. The following table is also clearly showed this type of vision.

Table 24: Percent distribution of number of CEB and place of delivery in Mahendranagar Municipality

No. of Children	Place of Delivery							
	Home		Hospital		Other		Total	
	N	P	N	P	N	P	N	P
1.00	25	27.47	64	70.33	2	2.20	91	100.00
2.00	21	25.30	62	74.70	0	0.00	83	100.00
3.00	18	52.94	16	47.06	0	0.00	34	100.00
4.00	9	60.00	5	33.33	1	6.67	15	100.00
5.00	1	20.00	4	80.00	0	0.00	5	100.00
Total	74	32.46	151	66.23	3	1.32	228	100.00

*Source: Field Survey, 2006
(N = Number, P = Percentage)*

It was clearly showed that lower the children ever born, there is safe place of delivery. Who have under 3 children they practiced safety and good place for delivery in comparison who have more than 3 children. In the above table, who have got only one child, 70.33 percent women's place of delivery was hospital followed by 2 children, 74.40 percent women's place of delivery in the hospital.

Thus, it could be mention that more children bearing mothers' place of delivery is their own homes (Table 24).

5.5.2: Number of CEB and Use of Safe Delivery Kit

In the context of Nepalese society, some of the norms and values are still traditional, so the child mortality, infant mortality and maternal mortality is so high. Due to the lack of safe delivery kit, so many infants go to month of death. Therefore the question was asked about use of safe delivery kit and CEB at the time of survey. The responses are presented in the following table:

Table 25: Percent distribution of number of CEB and use of safe delivery kit in Mahendranagar Municipality

No. of Children	Use of Safe Delivery Kit					
	Yes		No		Total	
	N	P	N	P	N	P
1.00	82	90.11	9	9.89	91	100
2.00	78	93.98	5	6.02	83	100
3.00	26	76.47	8	23.53	34	100
4.00	11	73.33	4	26.67	15	100
5.00	2	40.00	3	60.00	5	100
Total	199	87.28	29	12.72	228	100

Source: Field Survey, 2006

(N = Number, P = Percentage)

It was found that lower the CEB higher the use of safe delivery kit. Who have 2 children their (use of safe delivery their) use of safe delivery kit was 93.98 percent. Similarly, in the first child, the use of safe delivery kit was 90.11 percent. But while the CEB was acrossing more than 3 children use of safe delivery kit was decreasing (Table 25).

5.5.3: CEB and Delivery Assistance

Delivery Assistance is very important for child bearing mother/women. It is also a matter of significance that the delivery assistance should be from a reliable and skilled person. In this study, some questions were asked about number of children born and their delivery assistance. The responses were presented in the following table.

Table 26: Percent distribution of number of CEB and delivery assistance in Mahendranagar Municipality

No. of Children	Delivery-Assistance											
	Doctor		Nurse		TBA		Health Worker		Relative n Friends		Total	
	N	P	N	P	N	P	N	P	N	P	N	P
1.00	10	10.99	42	46.15	9	9.89	9	9.89	21	23.08	91	100.00
2.00	2	2.41	37	44.58	13	15.66	7	8.43	24	28.92	83	100.00
3.00	1	2.94	11	32.35	7	20.59	2	5.88	13	38.24	34	100.00
4.00	0	0.00	4	26.67	2	13.33	3	20.00	6	40.00	15	100.00
5.00	2	40.00	1	20.00	0	0.00	0	0.00	2	40.00	5	100.00
	15	6.58	95	41.67	31	13.60	21	9.21	66	28.95	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

It was hypothesized that lower the CEB higher the safe delivery birth assistance. Women having less than 3 CEB they have highest delivery assistance from a doctor or a nurse. While increasing the number of CEB the assistance during the birth of a child also being decreasing from and nurse and having assistance from friend and relatives, which was very unsafe and risky. In the above table, the first delivery from women assisted by a nurse followed by TBA 9.89 percent women's delivery assistance was nurse, which is more reliable delivery assistance (Table 26).

5.6: Age at marriage and safe delivery

Among the women who did marriage below the 18 years of age higher the unsafe delivery is observed. It means lower the age at marriage and delivery higher the unsafe delivery is found. Therefore, the study focused the age at marriage and safe delivery.

5.6.1: Age of Marriage and Place of Delivery

The early age marriage and early age delivery, are more risky to mother and child. Those women who were under 18, they could not have knowledge of safe delivery. Therefore, the question was asked about age of marriage and place of safe delivery at the time of survey. The responses are presented in given table:

Table 27: Distribution of age of marriage and place of delivery in Mahendranagar Municipality

Age at marriage	Place of Delivery							
	Home		Hospital		Other		Total	
	N	P	N	P	N	P	N	P
12 to 15	18	51.43	16	45.71	1	2.86	35	100.00
16 and 17	28	50.91	27	49.09	0	0.00	55	100.00
18 Only	13	17.81	60	82.19	0	0.00	73	100.00
19 and 20	11	23.91	33	71.74	2	4.35	46	100.00
21 Plus	4	21.05	15	78.95	0	0.00	19	100.00
Total	74	32.46	151	66.23	3	1.32	228	100.00

Source: Field Survey, 2006
(N = Number, P = Percentage)

It was found that women having below 18-year age at marriage, also having half of the at home. In compared to this, women with age at marriage 18 years delivered their most of babies (82.19%) at hospital followed by age at marriage 21 years plus (78.95%) and age at marriage 19-20 years (71.74%).

Thus, it could be said that higher the age of marriage, their place of delivery is also safe and reliable (Table 27).

5.6.2: Age at Marriage and Safe Delivery Kit

If a woman married in earlier age, then delivery could be earlier. It has been noticed that early marriage and early pregnancy lead to death. Therefore, the information was taken about age of marriage and safe delivery kit from the study area. The distribution of percentages are as follows:

Table 28: Percent distribution of age of marriage and use of age delivery kit in Mahendranagar Municipality

Age at marriage	Use of Safe Delivery Kit					
	Yes		No		Total	
	N	P	N	P	N	P
12 to 15	25	71.43	10	28.57	35	100
16 and 17	49	89.09	6	10.91	55	100
18 Only	67	91.78	6	8.22	73	100
19 and 20	42	91.30	4	8.70	46	100
21 Plus	16	84.21	3	15.79	19	100
Total	199	87.28	29	12.72	228	100

Source: Field Survey, 2006
(N = Number, P = Percentage)

It revealed that higher the age at marriage, higher the use of safe delivery kit. The table 5.17 indicates that whose age of marriage was 18 years, the use of safe delivery kit was 91.78 percent followed by 19

to 20 years, 91.30 percent and 21 plus 84.12 percent. Thus it is clear that higher age at marriage is not risky (Table28).

5.6.3: Age at Marriage and Delivery Assistance

There is more risk when women got pregnant in early age. In the early age, women are unknown about safe delivery and the best delivery assistant.

Table 29: Percent distribution of age at marriage and delivery assistance in Mahendranagar Municipality

Age at marriage	Delivery-Assistance											
	Doctor		Nurse		TBA		Health Worker		Relative n Friends		Total	
	N	P	N	P	N	P	N	P	N	P	N	P
12 to 15	0	0.00	8	22.86	5	14.29	3	8.57	19	54.29	35	100.00
16 and 17	0	0.00	15	27.27	11	20.00	4	7.27	25	45.45	55	100.00
18 Only	5	6.85	41	56.16	8	10.96	10	13.70	9	12.33	73	100.00
19 and 20	3	6.52	26	56.52	6	13.04	2	4.35	9	19.57	46	100.00
21 Plus	7	36.84	5	26.32	1	5.26	2	10.53	4	21.05	19	100.00
Total	15	6.58	95	41.67	31	13.60	21	9.21	66	28.95	228	100.00

Source: Field Survey, 2006

(N = Number, P = Percentage)

It was clearly expressed that the women whose age at marriage, 54.29 percent delivery assistant were relatives and friends. Similarly, with age at marriage 16 to 17, 45.45 percent women got delivery assistance from relatives and friends and those who had married at 18 years, 56.16 percent delivery assistance was taken from nurse. Likewise, the women whose age at marriage was 19 to 20 years, 56.52 percent delivery assistance was also from nurse. But whose age at marriage was, 21 years above, 36.84 percent women's delivery assistance was from Doctors. Thus it is clear that where higher the age at marriage, there is also higher quality of delivery care, which is with less risk, safe and reliable (Table 29).

5.7: Statistical Analysis

Bi-variate relationship among selected study variables were presented in table. Generally bi-variate correlation coefficient cannot measure the linear relationship between two variables, but it can indicate positive and negative

relationship in macro level. The correlation coefficient is also used to test significant or insignificant of the variables.

The selected variables are: ethnicity, occupation, education of mother and facilities available in household such as ratio, television etc. These variables are associated with safe delivery. i.e., we have to test the relationship between selected variables and safe delivery, separately.

Table 30: Bi-variate Analysis of Selected Variables

		Ethnicity	Occupation	No. of CEB	Education Group	Radio	Television
ANC Times	Pearson Correlation	-0.2200453**	-0.03356266	-0.22131948**	0.3637561**	-0.36583**	-0.26242**
ANC Exam	Pearson Correlation	-0.2114717**	0.097766215	0.21532991**	-0.2455685**	0.239136**	0.354954**
Delivery-Assistance	Pearson Correlation	0.3617577**	-0.04311553	0.14257848	-0.4439071**	0.374765**	0.390973**
First Labor - Time in Hours	Pearson Correlation	-0.0510842	0.111714273	-0.08457561	-0.0699403	0.030312	0.06987
Delivery problem	Pearson Correlation	0.07258	-0.04456451	0.12321455	-0.1747186**	0.156309	0.140783
Use of Safe Delivery Kit	Pearson Correlation	0.2083441**	0.172962295**	0.24444831**	-0.2126562**	0.223298**	0.30704**
Duration of PNC	Pearson Correlation	-0.1495307	-0.1598488	0.12811318	0.0343443	-0.10217	-0.15305

*** Correlation is significant at the 0.01 level (2-tailed)*

There is positive relationship between higher caste (Brahmin and Chhetri) and safe delivery. The safe delivery practices are low in lower castes (Dalit and Tharu).

Similarly, the educated women or educational attainment higher than S.L.C. have good practice in safe delivery. Statistically there is significant relationship between education level of mother and safe delivery.

Knowledge on safe delivery had positive effect due to household facilities. The family who always listen radio and watch T.V. has more knowledge about ANC visits, ANC exam delivery assistance, delivery problem and use of safe delivery kit.

The occupation is mainly categorized: into household job and non-household jobs. Women who are involved agriculture sector and pure housewives had low practice or negative relationship about safe delivery.

Likewise, the number of CEB had positive relationship with higher castes, higher level of education and non-household jobs (trade, government job).

CHAPTER - VI: SUMMARY, CONCLUSION AND RECOMMENDATION

6.1: Summary

This dissertation is the comparative study of status of child delivery in Mahendranagar Municipality (Ward of 1-19) Kanchanpur district. The study is based on some selected dependent, intermediate and independent variables, and are primary in nature. The major finding of the study are as follows:

- Average number of respondents size Brahmin, Chhetri, Tharu, Dalits and others is found to be 24.6, 43.4, 10.1, 19.3 and 2.6 respectively.
- This study showed that out of 228 respondent 29.8 percent were illiterate and 23.2 percent were SLC plus.
- In study area 91 percent respondent use safe drinking water (piped water).
- It was found that among 228 sample only 8.8 percent people have no land. Majority of respondent i.e. 36.8 percent have up to 10 kaththa.
- Brahman and Tharu married at mean age of 20.6 and 17.3 have mean CEB 1.6 and 2.6 respectively.
- SLC plus and illiterate respondents married at the mean age of 20.9 and 18.4 have mean CEB 1.6 and 2.6 respectively.
- Respondents involved in Business and wages married at respective age of 20.8 and 18.3 have CEB 1.6 and 2.1.
- Respondents in contact with information media were found to have lately married with less CEB.
- Out of different ethnic group Brahmans and Tharu used safe delivery place and unsafe delivery place respectively.
- It was found that literate (Grade 8-10) used safe delivery (85.53%) while illiterate used unsafe delivery (58.82%).

- On the basis of occupation the respondents have had, it was found that those involved in trade/business used safe delivery and those in wages used unsafe delivery.
- The respondents in exposure to mass media used safe delivery, but those not exposed to mass media have unsafe delivery.
- Brahmans were found to use safe delivery kit while Tharu were found to use unsafe delivery kit.
- Literate (Grade 8 to 10) used safe delivery kit (97.37%), but illiterate used unsafe delivery (23.53%).
- All of the service holder used safe delivery kit (100.00%) while those having household jobs used unsafe delivery kit (19.13%).
- The respondents in contact with information media uses safety kit while those not in contact with information media used no any kit.
- Brahman and Chhetri were assisted by nurse in their delivery while Tharu and Dalit were assisted by their relatives and friends.
- Illiterate respondents were assisted by their relative and friends while respondent SLC plus are assisted by the nurse.
- Respondent involved in the service use nurse as delivery-assistance (84.21%) while wages respondent used relative and friends as delivery assistance (70.00%).
- Respondent who were in contact of mass media used safe delivery-assistance while others used unsafe delivery-assistances.
- It was observed that women who were married at the age of 12-17 used home as place of delivery while women who were married at the age above 18 years used hospital as a place of delivery.
- Women who married at 12-15 age group used only 28.57 percent unsafe delivery kit while women above 18 age group 91.78 percent used safe delivery kit.

- Majority of woman who delay age married uses nurse and doctors as delivery - Assistance while those who early age at married uses relatives and trends as delivery - Assistance.
- Those respondents having only two babies used hospital as a place of delivery (70%) while those have more than two babies used their own home as a place of delivery.
- Safe delivery kit was used by the respondents having only one or two children. But not any safe delivery kit was used by the respondents having more than three children.

6.2: Conclusion

On the basis of analysis of data, child delivery practiced in to different ethnicity in Mahendranagar Municipality, Kanchanpur District varied results were found. Safe delivery was well practiced by Brahmans while no any safe measure/means were used by lower castes like Tharu and Dalit. Likewise, literate got married at late age and used safe delivery but illiterate got married at early age and used no any safe delivery. Respondents in contact with mass media got married at their late age and used safe delivery conversely those not in contact with mass media got married at their early age and paid no any concern to the safe delivery.

6.3: Recommendation

On the basis of conclusions the recommendation for policy implication and future area of research are suggested as follows:

6.3.1: Recommendation for Policy Implications

Policymakers, planners, local authorities and interested person or organizations need to recognize the problems of people in the area to make changes and improvement in the condition of the people. Following are some recommendations for safe delivery practice in the studied population.

- Basic physical needs such as drinking water, sanitation, electricity should be made available to all the household.
- Mother groups should be organized, strengthened and trained and services should be provided by the trained personnel.
- Newspaper and magazine about safe delivery practice should be provided for people, especially women of reproductive age through mother groups.
- Training, seminars and meeting should be conducted to motivate women of reproductive age.
- Midwifery training should be provided for women of lower caste.

6.3.2: Recommendation for Future Area of Research

Researchers who are interested to study the safe delivery practice in this area in the future, following are some recommendation for them:

- All castes should be covered to study in the future.
- All age groups not only 15-49 years should be studied.
- Study should be made on other aspects of reproductive health.
- Study should be made taking nearly same number of sample size to compare the situation among different castes people. Only then, the results will be more reliable.

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APPENDIX - A

Questionnaire

Status of Child Delivery: A Study of Mahendranagar Municipality, Kanchanpur

- 1-Zone
- 2-Village
- 3-Municipality
- 4-Ward no.
- 5-Cast
- 6-Religion
- a. Hindu b. Buddhism c. Islam d. Christian e. Others

S.N.	Relation	Gender	Age	Education	Occupation

Individual Questionnaire

1. How much land are claudicating? So far?
2. What was your age when you got married?
3. What was your age when you got first menstruation?
.....
4. How many children did you get? (1) Yes (2) No
If yes, explain
5. What was your age when you got first child?
6. At what age did you get pregnant?
7. Have you lost any child just after its birth?
8. Did you have any knowledge about pregnancy?
9. Did you follow-up doctor? (1) Yes (2) No
10. How many times did you have follow-up.
11. Have you taken any type vaccine during ANC (1) Yes (2) No
12. If yes, how many times
13. Where did you get your baby (a) Home (b) Hospital (c) Other
14. Did you take any delivery assistant from
(1) Doctor (2) Nurse (3) TBA (4) Health worker (5) Relatives & Friends
15. How much time did you taken?
16. Have you any dangerous circumstances about your delivery?
(1) Yes (2) No
17. If, yes what types?
(a) Vomiting (b) unconsciousness (c) Bleeding (d) Others
18. Have you used any type of delivery kits?
(a) Yes (b) No
19. What did you do immediately after baby was born
(a) Identify the sex
(b) Cutting the cord
(c) Observed baby crying
(d) Others
20. What would you do if your baby got some difficulty in brutality?
(a) Keeping the baby in warm place
(b) Immediately refer to Hospital
(c) Others

21. How much time was taken to make a decision after labour?
22. Which vehicles did you use to reach to Hospital?
 - (1) Ambulance
 - (2) Car
 - (3) Thela Gaadi
 - (4) Cycle Ambulance
 - (5) Tractor
 - (6) Others
23. Did you get service easily in Hospital? (1) Yes (2) No
24. After how much time did you check your health after delivery?
25. How many time did you vaccinate your baby after delivery?
26. How far is your home from health post?
27. Do you know about family planning devices. (a) Yes (b) No
28. How did you come to know
 - (1) Through news paper
 - (2) Television
 - (3) Radio
 - (4) Husband
 - (5) Others
29. Have you taken nutritious food during pregnancy?
 - a. Green leaves
 - b. Meats
 - c. grain
 - d. Milk/curd
 - e. Others
30. Did you take any Iron tablet?
31. Will you want to be pregnant again?
32. What sorts of facility in your household immunities.

(1) Electricity	(1) Yes (2) No
(2) Govar gas	(1) Yes (2) No
(3) Telephone	(1) Yes (2) No
(4) Radio	(1) Yes (2) No
(5) Television	(1) Yes (2) No
(6) Others	(1) Yes (2) No
33. What sorts types of Transportation facility are in your home?
 - (1) Motor cycle
 - (2) Car /Jeep
 - (3) Cycle
 - (4) Other
34. What are the main sources of drinking water in your home?
 - (1) Piped water
 - (b) Tubel water
 - (c) Open well
 - (d) Canal, river
 - (e) Others
35. What types of Toilet facilities are in your home?
 - (1) Flush toilet
 - (2) Toilet
 - (3) Temporary toilet
 - (4) Open toilet
 - (5) Others