

**Traditional and Modern Maternal and Child Health Care Practices and  
Effects among Rajbanshi Community in Nepal**

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## Abstract

This is a descriptive and cross-sectional study on the *Rajbanshi* of Nepal in 2010. The common theories in Ethnographic/Indigenous Psychological perspective, Social Construction theories and Public Health perspectives have navigated the study. This study poses both qualitative and quantitative methods: interviews, observations and examinations. Household samples were randomly taken and clusters taken by purposive sampling method. Altogether 1514 people accounted in samples. Tools were semi-structured questionnaires, checklists, EPDS, weighing machine and measuring tape.

*Rajbanshi* community is one of the marginalized indigenous people resided in the southeastern part of Nepal. They have unique tradition and culture. They have owned traditional health care practices. Guru Gosai and Gosai are traditional healers. In the *Rajbanshi* tradition, the causes of diseases and illnesses are deities, witchcraft, evil spirits, the touch of *pithiya/chhatka* and dirty environment or poor sanitation. They diagnose disease by looking at jokhana. After the findings, they treat patients by chanting of *mantra* or *jharphuk*, *jadibuti*, *buti*, *ferani* or *bhakal*. They are mainly taking modern care services from different levels private clinics/nursing home/hospitals and public health post/hospitals simultaneously.

In the study 93.87% samples adopted modern and traditional dual practices concurrently. 74.14% samples visited local medical clinics, and 14.41% visited hospitals for the treatment at first. Total 28% samples adopted solely modern care where nobody adopted solely traditional practices. However, 11.50% samples took traditional care at first for the mother and the child care. 16% pregnant took first care from traditional healers. The study also identified the trend of traditional and modern care practices. Hospital delivery increased from 30.67% to 69.33% between first and last deliveries where home delivery decreased to 29.23% from 69.33%.

In spite of good access to modern care services the maternal and child mortality rates estimated high in those who are very poor, illiterate, remote and traditional practicing families in the community. Likewise, children with underweight were in an alarming situation (72.53%) in those who are very poor, labor, illiterate, rural and traditional practicing. Postpartum depression in mothers associated with their stress and sleeplessness were statistically significant. The PPD in mothers also tested with husband's smoking habit and find statistically highly significant ( $p < .0001$ ). Women of three groups are vulnerable: 1. Pithiya is a woman whose baby is died or still birth. 2. Chhatka is a mother who is suffering from abortion. 3. Tantra/mantra practicing women. These women are considered as causes of diseases. In such sociocultural circumstances, they become victims of social stigma.

Traditional practices involve local barbers to cut the umbilical cord during delivery. They shave newborn's head with the traditional knives after few days of the delivery. They are unsafe and can cause infection including neonatal tetanus. They need training on using sterile blades. Awareness of reproductive rights in mothers needs to rise. They need integrated mental health program. More nutritional programs required for the children.

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## LIST OF ACRONYMS

ADD	: Acute Diarrhoeal Disease
AIDS	: Acquired Immuno-Deficiency Syndrome
ALRI	: Acute Lower Respiratory Tract Infection
ANC	: Ante Natal Care
ARI	: Acute Respiratory Infection
BMI	: Body Mass Index
CAC	: Comprehensive Abortion Care
CBS	: Central Bureau of Statistics
CREHPA	: Center for Research on Environment Health & Population Activities
DDC	: District Development Committee
DoHS	: Department of Health Services
DPHO	: District Public Health Office
FGD	: Focus Group Discussion
FGM	: Female Genital Mutilation
FHD	: Family Health Division
HI	: Health Institution
HIV	: Human Immunodeficiency Virus
HP	: Health Post
HSME	: Holistic Self-Management Education and Support
IOM	: Institute of Medicine
IMR	: Infant Mortality Rate
IRIN	: Integrated Regional Information Networks
KIM	: Key Informants Monitoring
MDAA	: Multicultural Disability Advocacy Association
MDG	: Millennium Development Goal
MMR	: Maternal Mortality Rate
MoH	: Ministry of Health
NHRC	: Nepal Health Research Council
NDHS	: National Demographic Health Survey
PAC	: Primary Abortion Care
PHCC	: Primary Health Care Health Centre
PNC	: Post Natal Care
PPD	: Postpartum Depression
SFCL	: Small Farmers Cooperative Limited
SFOP	: Small Farmers Development Programme
STD	: Sexual Transmitted Disease
STI	: Sexual Transmission Infection
TBA	: Traditional Birth Attendant
TH	: Traditional Healer
UNDP	: United Nations Development Programme
UNICEF	: United Nations Children Fund

VD : Vaginal Douching  
VDC : Village Development Committee  
WHO : World Health Organization

# CHAPTER 1: INTRODUCTION

## 1.1 Background of the study

Nepal is a Himalayan country having multiethnic, multicultural, pluralistic society with enormous socioeconomic disparities. There exists very poor awareness of maternal and child health risks. Serious psychological disturbances can manifest and seriously threaten safe motherhood during the postpartum period. Mental health has been clearly established as an inherent part of public health. But, mental health receives insignificant attention by the government. The traditional/religious healing methods still remain actively practiced, specifically in the field of mental health.

Population census of Nepal 2011 accounts total population 26,494,504, life expectancy 67 years (male 65, female 69), sex ratio 94.16, population growth rate 1.35%, population density 180/Km<sup>2</sup> with urban population 19.3% and rural 80.7% in the country (CBS, 2011). Government health facilities under Ministry of Health and Population have central, regional, zonal and district level hospitals 86, Primary Health Care Centres 205, Health Post 822 and Sub-Health Post 2987 in number and there are 48897 Female Community Health Volunteers (FCHV) including trained Traditional Birth Attendants (TBA) working at community level across the country (MoHP, 2014). According to the annual report of Ministry of Health and Population, the top ten diseases accounting for morbidity are pyrexia of unknown origin, headache, gastritis, ARI, upper respiratory tract infection, intestinal worm, impetigo/boils/furunculosis, presumed non-infectious diarrhoea, amoebic dysentery and falls/injury. Percentage of children under age 5 underweight is 25%, stunted 46% and Anaemia 46% (MoHP, 2014). The report also shows the percentage of children suffered from diarrhoea 14% and ARI 4.6%. Percentage of currently married women who are currently using modern method 43.2%, Antenatal Care from skilled birth attendants 58.3%, place of delivery at home 63.1% and at health facility 35.3%. In child health, the immunization of children is BCG 97%, DPT3 91.4%, Polio3 92.1% and measles 88% which is published on the website of ministry of Health and population.

Nepal is a country having high maternal mortality rate 229/100,000 (NMMMS, 2008/09) and high Child mortality 54/1000 in the region (NDHS, 2011). As any statistics in Rajbanshi community mothers are still dying due to pregnancy and pregnancy-related complications. Children are dying from Acute Respiratory Infection (ARI) and diarrhea in the community.

As a member country of United Nations Nepal has made a global commitment of Millennium Development Goals (MDGs) which aims to bring peace, security and development to all in the country. It has outlined major priorities with numerical targets set for each goal to be achieved by 2015. The goal of the plan is to reduce the maternal mortality ratio to 67 per 100,000 live births by 2015, reduce under-five mortality to 54 per 1,000 live births and the infant mortality rate to 34 per 1,000 live births by 2015 through an increased access and use of quality maternal and neonatal health care services. Mother and child have rights as human beings and need special care and protection

including health services. More than 50,000 children die in Nepal each year, with malnutrition as the underlying cause for more than 60 per cent of these deaths (UNICEF, 2009). The proportion of home delivery in Eastern Terai of Nepal is 81% and Maternal Mortality Rate is 229 per 100,000 live births (NDHS, 2011).

Above mentioned figures indicated that Nepal has the higher MMR and IMR in the world. These indicators are the result of poverty, discriminatory practices based on ethnicity, gender and regional exclusion. It is thus necessary to find the status of Rajbanshi in the country and necessary to find out the disparities among different social strata within *Rajbanshi*.

In Nepal, the physical health of mothers and children receives high priority in health programs. Less emphasis has been given upon mental health of the mothers. There are a close interaction and co-morbidity between mental and physical disorders. Mental disorders increase the risk for both communicable and non-communicable diseases, as well as injuries. The proper attention to mental health, especially in developing countries, was therefore highlighted in the Lancet Series of Global Mental Health in 2007, with the conclusion that there is “no health without mental health” (Prince et al., 2007). There is a lack of literature about mental health status like Postpartum Depression (PPD) on the basis of caste and ethnicities. Such type of studies is a need for the country's public health intervention and social development.

WHO has estimated 450 million people worldwide have a mental disorder. Mental disorders include common conditions such as depression and anxiety, those due to abuse of alcohol and other substances, and severe and disabling disorders such as schizophrenia and bipolar disorder. Between 76% and 85% of people with severe mental disorders receive no treatment for their mental health problem in low and middle-income countries (WHO, 2011). Depression alone is second highest contributor to the global burden of disease by the date. Mental illness is also associated with more than 90% of the one million suicides that occur annually. Only 2% of the national health budget dedicated to mental health and about 76-86% of the people with mental illness do not receive treatment in developing countries (WHO, 2009).

Nepal is not an exception to the global situation in mental health. A study has shown suicide as the first leading cause of death among women of reproductive age in Nepal (Pradhan, 2008/9). In a new report entitled "New Understanding, New Hope" the United Nations' health agency seeks to break this vicious cycle and urges governments to seek solutions for mental health that are already available and affordable. Governments should move away from large mental institutions and towards community health care, and integrate mental health care into primary health care and the general health care system (WHO, 2001).

Mental disorders like baby blues, postpartum depression and postpartum psychosis are prevalent across the world. Depression after childbirth affects the health of both the mother and her infant. Sleeplessness occurs during the postnatal period, but there has been little attention to the altered sleep pattern in the postnatal period and its association with maternal depression. A multinational population survey initiated by WHO (2000) found that mental disorders were highly prevalent often associated with serious role impairment and often went untreated.

Baby blues is a form of mental illness and globally widespread. Mood swings after the birth of a baby are not uncommon. Many women feel confused about struggling with sadness after the joyous event of adding a new baby to the family and often do not talk about it. Empirical data strongly suggest that poor social support increased the risk of postpartum illness (Linda, Luecken, Kathryn, Lemery, 2004).

Postpartum depression is a major public health problem (Wisner et al., 2006). Giving birth to and caring for a new baby could act as a psychosocial as well as a biological stressor (Riecher-Rossler and Rohde, 2005). One of these biological stressors could well be sleep deprivation connected to infant care in the postnatal period, but very few studies have examined this (Lee, 1998; Ross et al., 2005).

A variety of traditional care systems exists in Nepal. Ayurveda, Tibetan medicine, indigenous care and faith healings are the major traditional medical systems or folk medicine. Modern or Western allopathic medicine introduced in the seventeenth century but became dominant from the middle of the 20th century (Dixit, 2009). Multiple and Alternative medical systems are popular in all community in Nepal. This variety reflected in a tolerant co-existence and co-operation between differing forms of therapeutic practice (Hitchcock, Jones, 1976; Hawran, 1981; Shrestha et. al., 1983; Stone, 1976). The "great traditions" of ayurvedic medicine and Tibetan healing practice that tend to eclipse their own "small tradition" of local healing. In their epidemiological study a Brahman-Chhetri village in the Kathmandu valley, Shrestha et. al., (1983) described two traditional concepts of psychic illness that determine the family's and the community's perception and reaction to a large extent: bahulapan (madness) and chopuwa (Consciousness disorder). The different attributions of causes are determined by the cultural patterns of interpreting these disorders, and they are crucial in choosing the healing approach (White, 1980).

WHO has defined health as physical, mental and social wellbeing, the health status of any particular community depends upon biological, psychological, spiritual factors and others. Modern medicine being as a scientific tool looks at people with the eyes of knowledge of anatomy, physiology, pharmacy and surgery. But traditional medicine is more complex to understand with single cultural knowledge. The traditional system does not explain everything by logic and it also ignores modern practices. Every culture is characterized by a unique set of concepts, images system of values and specific type of perception of the world (Lomov et al, 1993). Scientific investigation of indigenous knowledge is still in its infancy. The multitude of perspectives lies within a particular society with dualism and parallelism. Dualism is a situation where one sector of society developed "westernized" and the other sector remains "traditional" (Kim, Berry, 1993). Even within a particular culture these two sectors have limited interactions and run parallel to each other. In addition, the cultural diversity within a particular society could produce the different types of explanations and interpretations (Moghaddam, 1986).

## **Historical background**

The word Rajbanshi means "dynasty of King". They dwelled and over populated in the Koc-Bod area of upper Tibetan plateau was known as Koch or Koches. These people came down to the southern region and Brahmaputra river valley sometime between 7000 to 5000 B.C. and so physical changes through various doors i.e. hilly paths or passages. When Koch was over populated in the Koc-Bod areas one branch of the common stock achieved prominence around the Kochi (Koshi or Kosi) river banks and in areas between lower Nepal and north Bihar (Chaudhary, 1969). Bishu assumed the name of Vishwa Singh and his brother Sisu became Siba Singh while many of his followers discarded. This old tribal designation called them Rajbanshi. He worshipped Shiva and Durga and gifts to the disciples of Vishnu and to the priest and astrologers. He revived the worship of Kamakhya, rebuilt her temple on the Nilachal hill near Gauhati and imported many Brahmans from Kanauj, Banaras and other centres of learning. He moved his capital from Chikangram to Koch Bihar, where he built a fine city (Gait, 2008 pt.). Ancient Rajbanshi territory dispersed and found largely in modern India, little parts are found in Nepal, Bangladesh and Pakistan. After the unification of Nepal by Prithvi Narayan Shah the Rajbanshi territory fall in Morang, Jhapa and Sunsari districts began.

Scholars have expressed a different opinion about their origin. According to a widely accepted opinion, Bodo people had entered India during the commencement of Bikram Sambat and they got settled along the bank of the Brahmaputra River and gradually migrated to Assam and north and east Bengal and eastern Terai of Nepal.

## Lineage and Physical Structure

*Rajbanshi* themselves considered as *Kchhetriya* of Hindu caste system. Anthropologists have opined that they are the kith and kin of the peripheral Koch people of the adjacent states of West Bengal and Asom (Assam) in India. As described by a social organization of *Rajbanshi soranepal*, they are having Mongoloid features they consider themselves as a branch of the *Kirants*. They have a lifted bone over their throat a little higher than the average height. The structure of their eyes and forehead etc is like those of a mix of *Aryan-Mongloid*, *Austic*, *Negrito*, and *Dravidian*. They wear clothes conforming to climate and weather (SORA, 2012). Their physical characteristics are similar to local indigenous people like *Tharu*, *Meche*, *Dhimal*, *Nuniya* and *Batar*.

Referring to Ridge (1991) Shrestha (2009) has mentioned in his study that kinds of *Rajbanshis* such as *Koch Rajbanshi*, *Poundra Rajbanshi*, *Mech Rajbanshi*, *Newar Rajbanshi*, and *Khataha Rajbanshi* in Nepal. In India, there are also many types of sub-castes of the *Koch Rajbanshis* in the North Bengal, India such as *Paliya*, *Sadhupaliya*, *Babupaliya*, *Deshi*, *Domasir*, *Modasi*, *Jaluwa*, *Tongriya*, *Khopriya*, *Gobriya*, *Kantai*, *Dhalai* and *Koch* (Risely, 1967). But these sub-castes of the *Rajbanshis* found in India are not present in Nepal.

There are mainly more than four types of *Rajbanshi* found in Nepal. (1) *Khotaha Rajbanshi*- speaks the Maithili language. They have poor economic and social condition. They take alcohol; eat pork, chicken, rat and a kind of wild snail called in local language *ghongi*. They believed that during *Ramayan* era when Parshu Ram started genocide against *Kchhetryas* some run away from their place to hide over the northern part which is now the territory of Nepal. They have been settled here since "Ramayana era". According to Shrestha (2009) their castes are called- *Teli*, *Baniya*, *Gwar*, *Kahal*, *Khatwe*, *Kipat*, *Dhanuk*, *Nuniya*, *Amat*, *Kalawar*, *Kamat*, *Koiry*, *Sharma*, *Pandit*, *Ganesh*, *Chuhan*, *Chanda* and *Mana Chanda*. They are inhabited in Biratnagar city covering from the east of Sindhiya River and have marital linkage with *Rajbanshi* of Purniya in Bihar. (2) *Rajput Rajbanshi*- They believed that they are proceeder of *Rajbanshi* dynasty as pure *Kchhetriya*. Their habitat is located west of Morang to Saptari. Their castes are called as: *Chandel*, *Chauhan*, *Kachwaha*, *Parihar*, *Ponwar*, *Rathaur*, *Bhisaudiya*, *Solankhi*, *Tinwar*, *Yadav*, *Jaath*, *Gujer* etc. (3) *Newar Rajbanshi*- during Malla dynasty in Kathmandu valley Malla king married Koch princess (Shrestha, 2009). Since Malla dynasty or before *Newar Rajbanshi* or *Koch* are living in Kathmandu as *Newar Rajbanshi*. They have Newar culture and language in Kathmandu valley. (4) *Bengali Rajbanshi*- is also known as *Petani Rajbanshi* since they wear a dress called *Petani* by women. Their tradition and culture are similar with *Rajbanshi* of West Bengal and Assam. However, this *Rajbanshi* of Nepal is living before the unification of Nepal. Apart from these *Rajbanshi*, there are *Bongaha*, *Hadi*, *Paliya*, *Majhi* and *Gosai Rajbanshi* found in Nepal.

## Social Structure

In *Rajbanshi* culture, there is caste system based on Hindu culture as- (A) *Thakur Gosai* (*Kul Guru* or *Guru Gosai*). (B) *Chandra Banshi Khotry Rajbanshi*. (C) *Bongaha, Tajpuriya, Gengai, Koch* etc. (D) *Koch, Kahar, Hadi* etc. According to *Guru Gosais*, there are 16 Clans deities or *Kul Deotas Puruwa* in *Rajbanshi*: *Chaitanan, Nitanan, Balaram, Satguru, Ramaut, Aadit, Thunthuniya, Lakhikdadhar, Chaturmaria, Chatankhela, Jagabandhu, Udet, Sitaudet, Dhadigar, Kavar and Tulasia*.

*Rajbanshi* are Hindus. They are following caste system of Hinduism. *Gosai, Guru gosai* are priest and they are Brahmin. They use to wear *pagari* in the occasion. Most of the *Rajbanshi* are *Kchhetriya* as proceeder of *Rajbanshi* dynasty. But, there is also discrimination among them since some of them have different culture called *Khotaha*. However culture of *Rajbanshi* is not totally similar to Hindu as they have different rituals during birth, marriage and death. They have their own priest *Guru Gosai*. *Guru Gosai* performs all rituals from birth to death. *Rajbanshis* have a clan who has ritual of encavement of dead body. Now there is Hindu acculturation into their indigenous culture.

There are both joint and nuclear family. But now there is the tendency of the nuclear family. Most of the houses are patriarchal and some houses have a matriarchal family. They are sensitive to their tradition and culture. They have their own dress. Women wear dress *petani* that are found only in *Rajbanshi*. There are special cuisines found in *Rajbanshi* called as *pelka saag, khari daal, kadur khari*, and *beganeer tarwa*. They are nutritious foods as well as tasty to eat.

## House and family

*Rajbanshis* built thatched roof house made up of with locally available materials such as wood, bamboo and jute stalks. Houses are beautifully decorated with red clay, dung, and white clay. Visitors are not given direct entry to such houses. They do not allow a new visitor to go inside the house at once. They usually have four small houses attached together named as: *nandhan ghar* or kitchen, *andri ghar* or Bed room, *bahiri ghar* or guest room and *guwali ghar* or cattle house. Women are expert in decorating the house and maintaining sanitation around the house. Boys are active in jobs like caring cattle, farming and other occupation. They classify houses as *Ekchaliya Ghar, Bangala Ghar* and *Chuhari Ghar*. A study showed that slightly more than half of the families (53%) were nuclear followed by 47 percent joint families (Shrestha, 2008). Now, there is the preference of the nuclear families and tendency of gradual fragmentation of the landholding.

## Language

The language of *Rajbanshis* is *Rajbanshi Bhasa*. It is a mix of Bengali and Maithili. The language of Koches, is the original ethnonym of *Rajbanshis*, has commonalities with the language of *Garo* (Bista, 1997). *Rajbanshi bhasa* mostly spoken in Nepal is kin to Bengali and Assamese languages.



## Occupation

The principal occupation of *Rajbanshi* community is agriculture. But many people are working as labour in factories, labour in farms and pulling the rickshaw. Some *Rajbanshi* are also working in schools, government service or private organizations and others have small business and mechanical jobs in nearby urban areas.

## Religion

There are now three main social divisions among the *Rajbanshi*. These are the *Hindu Rajbanshi*, the *Muslim Rajbanshi*, and the *Koch*. The *Rajbanshi* of Nepal is primarily Hindu (Gautam, 1999). They worship *Thakur Brahmani* and various *Devis* and *Devatas*, but the puja to the deity *Kali* (female *Shakti*-power) carried out with great fanfare and enthusiasm” (Gautam, Thapa, 1994). There are also aspects of the traditional shamanism mixed in with the *Rajbanshis*’ Hindu beliefs (Adhikari, Ukyab, 2000). They believe in spirits, magic, sorcery and ghosts. They play with mud and water during their major festivals.

## Marriage

*Rajbanshi* community organizes marriage tradition according to Hindu culture. They marry within their own community. They prefer to arrange marriage. There is also a place for love marriage. In arrange marriage, a matchmaker called *karuwa* initiates the marriage proposal and *guru gosain* priest performs the rituals. *Rajbanshi* generally prefers to marry within the caste, however, outer *Rajbanshi* marriages are also allowed. There are different types of marriages in *Rajbanshi*. In *magi biwaha* people from groom side go to bride's home with a marriage proposal. In *dhanjiya biwaha* marriage groom go to bride's house and stays for some years but do not settle. In *danguwa* marriage groom go to bride's home and settle. In *damdume biwaha* bride go to groom house and settle. It is common in poor bride family. In *ghardhuka biwaha* bride goes voluntarily to groom's house and settle. In *bhatar dhara biwaha*, boy, and girl when loved each other go outside the house and get married and come back. In *kiya biwaha* widow taken into the house as the bride and get married. In many areas, the practice of paying a bride price is still common. If a man is unable to pay this price, he may work for the bride-to-be's parents for one to three years (Bista, 2000). After marriage, the couple returns to the groom's home where they will live until the time to set up their own household, generally still in the husband's home village.

## Death Ritual

Death ritual of *Rajbanshi* community divided into four parts 1. *Daha sanskar* when a dead body is either buried or cremated, 2. *tin sinan* (terat) after three days ritual of giving Shraddha is given by his/her sons kriyaputri. Neighbours and kriyaputri go to the river or cremated place with singing a sentimental melody, 3. *matha kama* (khaur) or shave head and 4. *Bhoj* or party. The eldest son sets fire to the corpse of father or mother. The people in the death procession have a bath in the river and return home after burial or cremation at the funeral spot. Most of the *Rajbanshis* bury their dead but now-a-days some of them have adopted cremation formalities (Voice of *Rajbanshi*, 2012). On the third day of death people in death, the procession goes to the river with music band *Kirtiniya* singing

to make soul rest in peace called *shraddha*. After taking bath people in death procession would be ritually clean after *shraddha*. *Kriyaputri* sits on *Kiriya* wearing white clothes for the 13 days. Only one son among the sons needs to seat as *kriyaputri*. That is different from Hindu system where all sons have to sit as *kriyaputri*. Corpse of *guru gosai* must bury and a plant called *birna* be planted in the ground.

### **Unique Religious Practices**

*Rajbanshi* tradition and culture has some uniqueness although they are Hindu. Priest of *Rajbanshi* called *Guru Gosai* inherited. Knowledge on *Tantra*, *mantra* they use for treatment by *guru gosai*, *gosai* and *Ojha* or *dhami* are different they do not use same *tantra*, the *mantra* for the same thing. *Rajbanshi* is Hindu but they do not take any Tika during *Bada Dashain*. And also do not sacrifice any animal during *Dashain*. They do not do *Sora shraddha* during death ritual. They do not call any *Guru gosai* or any priest to give *Tarpan* to their dead ancestors. Family members can give the *Tarpan* to their dead ancestors during *siruwa*, *holi*, and *Tihar* festivals. Women do not celebrate *Teej* of Hindu culture. Widow marriage permitted in *Rajbanshi* culture which is not allowed in Hindu. Marriage system in *Rajbanshi* culture is liberal than in Hindu culture.

*Rajbanshi* community is rich in culture. There is some literature on language, education and culture. But there is a lack of literature on health in the academic field. This study entitled on traditional and modern maternal and child caring practice and impacts be added in this field. In addition, District Public Health Office Morang in her report showed district level coverage of primary health care services. According to the report in maternal care ANC check up 45%, PNC 69%, CPR 67%, health institutional delivery 63.50%, new women iron receiving 68% and in child care BCG coverage 100%, DPT3 coverage 90%, Polio3 coverage 90%, Vitamin A 100% coverage reported (DPHO/Morang, 2069/70). Similarly, According to annual report of District Public Health Office Jhapa for maternal care ANC check up 37.10%, PNC 34.40%, CPR 60.80%, health institutional delivery 30.70%, new women iron receiving 100% and in child care BCG coverage 100%, DPT3 coverage 100 %, Polio3 coverage 100%, Vitamin A 100% coverage reported.

A study was done in *Katahari* and *Baijanathpur* VDCs of Morang district in same community had also noted that *Rajbanshi* community was adopting modern, self and alternative medications. Modern medication was equally popular in both poor and rich or both educated and uneducated (Subba, 2004).

## 1.2 Statement of the Problem

Maternal Mortality Rate in Nepal is 229 per 100,000 live births in Nepal (FHD, 2009) due to haemorrhage, sepsis, unsafe abortion, AIDS, eclampsia, and obstructed labour (MoH, 2001). Despite the evidence that Maternal mortality ratio of Nepal has reduced from 539/100,000 (NDHS, 1996) to 281/100,000 (NDHS, 2006), every day six women die from pregnancy-related causes. Unclean delivery conditions and improper care for mothers and their newborns bear many risks to the wellbeing of thousands of mothers and babies each day. Studies have concluded that around ninety-nine percent of maternal deaths occur in the developing world (IAGSM, 1997).

Nepal is having under-five mortality rate 54 per 1000 live births in 2011 (NDHS, 2011). In developing countries child death occurs around 27% result from Acute Respiratory Infections (ARI) and another 23% from diarrhoea (WHO, 2009). Acute diarrhoeal diseases (ADD) and ARI are most important causes of morbidity and mortality in the children in Nepal as well. It is notable that various studies from developing countries have reported that delay in seeking proper care and not seeking any care contributes to a large number of child deaths (D'Souza et al. 2003).

Major direct causes of neonatal death in Nepal are infection, birth asphyxia, preterm birth, and hypothermia (SCF, 2002). There is causal association between early breastfeeding and reduced infection-specific neonatal mortality in young human infants (Karen et al. 2007). Understanding and improving families' care seeking behaviour could give much to reducing child mortality in developing countries. Mortality is highest within the first day and first week of life (JNMA, 2007).

Birth rituals including cultural practices of mother and child care may play the role in understanding health and illness and health seeking behavior, or treatment choices. In Rajbanshi culture, until six days of delivery mother and child are ritually unclean. Mothers are also reluctant to show or to let the infant and herself touch unnecessarily and reluctant to seek of modern health care during crucial neonatal period.

Health services are not equally available to all Rajbanshi. It will be accessible when those are physically available, affordable (economic accessibility), appropriate and acceptable. Australian Government report showed that health services are inaccessible if providers do not acknowledge and respect cultural factors, physical barriers and economic barriers, or if the community is not aware of available services. There are many strategies for successfully improving Indigenous access to urban and regional health services. Individual service providers need to consult with their local community to find the specific issues in their context (AIHW, 2013).

In Nepal Women, Dalits, Adibasi Janajatis, Madhesis, Muslims and people of geographically remote areas belong to the disadvantaged groups and are intentionally and unintentionally discriminated. There is a finding of significant gap in knowledge and practice between disadvantaged and general population in Eastern Development Region of Nepal. Disadvantaged communities were Dalits, Janajatis and Muslim in a study. Significant numbers of the mothers were able to communicate only in their mother language. Since health workers are not familiar with local language local mothers felt barrier to take health care from the health institutions (Subba, 2003).

The disparity between disadvantaged and advantaged groups is one of the most severe barriers in accessing basic health care, even higher than economic and resource limitations in Nepal (World Bank, ADB, UKAID, 2011). Rajbanshi is one of the disadvantaged community it attracts researcher to look into access to primary health care and barriers to community.

Indigenous knowledge could have contributed to the high under-five mortality rate (80/1000 live births) in hill Janajatis compared to a national average of 68 (Bennett, Parajuli, 2010). The practice of using Skilled Birth Attendants (SBA) by Terai Dalits was found 5% since it was 70% in higher castes like Brahmin, Chhetri (NDHS, 2006). We have to study in under five mortality and traditional practice and use of skilled health worker or health institutions for delivery In Rajbanshi community.

Wealth disparity within caste/ethnic groups was also widely prevalent. Health status of rich people and poor people within an ethnic was also wide. Contraceptive use in wealthiest Newars was 68% and which was only 26% among the poorest. Among Muslims too, the difference in contraceptive use between the poor (4%) and the rich (42%) was very stark (HSRSP 2008). So, Rajbanshi's practices and impacts among different social strata must have studies.

Regarding service users by caste and ethnicity, very low number of percentage (5%) of Terai people were taking Comprehensive Abortion services from hospitals (Cherry, 2005). Some unseen and unexplored reasons may lead to the risk to mothers and newborns to death. Such reasons may include unclean delivery conditions to proper care during birth along with the cultural practices.

Rajbanshi is living in Jhapa and Morang districts. They are the disadvantaged community in terms of access to health care services provided by the government (ERHD, 2003). The majority of the population is adopting home delivery and traditional health care system and having higher maternal and infant mortality rates as per sample survey. According to report published by District Public Health Office Jhapa (DPHO Jhapa, 2007/2008) a significant number of patients suffering from Kala-azar and diarrhea were from Rajbanshi community.

Studies uncover health care practices and impacts in this community. Mortality and morbidity rates were also higher in the community in rural and where access to health care service was poor. Traditional practices are deep-rooted due to the cultural background which is not easily removable so, many people are still adopting both traditional and modern care practices. These were remarkable social and public health problems of Rajbanshi community but there is still a lack of studies and literature on their traditional and modern care practices and the impacts on mother and child.

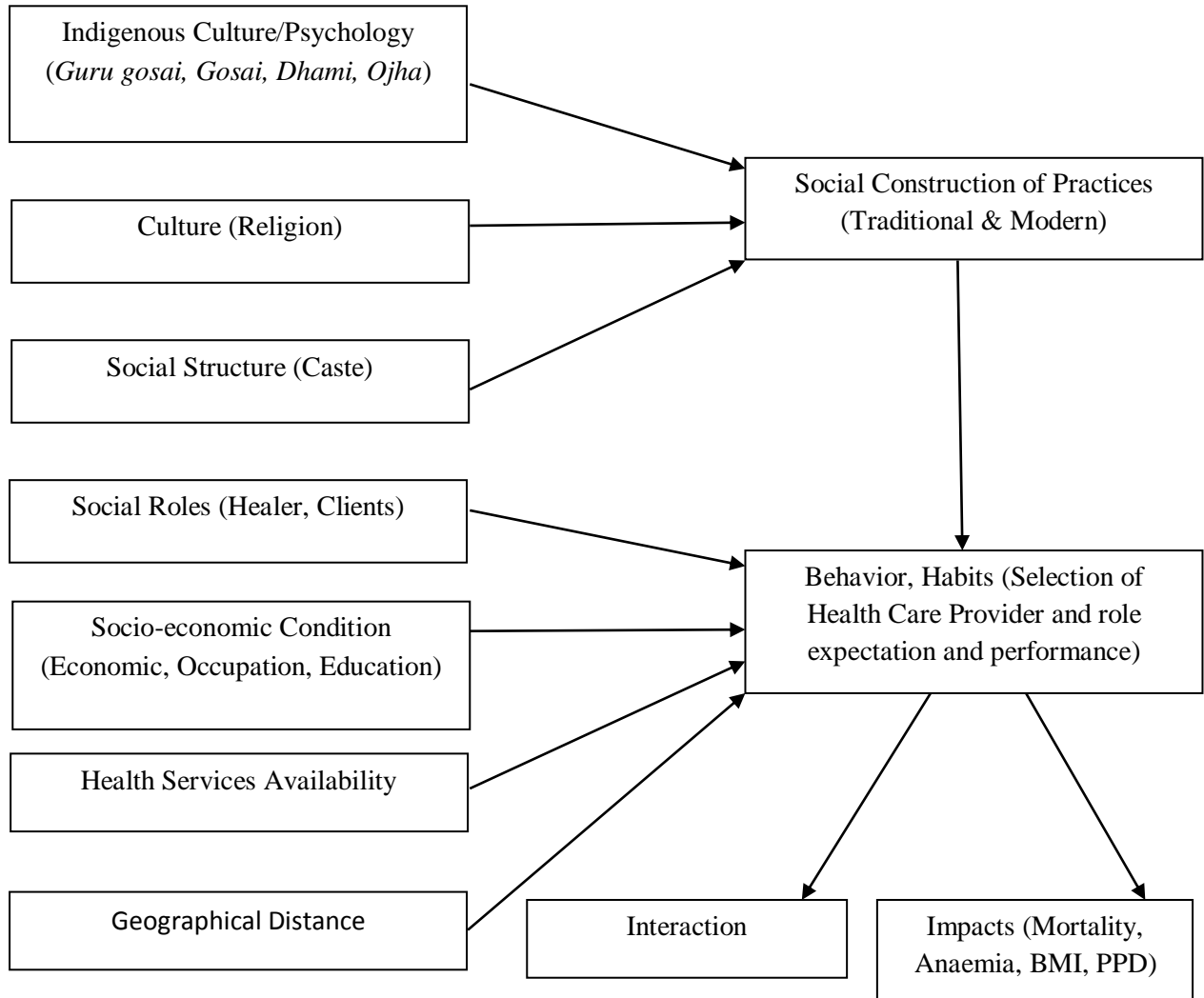
This study has looked into their traditional cultural practices and identified harmful and useful practices. It has also identified most vulnerable groups or people among Rajbanshi. Mental health of mother and behavior of smoking and drinking behaviors were also studied and tested statistically. There was an association seen between PPD and smoking/drinking and maternal stress in the study. Results of the study can support mental health program to the community and findings of this study has also opened room for further research.

## Birth Ritual

*Rajbanshi* family is aware of care of a pregnant woman. They call a pregnant woman as *dorjuwa* and they called a delivered woman as *Puwati*. They do not allow pregnant to go or to see bad things and events since it has been supposed that it affects foetus of the womb. They believe in ghosts and they put knives under bed to get protect from ghost and evil spirits. A traditional birth attendant (TBA) called *dhai* or *dayani* look after during pregnancy, delivery and after deliver. According to *Rajbanshi* culture first baby be born at natal home *maita ghar* where pregnant daughter is feed rice pudding before a delivery. When new baby birth is given family member of own house should come with small gifts for baby to see. *Chhattiyar* or *pachhati* or *suddhabad* or *nwaran* takes place on sixth day for boy and on the third day for girl child. On the day of *Chhattiyar* or *pachhati* baby's head shaved to make ritually clean and shown to sun putting the baby on *nanglo* a basket by *guru gosai*. *Guru gosai* worships *Kul deota* clan deity as registering new member in the clan. But the nowadays culture of the naming of a new baby by grand mother and neighbor with the short cut method is being popular. A delivered woman is ritually clean after *chhattiyar*. Rice feeding ceremony celebrated between five to nine months regardless of son or daughter. Maternal uncle makes rice pudding from milk and feeds to the baby. The uncles bear the expenses incurred upon the celebration. Nowadays, women go to a nearby health post or hospital for the delivery. Practices of cutting of umbilical cord and shaving of newborn head only by *hazam* or *Thakur* are potential to risk condition. Use of unsterile blades and sometime delaying to find *hazam* or *Thakur* to cut umbilical cord may cause bleeding during delivery.

### 1.3 Conceptual Model

Figure 1 Conceptual Model



Indigenous culture/psychology, religion and social structure linked and interact with traditional and modern health care practices to make socially constructed practices. Socially constructed practices, social roles of healer and client, socio-economic condition, health services availability and geographical distance is inter-linked and interacts to form behavior or habits of Rajbanshi community. The behavior is changeable in selecting health care provider and having expectation and performance. Impacts on mother and child then resulted as mortality, morbidity, anaemia, BMI and PPD.

## **1.4 Objectives of the study**

The aims of the study on Rajbanshi of Nepal were:

1. To find out traditional and modern care practices during Pregnancy, at birth and after birth.
2. To find changes in maternal and child health care practices.
3. To analyze demographic characteristics of households and compare maternally and child health between a number of children, education, economic condition, occupation, urban-rural settings, and behaviors.
4. To find the impact on maternal and child health by traditional and modern maternal and child health care system.
5. To compare impacts between:
  - Child mortality rate in modern and traditional health care practices,
  - Maternal mortality in modern and traditional health care practices,
  - Nutritional condition of mother and child and disease: anemia and Body Mass Index (BMI),
  - Mental health status of mother: Post Partum Depression (PPD) and
  - Sociocultural effects on the health of mother and child.

## 1.5 Rational of the Study

*Jhapa*, *Morang* and *Sunsari* are Terai districts at South-eastern region of Nepal. These districts were Malaria, Kala-azar, Tuberculosis and Cholera affected areas and people from outside areas isolated this Terai region due to fear of these diseases. Indigenous people like *Koch*, *Meche*, *Dhimal*, *Satar* were living in the region until 60's decade. *Rajbanshi* is one of the oldest tribal groups living in *Morang* and *Jhapa* (Bista, D.B., 1997). Incidence of vector borne diseases like Malaria, Kala-azar and other communicable diseases fell down by the introduction of malaria control programs by Nepal government,. With the control of epidemics and due to population policy introduced by government of Nepal people overwhelm migrated towards Terai mainly from hilly and mountainous districts of the country as well as people also came from India, Burma and Bhutan and settled. The population structure changed due to improved developmental infrastructure of the region. Indigenous people living in this region are feeling their cultures are being dominated by culture of migrated people and are also marginalized from mainstream of social world. Indigenous *Rajbanshi* are getting distanced themselves from their traditional practices due to development activities and increment of modern health facilities in the market. Now organized voice raised before government for the preservation and promotion of indigenous culture and practice which are now being disappeared by different reasons.

*Rajbanshi* has own tradition, culture and practices. They have their own traditional knowledge, attitude and practices in caring, mother and child. Concepts of health and hygiene, disease and illness also differ from culture to culture. However, very few studies focused on specific ethnic practices in Nepal. In *Rajbanshi* dualism of modern and traditional care seeking practices exist and has continued to impact on physical, psychological health of *Rajbanshi* in Nepal.

This research explores an extensive literature review of *Rajbanshi* community and relates the similar factors responsible for shaping up of a practice and effect in *Rajbanshi*. It has explored information, described things and confirming the findings with references to knowledge and theories which have already been established. The social construction of *Rajbanshi* society, its culture, and indigenous psychology are documented in the results. Knowledge generation about *Rajbanshi's* practices and conditions and its sharing will contribute to the field of research. The study has added traditional knowledge on maternal and child care practices in the academic field. The study has also examined impacts of traditional and modern care practices on the health of mother and child. Some of the practices identified and documented as harmful to health and that knowledge would be usable in planning to lower Infant Mortality Rate and Maternal Mortality Rate of *Rajbanshi*.

The Cultural heritage of the *Rajbanshi* is a wealth of the country and there is scope for research. It explores and preserves the knowledge of the practice of *Rajbanshi* and to add into academic field. Many scholars have done studies on their language and culture but there is a lack of literature in the field of maternal and child care practices and impacts on the health of mother and child in *Rajbanshi*. So, this researcher has taken the initiative in this field. Modern care ignores culture and culture also ignores or resists modern values that are not the part of the culture. There is something lacking by which *Rajbanshi* are still far to meet national standard or targets in mother and child health. Both qualitative and quantitative information gathered and analyzed so that gaps if they exist, will find out by this study.



According to Gergen (1991) as new technology increased relationships on every level reaching up to social saturation small face to face communities are disappearing. Our 'self' becomes an imitation of others in different situations. By this personal self-image, disappears and consciousness of the construction of the saturated self-becomes focal and social saturation expands values and goals based on relationships with others. In Nepal issues on disadvantaged rose but which need verification and documentation as if how far this underprivileged community got access and use of health care services provided by the government and non-governmental sectors and place of *Rajbanshi* community in the country. The maternal and child health gaps within the community also need to explore and to prove the findings. The researcher hopes these gaps mentioned in findings could be usable for further planning for action by respective authorities of the state.

Modern care system has poor access and became unaffordable. Sociocultural factors affect modern care and vice-versa. Thus, it is necessary to study on sociocultural with modern and traditional care system that look at economic, occupation, education; rural-urban setting and behaviors have an adverse impact on maternal and child health in *Rajbanshi*.

### **1.6 Limitations of the study**

Literally, *Rajbanshi* includes various types of communities in Nepal. There is largely cultural diversity from place to place among Rajbanshi called communities and people. But the scope of the study is Rajnbanshi communities living in *Morang*, *Jhapa* and *Sunsari* in Nepal who are Hindu by culture.

## 1.7 Operational Definitions

**Aali barne or aali badhne:** a preventive measure done for safe delivery.

**Anemia:** is defined as a deficiency of hemoglobin, a molecule inside the red blood cells (RBC's). Severe anaemia as seen by clinical examination noted in the study.

**Baby Blues:** A brief period of anxiety, mood swings, and sadness which occurs in some women after delivery and usually resolves within a week.

**Buti:** It is medicine made from plants and organic substance put into nail sized copper box and tied over the neck or upper arm.

**Chhatka:** a woman who has had an abortion.

**Child health care:** Children's health encompasses the physical, mental, emotional, and social well-being of children from infancy through adolescence.

**Child Mortality Rate (USMR):** The number of deaths divided by the number of population at risk during a certain period per 1,000 live births. The probability of death derived from a life table and expressed as a rate per 1,000 live births.

**Chhutiya:** People considered ritually unclean when baby birth or death of a member occurs in a family.

**Chhutiya pari:** Ritually unclean house.

**Chhuwati:** Joint pain or pain in arms and feet.

**Economic condition:** (1) Very poor: who has food enough only for less than 6 months, (2) Poor: who has enough food for 6 months or more but less than 1 year and (3) Rich: who has enough food for more than one year. The criteria based on the guideline set by Ministry of Health and Population Government of Nepal, Department of Health Services (DoHS, 2067/68).

**Ferani:** Promise and offering things to the deity as a reward for being cured or Bhakal.

**Gahili deota:** Rajbanshi deity responsible for causing arthritis.

**Ghar deota:** Deity of the house.

**Gwagashree:** a Local medicinal plant that used by the traditional healer for delivery problem.

**Jadibuti:** It is a local medicine ready from plants.

**Jharphuk:** It is traditional treatment process where a traditional healer takes a cup of water and leaves of holy basil Tulasi and chants mantra. Treated water with mantra sprinkled over patient's body with the leaves of holy basil Tulasi.

**Jokhana:** It is a traditional diagnosis procedure when a Rajbanshi traditional healer looks into a place of a leaf of holy basil Tulasi plant on the surface of glass water.

**Kalijhar:** a kind of local medicinal plant with triangular leaf found in jungle or bank of the river.

**Modern health care:** it is the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments in humans. Health care delivered by practitioners in medicine, optometry, dentistry, nursing, pharmacy, allied health, and other care providers. It refers to the work done in providing primary care, secondary care, and tertiary care, as well as in public health.

**Maternal health care:** refers to the health of women during pregnancy, childbirth and the postpartum period. While motherhood is often a positive and fulfilling experience, for many women associated with suffering, ill-health, and even death.

**Post partum depression** is a mood disorder that begins after childbirth and usually lasts beyond six weeks.

**Morbidity:** an illness or an abnormal condition or quality.

**Mortality:** the condition of being subject to death.

**Patalshree:** a kind of locally available medicinal plant used by Gosai or Guru gosai.

**Pithiya:** A mother who had ever lost two babies including stillbirth.

**Puruwa:** Deity of a clan.

**Lajani:** a kind of small plant which withers when touched called as Lajawati.

**Sarpako phal:** a kind of plant which looks like a maize and called maize of snakes locally.

**Seto dubo:** thin grass with white blades which considered sacred in Hindu religion.

**Thakur Brahmani:** Rajbanshi deity of the house which can cause diseases.

**Traditional health care:** is the total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in maintaining health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.

**Vasota:** nausea, vomiting, abdominal pain caused by ghost or jungali.

# CHAPTER 2: LITERATURE REVIEW

## 2.1 Global

Global health is a research field in medical and social science disciplines. It is the intersection of culture, sociology, psychology, demography, economics, epidemiology etc. It focuses on determinants and distribution of health from different perspectives.

Different cultural effects on health outcomes and behaviors have been well documented in the literature (Perez-Stable, 1992). Popular examples of cultural constructs that are directly associated with health behaviors include the hot-cold food and medical theories that were extensively studied in East Asian, South Asian and Latin American populations (Manderson, 1987) and the fatalism (fatalistic outlook) reported among Latinos, which identified as a barrier to use of cancer screening tests (Perez-Stable, 1992). However, the role of culture on health outcomes is usually taken for granted, and culture is infrequently conceptualized or measured as an independent variable that influences differential health outcomes (Weisner, 1996). Culture is often reported as an explanatory variable to explain ethnic or population differences (Baranoski et al. 1990, Kumanyika, 1993).

A study conducted in Nigeria has identified cultural practices with positive health effects a "Tamako" a system of community-based help to the sick was found among the Nupes in Katcha. This system is useful in defraying hospital bills of indigent members of the community. Another positive practice is the culture of food help and gifts to nursing mothers which helps to improve their nutritional status. However Negative cultural practices such as child marriage, "Sadakiar" (wife gifts), "Egikpa" (child fostering) and "Efidan" (body scarifications) are also practiced (Oleribe, Alasia, 2006).

A study of Latin American country Dominican Republic a study has described that family members were influential in providing women with first care seeking referrals to indigenous healers credited with influence over physical, mental, spiritual and supernatural properties of illness. When indigenous treatments were ineffectual, the women sought care from trained healthcare providers (Bobbie, 2006). In the culture of the Dominican Republic family members and traditional healthcare providers are influential advisors on first health-seeking behaviors and self-care practices.

Adolescent mother's health services have a potentially critical role to improve the of reproductive health. In order to get a better understanding of adolescent mothers' needs, the study compared health seeking practices of first-time adolescent and adult mothers during pregnancy and early motherhood in Wakiso district, Uganda (Lynn, 2008). Adolescents showed poorer health care seeking behavior for themselves and their children, and experienced increased community stigmatization and violence, suggesting bigger challenges to the adolescent mothers in terms of social support. The study has also suggested as adolescent friendly interventions such as pregnancy groups targeting to allow pregnant adolescents providing information on pregnancy, delivery, and early childhood care need to introduced and implemented.

In order to understand factors influencing choice of delivery sites in Rakai district of south-western Uganda the factors influencing choice of delivery sites were: access to maternity services; social influence from the spouse, other relatives, TBAs and health workers; self-efficacy; habit (earlier experience) and the concept of normal versus abnormal pregnancy (Amooti, Nuwaha, 2001). Factors that influence the choice of delivery are family members, relatives, and community.

The multiplicity and complexity of factors including some of the governmental policies and attitudes have contributed to the environment in which a young pregnant woman suffers death during child-birth. A study on health risks associated with the use of the traditional healers and midwives, a number of other cultural factors contribute to poor genitourinary health among Zimbabwean women (Kanchense, 2005). These practices include chiramvu, kuroodza (debt-bondage) kugara nhaka (wife inheritance), and forced elongation of labia minora. The study has also made recommendations for improving the situation begin with allowing women to recognize their inherent power and use it responsibly. A newly developed model of public health, Holistic Self-Management Education and Support (HSME & S) care model addresses disease management ideals of the in the original primary health care model (Kanchense, et al, 2006).

Studies on care seeking and educational factors have noted various variables responsible for care seeking practices and effects. Education is the only individual-level variable that is consistently a significant predictor of service use while the socio-economic level is a consistently significant predictor at the household level. At the community level, urban residence and community media saturation are consistently strong predictors (Stella and Adesegun, 2009).

A study conducted in assessing determinants of health care to seek for childhood illness in slums of Nairobi Kenya. In the study it was found that perception of illness severity was strongly associated with health care seeking (Negussie, Chepnengo, 2005). Household income was much associated with health care seeking up to certain threshold levels.

London people with mild-to-moderate distress seem to prefer informal sources of help and those involving human contact, compared to medication or self-help. This has implications for potential interventions for psychological distress in primary care (Walters et al., 2008).

Mongolia delayed health care seeking associated with younger maternal age, absent father, having only one child in the family, and living a greater distance from a family health clinic. Distance from family homes to clinics was definitely associated with a delay in medical care seeking (Gombojav et al., 2009).

Culture and care seeking practice in Vietnamese tradition they explain ill-health and disability is due to the supernatural and spiritual realm. There is also little understanding and trust in Western medicine. Many people, therefore, use traditional methods of healing exclusively or combined with Western medicine. Buddhism has a great influence on the thinking and behavior of Vietnamese people (MDAA, 2009).

Reproductive health knowledge, attitudes and practices survey which carried out among 468 Afghan women of reproductive age in Kabul. Of them, 24% had knowledge of any STIs, although most of these women did not know correctly how to prevent them. Most of the women (93 per cent) needed authorization from their husband or a male relative before seeking professional health-care (Van E. et al., 2004).

In Pakistan, a program of raising the socio-economic status through multi-sectoral development activities such as women's micro-credit, life-skill training, and non-formal education shown to have a positive impact on health-seeking behavior, morbidity, and mortality besides the overall empowerment of women population (Ahmed et al., 2003).

A study explored the demand-side of maternal healthcare by looking at differences in perceived knowledge and care-seeking behaviors of women in relation to postpartum hemorrhage or eclampsia. Haemorrhage and eclampsia are two major causes of maternal mortality in Bangladesh (Kalim et al., 2009).

In Rajasthan India, a study was done to find the cause of death and care-seeking behavior. Family perception of not being able to afford treatment at distant hospitals was a major barrier to seeking care, and 60% of those who sought care had to borrow money for treatment. Lack of skilled attendance and immediate postpartum care were major factors contributing to deaths (Iyengar et al., 2009).

Another study was done in Uttar Pradesh India to investigate the knowledge, attitudes, and behavior of both women and men to enhance the reproductive health status of couples. Results showed that even in India women are not free to seek for health care (Singh et al 1998).

Synthetic indicator DP2 of maternal and child health in the least developed countries of Asia is 4.42 in 2008/9. Nepal lies at a bottom place among least 10 countries (Antanio, Martin, 2011).

Table- 1 Synthetic Indicators of maternal and child health

Classification	Countries	DP2 Indicator	Total Population of Asian LDC (%)	Total Area Asian LDC (%)	Continent
1	Maldives	8.67	0.10	11.45	South-central
2	Bhutan	8.16	0.22	1.47	South-central
3	Myanmar	7.16	15.89	25.85	South-eastern
4	Cambodia	6.21	4.61	6.91	South-eastern
5	Timor-Leste	5.89	0.32	0.57	South-eastern
6	Bangladesh	5.20	50.85	5.50	South-central
7	Yemen	4.67	7.31	20.16	Western
8	Nepal	4.42	9.22	5.61	South-central
9	9 Lao PDR	2.59	1.94	9.04	South-eastern
10	Afghanistan	0.97	9.54	24.89	South-central

Source: Antanio J. & Martin R., 2011

A cross-sectional study was conducted with 482 Hindu women who were pregnant in Maitha, Utter Pradesh, India (Saroha, Altarac, 2008). Maternal health care service uses among both upper and lower caste women was very low. Upper caste women were almost three times more likely to use antenatal care. Five times more likely to have a trained birth attendant compared to the lower caste women. Caste was a significant determinant of tetanus toxoid use and trained birth attendant even after adjusting for sociodemographic factors. Besides caste, maternal literacy was the one sociodemographic factor that was significantly associated with the use of all maternal health care services.

Quantitative and qualitative case studies of women with no antenatal care and/or home birth, and verbal/social autopsies of maternal and infant deaths, conducted in three diverse sites across the country emerged following themes in South Africa (Tlebere, Jakson, et al., 2007). They are: 1) transport and distance to care were the biggest problems, particularly in rural areas; 2) providers' communication with families was very poor; 3) health-seeking behavior was better than anticipated; 4) treatment by health providers and quality of care showed mixed results; 5) HIV/AIDS is a major issue; however, basic maternity and neonatal service quality cannot be overlooked; and 6) families and communities are an untapped resource for improving maternal and neonatal health.

Study in Egypt (Awadala, Kamel, et al, 2009) showed that the rural center had a higher frequency of attendance on the curative services, antenatal care (ANC), and delivery care, while the urban center had higher attendance for family planning services, despite higher use of the rural center; histories of abortion and under-5-year mortalities were more prevalent among customers of the rural center than those of the urban center, and clients of the urban center reported more satisfaction than those of the rural one. The most common causes of dissatisfaction were long waiting time and the improper environment. Nearly 15% of the deliveries of babies in the rural center were attended by non-skilled staff, and about half of the clients of the family planning section used intrauterine devices as a method of contraception.

Study on family, friend, and neighbor child care providers and maternal well-being in low-income systems: An ecological social perspective in USA (Kossek, Pichler, et al, 2008) suggests mothers who

have providers with whom they have good caregiving interactions may experience positive social support and psychological crossover dynamics associated with mother well-being. Unemployed in Sweden (Pernilla, Plantin, et al 2006) felt they were a burden to their wives after emigrating to Sweden, and that they were no longer a suitable role model for their children. The status of maternal and newborn care services in Sierra Leone (Koyejo, Harding, et al, 2011) 8 years after ceasefire observed that Significant increases in the uptake of institutional delivery services, the linkage of remote health workers to the health system, and the recruitment of midwives, as well as rapid expansion in the training of health workers (including training in midwifery and obstetrics surgery skills), are urgently needed to improve the survival of mothers and newborns.

Various trends of practices studied in the US (DeClue, 1961). The study noted two more that are of interest to us. First, there is the multi-disciplinary approach becoming more and more widely recognized. Second, they are witnessing further development in the United States of schools for nurse-midwives. A few years ago they had two or three schools, with somewhat limited. There was a significant increase in Nomadic Bedouin Arab women receiving ANC from 31.8% to 57.6% after the establishment of the local MCH Clinic ( $p = 0.004$ ), increase of pregnant women who had at least one physician examination from 27% to 45% ( $p = 0.003$ ), in the percent who had at least 3 nursing visits from 25% to 39% ( $p = 0.011$ ) and compliance with screening tests.

In developing countries, more than three-quarters of people with the serious mental disease do not receive any treatment (Demyttenaere et al., 2004). During their reproductive years, women are at increased risk for most disorders that affect the emotions. These include depression, anxiety, post-traumatic stress disorder and anorexia (Holden, 2005). First-time mothers have a more than twofold risk of needing mental health care during the first months after delivery as compared to a year later, and the increased risk of depression lasts the first five postnatal months (Munk-Olsen et al., 2006). Depression in the postnatal period contributes to several problems in the personal, family and society. In severe depression, especially with psychotic symptoms, there is a risk of suicide (Oates, 2003). In addition, a depression in the mother may affect the child's cognitive, emotional and social development (Moore et al., 2001; Murray et al., 1999; Sinclair and Murray, 1998; Weinberg and Tronick, 1998). Depressed mothers are also less likely to breastfeed (Abou-Saleh et al., 1998; Bick et al., 1998; Warner et al., 1996), and thoughts of harming infants are higher among depressed mothers (Cadzow et al., 1999; Wisner et al., 1999).

The strongest predictors of postpartum depression: depression during pregnancy, anxiety during pregnancy, experiencing stressful life events during pregnancy or the early puerperium, low levels of social support and having an earlier history of depression. Moderate predictors were high levels of childcare stress, low self-esteem, neuroticism and infant temperament. Small predictors were obstetrics and pregnancy complications, negative cognitive attributions, quality of relationship with a partner, and socioeconomic status (Donna, Robertson, et al. 2003).

Suicide was the leading cause of maternal mortality in the United Kingdom (28%) (Oates, 2003) and it is the fourth most common cause of death for women of reproductive age in Europe in 1999 (Jacobsson and Renberg, 1999). In developing countries such as Pakistan, India and Nigeria, exposure to maternal mental distress and depression has been found to be associated with low birth weight and poor infant growth (Adewuya et al., 2008; Anoop et al., 2004; Inandi et al., 2005; Patel and Prince, 2006; Rahman et al., 2004; Rahman et al., 2008b). Maternal depression is also associated with fewer adherences to child health



promotion, including vaccinations (Minkovitz et al., 2005; Rahman et al., 2004). Social factors such as workload, nutrition, war, migration, violence and gender inequalities need to be addressed (Desjarlais et al., 1995; Van der Kwaak et al., 1991). In Norway, the response rate was 68% (n=2830). The prevalence of depressive symptoms (EPDS  $\geq 10$ ) was 16.5%, and the prevalence of postnatal sleep problems (PSQI  $> 5$ ) was 58%. Mean self-reported nightly sleep time was 6.5 hours and sleep efficiency was 73%. Depression was the reason most strongly associated with sleep problems in this period (Dorheim, 2009).

Table 2 Postpartum Affective Disorders: Summary of Onset, Duration and Treatment

Disorders	Prevalence	Onset	Duration	Treatment
Blues	30 – 75%	Day 3 or 4	Hours to days	No treatment required other than reassurance
Postpartum Depression	10 – 15%	Within 12 months	Weeks – months	Treatment usually required
Puerperal Psychosis	0.1 – 0.2 %	Within 2 weeks	Weeks - months	Hospitalization usually required

Source: American Psychological Association (APA)

Postpartum blues is the most common observed puerperal mood disturbance, with estimates of prevalence ranging from 30-75% (O'Hara et al., 1984). The symptoms begin within a few days of delivery, usually on day 3 or 4, and persist for hours up to several days. The symptoms include mood lability, irritability, tearfulness, generalized anxiety, and sleep and appetite disturbance. Postnatal blues are time-limited and mild and do not need treatment other than reassurance, the symptoms remit within days (Kennerly & Gath, 1989; Pitt, 1973). The propensity to develop blues is not related to psychiatric history, environmental stressors, cultural context, breastfeeding, or parity (Hapgood et al., 1988), however, those factors may influence whether the blues lead to major depression (Miller, 2002). Up to 20% of women with blues will go on to develop major depression in the first year postpartum (Campbell et al., 1992; O'Hara et al., 1991b).

## **Post Partum Depression**

Postpartum depression is the most common complication of childbearing, occurring in 10-15% of women after delivery (O'Hara & Swain, 1996). It usually begins within the first six weeks postpartum and most cases need treatment by a health professional. The signs and symptoms of postpartum depression are generally the same as those associated with major depression occurring at other times, including depressed mood, anhedonia, and low energy. Reports of suicidal ideation are also common.

Screening for postnatal mood disturbance is difficult to give the number of somatic symptoms typically associated with having a new baby that are also symptoms of major depression, such as, sleep and appetite disturbance, diminished libido, and low energy (Nonacs & Cohen, 1998).

Very severe depressive episodes characterized by psychotic features classed as postpartum psychotic affective illness or puerperal psychosis. These are different from postpartum depression in etiology, severity, symptoms, treatment and outcome. Postpartum psychosis is the most severe and uncommon form of postnatal affective illness, with rates of 1–2 episodes per 1000 deliveries (Kendell et al., 1987).

The clinical onset is rapid, with symptoms presenting as early as the first 48 to 72 hours postpartum, and the majority of episodes develop within the first 2 weeks after delivery. The presenting symptoms are typically depressed mood (which can fluctuate rapidly), disorganized behavior, mood lability, and delusions and hallucinations (Brockington et al., 1981). Follow-up studies have shown that most women with puerperal psychosis meet criteria for bipolar disorder (Brockington et al., 1981; Dean & Kendell, 1981; Kendell et al., 1987; Klompenhouwer & van Hulst, 1991; Kumar et al., 1995; Meltzer & Kumar, 1985; Okano et al., 1998; Robling et al., 2000; Schopf et al., 1984).

Research evidence has shown that risk factors for puerperal psychosis are biological and genetic (Jones et al., 2001). Psychosocial and demographic factors are probably not major factors of puerperal psychosis (Brockington et al., 1990; Dowlatshahi & Paykel, 1990).

Analysis of verbal autopsy data indicates mental health problems, relationships, marriage and family issues are key factors. It is also noteworthy that 21% of the suicides committed were by young women, aged 18 years and under, indicating that youth is a reason to investigate. The study recommended that more research is needed to improve understanding of the circumstances and contributory factors of these tragic events, to guide interventions (DoHS, 2008/2009).

## 2.2 Indigenous Psychological Prospective

Kim and Berry (1993) defined Indigenous psychology as "the scientific study of human behavior or mind that is native, that is not transported from other regions, and designed for its people." Indigenous psychology generally advocates examining knowledge, skills and beliefs people have about themselves and studying them in their natural contexts. Theories, concepts, and methods developed to correspond with psychological phenomena. According to them, Indigenous psychology explicitly advocates for incorporating both the content and the context of research.

There are ethnographic studies done on ethnicity based practice and impact. Findings from ethnographic studies of iron and folic acid supplementation by women of reproductive age in developing countries show that cultural factors potentially play a role in supplement use behaviors as well. Researchers in Malawi find that health care decisions made by the family, not the person. For example, the husband, mother-in-laws or both have to approve the buying of iron tablets by a woman. Beliefs held by communities about the treatment of anemia and effects of supplements that may influence their use as reported. They believed that Coca-Cola increases blood and bought more often than iron tablets despite its higher price. There was also fear among women that "too much blood" would be caused by taking iron tablets (Williams et al., 1996). Women in Indonesia expressed fear of iron tablets producing bigger babies (Moore et al. 1991). Honduran women were also worried about gaining too much weight and iron tablets causing deformities in babies. Because iron tablets distributed at low-cost, there was no status attached to their use and it was felt that they were not beneficial (JSI, 1997).

In Australia, almost 52 out of 100 indigenous mothers were 24 years or younger when they had their babies, compared with 18 out of 100 non-indigenous mothers. Almost 21 in 100 indigenous mothers were teenagers, compared with four in 100 non-indigenous mothers. The article noted that indigenous people generally experience more risk factors for ill-health than do other Australians (Australian Indigenous HealthInfoNet, 2008). In 2005, a baby born to indigenous women on average weighed 2170 grams less than those born to non-indigenous women (Laws, Abeywardana, et. al., 2007).

Indian women considered tiredness, weakness and dizziness as a part of a normal pregnancy and not symptoms of anemia and, thus, women do not seek treatment (Bentley et al. 1998). These studies suggest that culture can affect the way people perceive or respond to public health messages or interventions and can play an important role in their success or failure. Culture, therefore, does matter. One challenge is how to transform a cultural belief into a quantifiable variable and go beyond descriptive or ethnographic data.

Despite the advancement of modern medicine in Nepal, the role of traditional healers remains strong. In a study done in rural areas in Kathmandu, Jharphuke met his 20 patients 64 times and dhami his 10 patients 13 times. Breaking down the total fees on a visiting basis, They paid Dhami over three times as much as the jharphuke. And the dhami also received meat on three occasions (Ferdinand, 1976).

A study done in Jajarkot district of Nepal noted that the lower castes people who visited the health-post less often than members of the high castes. The traditional perception of Jajarkot people in illness is deeply rooted and embedded in their local culture and religion. Illnesses categorized into three categories:

(1) a natural cause (roga), (2) a supernatural cause (dokh), and according to (3) the severity of the illness. Each of the first two categories divided into three sub-categories. Within the class of rogas, the causes are explained by whether the illness is the result of (1) environmental conditions, i.e. hot or cold weather, (2) the consumption of food eaten, i.e. hot or cold food and (3) if the food eaten was ritually pure or polluted (Subba, 1999).

A study was done in a rural Nepal on health status categorized number of vaccination per child in each household, by ethnicity, socio-economic status, and village. Very few children had received any shots in the buttock, even in villages close to private or government clinics and no statistically significant differences emerged in any of the comparisons (McKay, 1999).

Women in Janakpur explained to the researcher that water becomes light or thin upon heating and light water is more readily digestible than ordinary water. Diarrhea causes the growth problems or thinness in children. Since digestive capacity is feeble; they prescribe 'light' water (Richard, 1988).

A study in *Gorkha* district described health seeking practice in which when a villager falls ill, he can consult any of a number of local healers. His first step presents his problem to family and friends in the hope that some simple advice and a few words of sympathy make him feel better. Alternatively, he may head for the teashops where he becomes convinced by the owner to buy a bottle of Ayurvedic medicine brought up from Kathmandu (Blustain, 1976).

Another study on illness and its links conducted in Dhunganagaun in *Nuwakot* district. The study finds metaphysical universe, any one of which related to illness. An astrological calculation on the person and the planets determines illness and fate. . So, the disease is misalignment between one's self and planets spell misfortune as *graha bigrayo* (Stone, 1976).

Level of education has played vital role in awareness. There were 91% clients with intermediate and above educational level were aware that abortion is now legal in Nepal. Awareness decreased as level of education decreased. Only about 25 percent of those with non schooling were aware of the legalization (FHD/CREHPA, 2006). According to National Planning Commission of Nepal, only half of the children aged 6-10 of *Tharu*, *Rajbanshi*, and *Bhojpuri* speaking and Muslim communities were found enrolled in schools (NPC, 2009). In *Makawanpur* birth outcomes in a poor rural population improved greatly through a low-cost, potentially sustainable and scalable, participatory intervention with women's groups (Manandhar, 2004).

Traditional family structures may influence the risk of depression among postnatal women in Nepal. Poor sleep, reported retrospectively, associated with depression independently of other risk factors. In 1997, suicide was the second largest cause of deaths (10%) among women in reproductive age in the Nepal, following mortality related to pregnancy and childbirth (20%). The highest rate was among women with two or three children (Pathak, et al., 1999). The depressive symptoms in the postnatal period were lower than previous reported from Nepal, but higher than earlier reported from Norway.

In Nepal, the prevalence rate of depressive symptoms (EPDS >12) was 4.9 % and the prevalence rate of mental distress (SRQ-20 >10) was 3.1 %. Multivariate analysis showed that postnatal depression was strongly associated with husband's alcoholism, polygamy and previous depression. Other significant factors were stressful life events, multiparity, smoking and depression during pregnancy (Dorheim, 2009).

The prevalence of postpartum depression (PPD) in Nepalese women is 12% and the validity and ease of use of the EPDS in the setting of a postnatal clinic in Kathmandu are all surprisingly similar to the results of many studies in developed countries (Regmi, et. al., 2002).

The naming and ritually cleansing *nwaran* performed between three and eleven days after birth. Sometimes it performed more than once (Costello, Anthony, 2000, Manandhar, 1999). The ceremony for a daughter is often earlier than for a son. The house cleaned or re-plastered with cow dung and mud. Cow's urine sprinkled around the house. Usually, a priest blesses the baby, gives a name and a birth certificate *chino*. The name is not spoken to others. Holy string tied around the baby's waist and wrist: If one do such things no-one will be greedy of the baby. Light is important so that the infant's future will be bright. The baby was shown to the sun. (Bennett, 1978). Usually, after this ceremony, the mother's domestic work begins and the no-touching rule disappears.

In Makwanpur district, rice feeding ceremony *pasni* done usually at five months for a daughter and six months for a son. Egg, fish and meat brought and rice cooked. The child fed with a coin or by hand and should taste a little of all the food that has been prepared. Relatives and those who were present at the birth invited and brought gifts (March, 1994).

Ethnographic studies have reviewed literature on obstetrics health issues among ethnic in Nepal.

Tharu: The Rana Tharus do not entertain the orthodox Hindu ideas about women who have been perceived as ritually unclean (Gurung, Kittelsen, 1996). They told that menstruating women are not prohibited from making food and that there is no avoidance of newborn children and their mothers. Tharu women do not experience the same set of rules and regulations related to their status as do caste Hindu women" (Kittelsen, Gurung, 1999). These authors question whether this difference will persist as more and more Tharus come under the influence of Hinduization.

*Magar*: Most information on birthing practices and ritual pollution among the Magar comes from the study (Hitchcock, 1966, 1980):

“Childbirth among *Magars* takes place in the small room off the main room, the furthest from the entrance door and the darkest place in the house. Occasionally a reputed woman for midwifery be called, especially when the birth is difficult within community. Usually, a woman asks a neighbor to help or her own daughter, if the girl is above 8. For 10 days the mother and baby stay inside the house out of the sunlight, for the sight of mother and child in a state of pollution is offensive to this holy luminary (the sun-god). They remain apart from the other members of the family. During this period, a daughter, husband or perhaps the mother's sister does the cooking. The new mother must not touch the water containers or any of the cooking utensils”.

A *Brahmin* comes to do the naming ceremony on the 11th day after the birth; he first purifies the house by sprinkling a little cow's urine inside and outside. The *nwaran* or naming ceremony removes the state of pollution in the house.

*Newars*: Amongst the rural Newars of the Kathmandu Valley, the placenta and umbilical cord of a newborn baby taken to be buried at a crossroads of two paths to the north-west of the settlement near a stone called *chvasa*. This is also the same place in which they bury the clothes of those who have just died. This site inhabited by divinities of an ambiguous nature that protect the villagers against the various evils coming from the outside, and especially from epidemics (Toffin, 1996). At *gathamugah* flaming torches representing malefic spirits is thrown out. Similar rites conducted at a small, unmarked, space at the opposite end of the village, to the south-east called the *kalka* where villagers leave the remains of funeral feasts. Family members may not take part in the important lineage (Manandhar, 2002a).

*Limbu* has a culture of *sappok chamen* during pregnancy in which worship is done to keep the fetus well inside the womb. Laoti (2005) has described in his book as in fourth or fifth month of pregnancy a worship of deity *wagamma* and *pakchanana* be done on the river. This completes after the worship of *Yuma* and *Theba* in the house. A *phedangma* Limbu priest gives guidance to the pregnant woman to avoid lifting weight, not to cross a river or hills. A *phedangma* also suggests about good and harmful foods. A husband of the pregnant woman prohibited to kill any kind of animal during the period of wife's pregnancy (Laoti, 2005).

There are flexible eating habits found among Rais and Limbus who are living in a grain deficit area but has low incidence of malnutrition. There are anomalies such as occasional scurvy despite a vast surplus of fruit. This is question of taste and consumption habits than taboo. Some Rais will not eat lentils with maize or millet porridge, but taboos like this can have little effect on nutrition standards (Wake, 1980).

First-time mothers have a more than twofold risk of needing mental health care during the first months after delivery as compared to a year later, and the increased risk of depression lasts the first five postnatal months (Munk-Olsen et al., 2006). Depression in the postnatal period contributes to several problems in the person, family, and society. In severe depression, especially with psychotic symptoms, there is a risk of suicide (Oates, 2003). In addition, a depression in the mother may affect the child's cognitive, emotional and social development (Moore et al., 2001; Murray et al., 1999; Sinclair and Murray, 1998; Weinberg and Tronick, 1998). Depressed mothers are also less likely to breastfeed (Abou-Saleh et al., 1998; Bick et al., 1998; Warner et al., 1996), and thoughts of harming infants are higher among depressed mothers (Cadzow et al., 1999; Wisner et al., 1999). Mental disorders like baby blues, postpartum depression, and postpartum psychosis are prevalent across the world. Depression after childbirth affects the health of both the mother and her infant. Women sleep less in the postnatal period, but there has been little attention to the altered sleep pattern in the postnatal period and its association with maternal depression.

The strongest predictors of postpartum depression are depression during pregnancy, anxiety during pregnancy, experiencing stressful life events during pregnancy or the early puerperium, low levels of social support and having an earlier history of depression. Moderate predictors were high levels of childcare stress, low self esteem, neuroticism and infant temperament. Small predictors were obstetrics and pregnancy complications, negative cognitive attributions, quality of relationship with partner, and socioeconomic status (Donna, Robertson, et al. 2003).

Postpartum blues and depression is a major public health problem (Wisner et al., 2006). Giving birth to a new baby and caring could act as psychosocial as well as biological stressors (Riecher-Rössler and Rohde, 2005). One of these biological stressors could well be sleep deprivation connected to infant care in the postnatal period, but very few studies have examined this (Lee, 1998; Ross et al., 2005).

Wundt (1916) considered Folk Psychology a new field of knowledge in which human actors occupy centre stage, affirming place of Vico and Herder. He pointed out that language, mythology, art, customs, and religions are products of collective human effort and "all phenomena with which mental sciences deal, indeed, creations of the social community". He defined Folk Psychology as "investigations concerns the relations which the intellectual, moral, and other mental characteristics of people sustain to one another, as well as to studies concerns influence of these characteristics upon the spirit of politics, art and literature". Moreover, Folk Psychology represents a cultural level of analysis that encompasses the individual consciousness:

In the analysis of the higher mental process, folk psychology is an indispensable supplement to the psychology of individual consciousness. Indeed, in the case of some questions, the latter already finds it obliged to fall back on the principles of folk psychology. Nevertheless, we do not have to forget folk community apart from people who enter reciprocal relations within it, so also does folk psychology, in turn, presuppose individual psychology, or, as it is usually called, general psychology. He former, however, is an important supplement to the latter, providing principles for interpretation of the most complicated processes of individual consciousness (Wundt, 1916).

Ethnography is a useful descriptive tool, but its results are method bound. In science, results need to verify by other researchers and different research methods. In cultural anthropology, an anthropologist rarely re-examines a finding of another anthropologist by replicating the study at the same field site with the same instrument and with the same population. The cross-cultural psychology and indigenous approaches are not mutually exclusive; rather, they are complementary approaches. The main difference lies in the starting point of research. Integration of these approaches is necessary if it is to discover true psychological universals (Berry, et al, 1988).

Culture, as a sphere of spiritual life of a society, is a product of development influenced by various economic, social and political structures. Culture is a common phenomenon for all humankind. It is incarnated in unique national forms. It cannot be considered as a total of features discriminating one nation from others. It is a system for reproduction of a spiritual world of an ethnicity that forms the basis of its existence. Culture supports continuity, successions of the development of what Humboldt called "the person form of human spirit, the nation." Every culture characterized by a unique set of concepts, images, a system of values and a specific type of perception of the world (Lomov, et al, 1993).

"Modern" and "Traditional" psychologies support the modern and traditional sectors in developing societies. In this context, the term modern psychology refers to the Western sciences of Psychology. The term traditional psychology refers to the systems of belief and understandings about a human that exist in 'Third World' societies, derived mainly from traditional and religions. Traditional and modern cultural systems are in a state of competition in third world societies in so far as forces attempting to extend or keep up the influence of each other. The third world has involved in the growth of a modern sector that is technologically and culturally different from the traditional sector. The cultural system dominating this

modern sector is primarily Western and imported. The social science generally, and psychology, in particular, serve to support this modern sector, through providing a conceptual framework for interpreting events and behavior that is compatible with the Western life-styles (Moghaddam, 1986).

Indigenous Psychologies is plural in form; one reason for this is that scientists conceive of indigenous psychologies and knowledge as being linked to group cultures or communication between each other. On the contrary, native psychology always appears in the singular form. May be scientists believe they are studying a universal rationality in their western world subjects. This ethnocentric rationality hypothesis joins the fundamental issue of variability/ rationality raised in anthropology. Without entering into the debate, suffice it to say that this issue is quite relevant to the scientific status of Indigenous Psychologies (Pepitone & Triandis, 1987). What is particularly interesting about this vision is that it leads to a pessimistic portrayal of the rational lay psychologist. In order to overcome the contradiction implied in this portrayal of the rational of the rational lay psychologist, one must call for a more social approach.

Farr and Mascovici (1984) illustrated the remark on attribution processes rely on a set of conceptions of human nature. The study of the mechanisms of attribution in isolation from the social contexts in which they normally run is a serious impoverishment of the subject of social psychology. The antidote to this impoverishment is to study social representation as they use in the social world outside the laboratory (Farr and Mascovici, 1984).

These findings give evidence that native psychologies are the product of a long and subtle process of reflection and manipulation of notions taken up from diverse areas of daily life, tradition, and science. These psychologies are directly affiliated with indigenous psychologies. One must treat them as such and find the means to compare these various common sense psychologies (Jodilet, 1993).



## 2.3 Social Construction Perspective

Constructionism is a model in psychology that characterizes learning as a process of actively constructing knowledge. Individuals create meaning for them or make sense of new information by selecting, organizing, and integrating information with other knowledge, often in the content of social interactions (Reese-Weber, et al., 2012). They mentioned how constructivism can occur. It occurs in two ways: person and social. Individual constructivism is when a person constructs knowledge through cognitive processes of their own experiences and not by memorizing facts provided by others. Social constructivism is when people construct knowledge through an interaction between the knowledge they bring to a situation and social or cultural exchanges within that content.

Social inquiry is in ongoing (re)construction in activities such as research, writing, teaching and consulting, and conference presentations. All social practices reproduce certain taken-for-granted about what exists; this is the question of ontology. So, such as, practitioners of the human sciences construct people (with personal characteristics such as motives, and cognitive maps), organizations (with structures, and a mission) and environments (complex, turbulent). Such constructions of existence go together with notions of what can be known of these things (epistemology), and how such knowledge might be produced (method) (Hosking, 1999).

Social constructionism was introduced in social sciences in sixties. The theory exists both in psychology and sociology. It is about theory of knowledge that considered how social phenomena or objects of consciousness develop in social contexts. Within constructionist thought, a social construction ( a social construct) is a concept or practice that is the construct (or artifact) of a particular group. Social constructs are generally understood to be the by-products of countless human choices and not laws resulting from divine will or nature. A major focus of social constructionism is to uncover the ways in which people and groups take part in the construction of their perceived social reality. It involves looking at the ways social phenomena are created, institutionalized, known, and made into tradition by humans. The social construction of reality is an ongoing, dynamic process that is (and must be) reproduced by people acting on their interpretations and their knowledge of it. Because social constructs as facets of reality and objects of knowledge are not "given" by nature, they must be maintained and re-affirmed to persist. Gender is socially constructed probably means that gender, as now understood, is not an inevitable result of biology, but highly contingent on social and historical processes. As Ian Hacking (1999) rightly observes, however, The Social Construction of What? Social construction talk is often applied not only to worldly items – things, kinds and facts – but to our beliefs about them. In our gender example, this means that while a legitimate biological basis for gender may exist, some of the society's perceptions of gender may be socially constructed. Harvard psychologist Pinker (2002) writes that "some categories really are social constructions: they exist only because people tacitly agree to act as if they exist. Examples include money, tenure, citizenship, decorations for bravery, and the presidency of the United States (Fish, 1996). In a similar vein baseball's "balls and strikes" are social constructions (Hacking, 1999). Clearly, the intent is not to insist on the obvious fact that certain women come to be refugees as a consequence of social events. Rather, the idea is to expose the way a particular belief has been shaped by social forces: the belief that there is a particular kind of person – the woman refugee – deserving of being singled out for special attention (Moussa, 1992).

Constructionism is a theoretical perspective with great potential usefulness for the study of religion. Constructionism can help us understand how historically and culturally contingent religious phenomena arise from the raw materials of our physical and social worlds (Engler, 2004).

There are two types of claims in social construction. The first amounts to the metaphysical claim that something is real but of our own creation; the second to the epistemic claim that the correct explanation for why someone has some particular belief has to do with the role that belief plays in our social lives, and not exclusively with the evidence adduced in its favor. Each type of claim is interesting in its own way (Boghossian, 2001). People show themselves to be locals, to be known by coordinating their actions in ways that (locally) are deemed and natural i.e., conventional. 'Local' has both social and historic aspects. For example, depending on the narratives referenced, standing around and watching others work may be supplemented as 'slacking off' or as research (Hosking, 1999).

Knowledge constructed through social interpretation and the intersubjectivity influences of language, family, and culture (Hoffman, 1990). The basic contention of social constructionism is that reality is socially constructed (Berger, 1967) that is, what they perceive as reality has been shaped through a system of social, cultural and interpersonal processes. Social constructionist has four assumptions.

- (1) The way to go about studying the world is determined by available concepts, categories, and methods. Our concepts often incline us toward or even dictate certain lines of inquiry while precluding others, making our results the products more of our language than of empirical discovery.
- (2) The concepts and categories they use vary considerably in their meanings and connotations over time and across cultures. Concepts are assumed to relate to permanent human experiences or functions.
- (3) The popularity or persistence of a particular concept, group, or method depends more on its usefulness (political usefulness particularity) than on its validity.
- (4) Descriptions and explanations of the world are themselves forms of social action and have consequences (Gergen, 1985).

Social construction theory explores an evolving set of meanings that are continuously created from people's interactions. The development of concepts is a social phenomenon, a fluid process that can only evolve within a cradle of communication (Hoffman, 1990). It is only through the interaction of the sociocultural processes with the intrapersonal self (ideas, beliefs, history) that the construction of knowledge is nurtured. This theory places an emphasis on the individual's active role in constructing reality, while being guided by her/his culture (Tiefer, 1987, 1995). Persons are constructors of knowledge in their lives assisted by the prevalent discourses in their societies and cultures, and their own life experiences.

The social definition of illness has an obvious effect on doctors. For example, not only must they treat the leprosy bacillus, they must also recognize and deal with the culture's belief about the disease. In India and Sri Lanka they must find hidden patients and convince those in treatment to return for more. In Hawaii and Louisiana doctors must care for and prove the continuous hospitalization of large proportion of Leprosy patients with inactive diseases who do not want to go home (Bloombaum, M. and Gugelyk, 1970).

The social and cultural context in which the disease exists must be seen as a part of disease process itself. The moral definition become established, it is often perpetuated for reasons having very little to do with the disease itself. In the case of Leprosy, even though effective treatment is available in the tropical countries where the disease is prevalent. These actions and beliefs, though not based on medical facts, are consistent with the normal community's definitions of disease and thus receive more sympathy from prospective donors. To continue their work, then, the organizations that "own" leprosy must sustain the stigma of leprosy. Instead, patients who voluntarily withdraw from society support another segment of patient population, those whom Gussow and Tracy call "carrier patients" (Gussow, Tracy, 1975). It is these career patients who take on a particularly "American" role, one that is undoubtedly respected by the public. They become professional educators, acting as representatives of all papers in trying to change the public view of the disease. They give talks at Rotary clubs, organize seminars, speak about leprosy on the radio, conduct tours of the leprosy hospitals, publish the Star. The content of their educational attempts is a new set of beliefs about leprosy, beliefs that are designed to replace the "old" ideas that justified stigma. The American society's fear of leprosy withered away as the public learns the "truth" about disease. No longer will leprosy feel wrongly labeled and no longer will they be stigmatized (Waxler, 1981).

Bourdieu (1984) has elaborated a theory of the role of cultural systems of distinction in social practices. For Bourdieu, the hobbies of an individual and his or her artistic taste, for instance, serve as an indication of cultural capital which can be exchanged, by means of various strategies, into economic capital and social status. Bourdieu's cultural class theory is trying to analyze the post-industrial society of the present day. Bourdieu (1980) said that people in a community act on a market, a structured space of positions in which the positions and their interrelations are determined by the distribution of kinds of capital. Bourdieu (1992) distinguishes not only economic capital (material wealth), cultural capital (knowledge, skills and other cultural acquisitions, i.e. educational or technical qualifications) and symbolic capital (i.e. accumulated prestige or honour. In his work he also focuses on linguistic capital, the capacity to produce expressions for a particular market. He considers symbolic power as invisible power which can be exercised only with the complicity of those who do not want to know that they are subject to it or even that they exercise it. Symbolic power is exercised on markets which enable actors to convert one form of capital into another.

In society, the dichotomous criterion of traditional Marxist class theory that is, the ownership of the means of production has become a very abstract phenomenon (Alasuutari, 1995). Talk of the social construction of belief, however, requires some elaboration of the core idea (Boghossian, 2001). The underlying assumptions on which social constructivism is typically seen to be based are reality, knowledge and learning (Kim, 2006). Social constructs are generally understood to be the by-products of countless human choices than laws resulting from divine will or nature (Burr, 1995).

Dollos and Draper (2000) noted social constructionism is not a theory as such but rather a meta-theoretical framework (ie a theory about theories), a social constructionist perspective allows trainees to use other theories in a pragmatic and flexible way than seeing the theories or formulations which flow from them as in some foundationalist sense 'true'. Thus Carrie has proposed that social constructionist therapists should take empirical research into effectiveness into account (Carrie, Callahan, 2000). But, since formulations of problems and exceptions to those problems are social constructions they should not be seen as 'truths'. The social construction theory of ADHD argues that attention-deficit hyperactivity

disorder is not necessarily a valid medical diagnosis, but rather a socially constructed explanation to describe behaviors that are not genuinely pathological, but rather simply do not meet prescribed social norms (Parens, Johnston 2009).

Researcher should not be bounded to a particular method. Results from multiple methods could be integrated to give more comprehensive and robust understanding of psychological phenomenon (Kim, Berry, 1993). The modern and traditional sectors of developing societies are supported by "modern" and "traditional" psychologies. Dualism refers to existence of two sectors, one modern and other traditional, that co-exist in the same society. In the case of Iran these differences were dramatic and probably played a major role in bringing about the social and political upheavals of the late 1970s (Moghaddam, 1986).

Van D. (1997) suggested that a consideration of different methods and approaches to discourse analysis can be worthwhile if it contributes to an improved understanding of the role of discourse in society. Overall the research aims to illustrate on a small-scale. "Too systematic, too mechanical, undermines the very basis of discourse analysis and induces the reification of concepts and objects that it seeks to avoid (Burman, Parker, 1993)." From a multi-disciplinary review of literature some specific research questions were developed to study the construction of 'older worker' identity. They related to exploring the versions of 'older worker' identity that were being discursively constructed, identifying those who were being targeted by these constructions, identifying the social actors involved in this discursive construction of 'older worker' identity and exploring the reasons for their involvement, and examining the implications of such constructions of identity (Du Gay, 1996).

From a constructionist perspective, traditional empirical research is most effectively deployed in illustrating interesting or challenging ideas, and tracing patterns of conduct of major significance to the society. In the case of bringing challenging ideas to life, the classic work of Asch on social conformity (Asch, 1952), and Milgram on obedience are illustrative (Milgram, 1974). These scholars dramatically succeeded in bringing provocative ideas about human interaction to life, thus generating debate and dialogue. Both researchers raise fundamental questions about the power of social influence, and the needs and problems of both belonging to social groups and remaining independent of them.

Constructionism places no particular constraints or demands on the scholar in terms of preferred visions of the future. However, there has been perhaps an inevitable tendency among constructionist scholars to develop theories and practices that favor communalism over individualism, interdependence over independence, participatory over hierarchical decision making, and societal integration as opposed to traditionalist segmentation. Such learnings are almost derivative of the constructionist view of knowledge as socially constructed (Gergen, 1996).

## **2.4 Public Health Perspective**

Winslow (1920) has defined Public health as "the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals." It deals with threats to health based on population health analysis.

Maternal and child health is a dynamic field to improve the health of women, children, youth, and entire families and communities. Family health is contributed by addressing health inequities and the systems and policies. Women's health covers the lifespan; sexual and reproductive health and justice; the perinatal period and birth outcomes; inter-conception care; child health, including mental health. The maternal and child health uses a life course perspective to address these issues, combining an understanding of human development and the social determinants of health as they accumulate and interact across the lifespan and across generations.

In 1991, Nepal's government introduced a National Health Policy. Its core objective was to upgrade the health standards of the majority of the rural population by extending basic primary health services and making modern medical facilities available at the village level. It called for prioritising preventive, promotive and curative health services to reduce infant and child mortality. The National Health Policy of Nepal 1991 (FY 2048 BS) was adopted to bring about improvement in the health conditions of the people so that they benefit from modern medical facilities and trained health care providers. Basic Primary Health Services has been provided through Sub Health Posts and health Post in all Village Development Committees (VDC). One Primary Health Care Centre in each electoral constituency have been established. Target groups for health care are mother and child since country has high maternal and child mortality.

The Second Long Term Health Plan of Nepal, SLHP (1997-2017) has a perspective plan for health sector development in the country. The perspective plan has aimed to result in the improved health status of the population particularly the most vulnerable groups, women and children, the rural population, the poor and the underprivileged and the marginalized whose health needs often are not meet (MoHP, 1997-2017).

The Interim Constitution of Nepal 2063 has guaranteed every Nepalese citizen's right to free basic health services as provisioned in the law and the right to demand or get information on any subject of their own or public concern as fundamental rights. For this purpose, the Ministry of Health and Population has worked continuously to further improve health status of public by increasing access to and use of health services, by reducing barriers to reach of health service and by strengthening health system. National Health Policy 2071 has stressed on universal health coverage. It has also covered areas like mental health, elderly health and non-communicable diseases according to need of the country.

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including mental health. The maternal and child health uses a life course perspective to address these issues, combining an understanding of human development and the social determinants of health as they accumulate and interact across the lifespan and across generations.

## **Undernutrition**

Child malnutrition is an important indicator for monitoring population nutritional status and health (OECD/WHO, 2012). In 2013, about 17%, or 98 million children under five years of age in developing countries were underweight. Underweight prevalence is highest in the UN region of Southern Asia 30%, followed by Western Africa 21% (UNICEF, 2013). When a person has hunger for a sustained period can develop malnutrition, mild to severe depending on their body needs and food intake. Malnutrition is defined as any disorder of nutrition resulted from an unbalanced, insufficient or excessive diet or from impaired absorption, assimilation or use of foods. Undernutrition in young children can cause underweight, stunted in height, hindered in developmental capacities. UNICEF mentioned the underlying causes of malnutrition are: household food insecurity, inadequate care, unhealthy household environment and lack of health services.

Poor nutrition, leading to either underweight or overweight, is closely associated with ill health. More than one-third of all deaths worldwide are due to ten main risk factors, and seven of these are related to nutrition (WHO, 2002). Based on the WHO classification, adults with a BMI below 18.5 are considered to be underweight, and 25 or over are overweight. Adults whose BMI is 30 or over are defined as obese. This classification, however, may not be suitable for all Asian populations, some of whom may have equal levels of health risk at lower or higher BMI (WHO, 2004).

However, Body Mass Index (BMI) is a simple index of weight-for-height that is commonly used to classify underweight, overweight and obesity. It is defined as the weight in kilograms divided by the square of the height in metres ( $\text{kg/m}^2$ ). For example, an adult who weighs 70kg and whose height is 1.75m will have a BMI of 22.9.

Low birth weight - Less than 2,500 grams.

Under weight - Moderate and severe - below minus two standard deviations from median weight for age of reference population; severe - below minus three standard deviations from median weight for age of reference population.

Wasting - Moderate and severe - below minus two standard deviations from median weight for height of reference population.

Stunting - Moderate and severe - below minus two standard deviations from median height for age of reference population.

## Anaemia

The name is derived from Ancient Greek "anaimia" meaning "lack of blood" derived from "an" means "not" and "haima" means "blood" (Dictionary, 2014). Anaemia is a condition in which the number of red blood cells or their oxygen-carrying capacity is insufficient to meet physiologic needs, which vary by age, sex, altitude, smoking, and pregnancy status. Iron deficiency is thought to be the most common cause of anaemia globally, although other conditions, such as folate, vitamin B12 and vitamin A deficiencies, chronic inflammation, parasitic infections, and inherited disorders can all cause anaemia. In its severe form, it is associated with fatigue, weakness, dizziness and drowsiness. Pregnant women and children are particularly vulnerable.

Anemia is the most common disorder of the blood with it affecting about a quarter of people globally. Iron-deficiency anemia affects nearly 1 billion (Vos, 2012). It is more common in females than males (Vos, 2012) and among children, during pregnancy and in the elderly (Janz, 2013). [4] Anemia increases costs of medical care and lowers a person's productivity through a decreased ability to work (Smith, 2010).

Medical perspective describes the pathology of major diseases and promotes prevention, diagnosis and treatment of diseases. The biomedical model of medicine has been around since the mid-nineteenth century as the main model used by physicians in diagnosing diseases. It is considered to be the leading modern way for health care professionals to diagnose and treatment. According to the biomedical model, health is the freedom from disease, pain, or defect, thus making the normal human condition "healthy". However Annandale (1998) described that biomedical model focus on the physical processes, such as the pathology, the biochemistry and the physiology of a disease and it is lacking to take into account the role of social factors or person subjectivity.

The relationship between smoking and personality characteristics were carried out according to the theoretical model (Eysenck, 1967). According to this model, there are three main dimensions of character or personality related to smoking: extroversion, neuroticism, and psychoticism. It has been hypothesized that there is a relationship between extroversion and smoking. The extroversion dimension comprises factors such as sociability, assertiveness, positive emotions, vivacity, and activity level (Gilbert, 1997). Similarly, traces of neuroticism can make the smoker sensitive to the properties of nicotine. People who get high scores on personality tests that rate this dimension possibly receive greater reinforcement in stressful situations, due to the stress-reducing effects provided by the cigarette. The neuroticism dimension form subdimensions of personality, such as anxiety, depression, psychological vulnerability, hostility, and anger, and is related to depression and anxiety disorders. The neurotic person presents high frequency and intensity of negative affection, resulting from an inefficient self-regulating mechanism for affection and modulation of excitation and, therefore, uses the cigarette to ease internal homeostasis. According to this Epidemiological Catchment Area study showed a 6.6% rate of depression in smokers and a 2.9% rate in a nonsmoker. Seventy-six percent of depressed

respondents said they had smoked at some point in their lives, compared with 52% of nondepressed respondents. Depression that affects one partner has an effect on the other partner, the relationship and ultimately the entire family. Mental health counselors like Sherman say depression often leads couples to seek counseling, fearful the depression will lead to divorce (kathleen, n.d.).

Partner alcohol problems pose diverse health threats for women. women whose partners had alcohol problems were more likely to experience victimization, injury, mood disorders, anxiety disorders, and being in fair or poor health than women whose partners did not have alcohol problems (odds ratio [OR]: 1.7-4.5). They also experienced more life stressors and had lower mental/psychological quality-of-life scores (Deborah, 2007).



# CHAPTER 3: METHODOLOGY

The study is a descriptive and cross sectional study that explores traditional and modern care seeking practices and impacts in Rajbanshi. Both qualitative and quantitative methods used and information collected in the study. Determinants of traditional and modern care practices which were predisposing (age, sex), enabling (occupation, marital status, education, income, culture, services, practices, habits) and resulting state and impacts on mother's and child's healths studied and described in the study to meet the goals of the study. The three theoretical frameworks Ethnographic/Indigenous Psychological perspective, Social Construction theories and Public Health perspectives have guided the study.

## 3.1 Study Areas

*Jhapa*: It is the easternmost district of Nepal and lies in the fertile Terai plains. It borders Ilam district in the north, Morang district in the west, the Indian state of Bihar in the south and east, and the Indian state of West Bengal in the east. The district is divided into 47 VDCs and is three municipalities, namely Bhadrapur in the south, Mechinagar in the east and Damak in the west with total population 812,650 as of Census 2011. Jhapa is home to many indigenous ethnic nationalities such as *Rajbanshi*, *Satar*, *Meche*, *Koche*, *Limbu*, *Dhimal*, and *Gangain*. Other ethnic groups such as *Rai*, *Jhangad*, *Tamang*, *Uraon*, *Magar*, *Gurung* and many others came to *Jhapa* in the late 19th century, so did the hill/mountain castes *Bahun*, *Chhettri* and *Newar*. *Jhapa* is diverse and rich in culture and traditions due to the influences of its different ethnic groups. All the ethnic groups/ethnic groups have their own languages, customs and traditions, and they celebrate their festivals every year.

*Morang*: It is situated on the southern Tarai, or plains, of Eastern Nepal. The district neighbours India to the south and the districts of Sunsari to the west and north, Jhapa to the east, and Dhankuta to the north east. Morang District, a part of Koshi Zone, is one of the seventy-five districts of Nepal having population of 965,370 according to census 2011 (CBS, 2011). Biratnagar is district headquarter. Morang is a mixed bag of different cultures and religions. It has a long history of its originality. The name Morang is derived from the name of the Limbu King *Mawrong Mung Hang*, who established the Morang Kingdom in the beginning of the seventh century. His capital and fort were at *Rongli*, present day Rangeli. The name Morang came into use again after the Shah Kings divided the country into administrative districts and Morang named after the old *Morang* Kingdom.

Most of the district is rural, though Biratnagar an urban city also boasts largest industrial area in the country, expanding from Rani Mills Area to Duhabi River. Raghupati Jute Mills and Dhanawat Matches are among the nation's oldest industries. Other minor towns include Urlabari, Biratchowk and Rangeli. The recent opening of *Purvanchal University* in Biratnagar, which offers graduate level courses in many disciplines of Arts and Sciences, is certain to make the place a college town as it attracts college graduates from most of the eastern part of the nation.

*Sunsari*: The district neighbours India to the south and the districts of Saptari to the west and Morang and Jhapa to the east, and Dhankuta to the north. It covers an area of 1,257 km<sup>2</sup> and has a population of

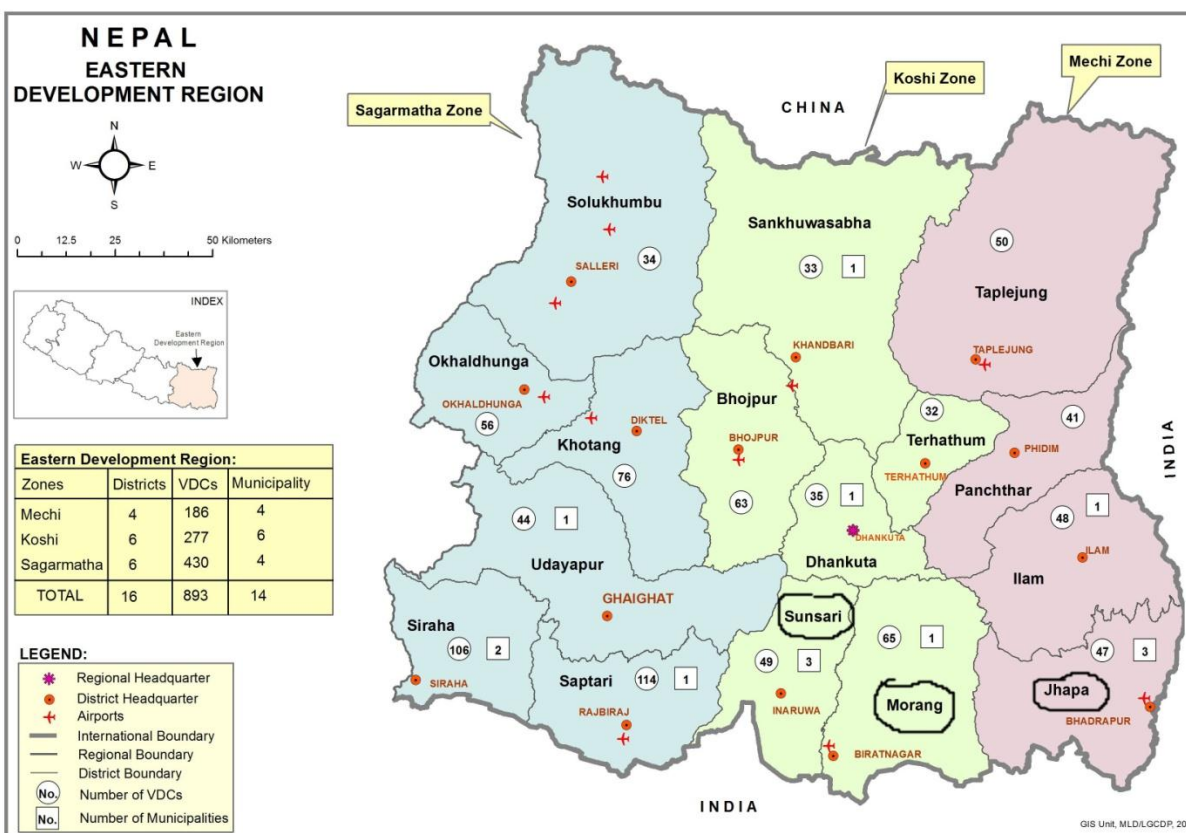
763,487 as of the 2011 census (CBS, 2011). The area was originally part of Morang but became its own district in 1962 when Nepal divided into 14 zones and 75 districts. Major cities in Sunsari district are Dharan, Itahari and Inarwa. The head quarter of the district is Inarwa bazar.

Table 3 Population distribution of Rajbanshi

Population of Rajbanshi Mother Tongue			
District	Total	Rajbanshi	Percent
Jhapa	812,650	83,303	10.25
Morang	965,370	36,435	3.77
Sunsari	763,487	1,286	0.17
Total	2,541,507	121,024	4.76

CBS, 2011

Figure 2 Showing Rajbanshi districts in Nepal



According to census 2011 people with *Rajbanshi* mother tongue living in Jhapa was 83,303, in Morang 36,435 and in Sunsari 1,286. The proportion of *Rajbanshi* is 4.76% in three districts and it is 0.46% in the country (CBS, 2011). In Nepal there are 59 indigenous communities dwell in the country. *Rajbanshi* is one of the indigenous people of their habitat terai region. People speaking the *Rajbanshi* language was 85,559 in census held in 1991, which increased to 1, 29,829 in 2001's census. And according to census 2011 the number is 121,024 whose mother tongue is Rajbanshi. *Rajbanshis* are found to have settled in most of the villages in Jhapa and Morang.

### 3.2 Research Design

This is basically a cross-sectional and descriptive study which explores both qualitative and quantitative data of Rajbanshi in Nepal. The difference between survey data and qualitative data is similar: survey data consist of measurements that have to do with the phenomenon, whereas qualitative materials consist of specimens; they are a piece of the world being studied. In the case of qualitative research, it is particularly important to set the phenomenon concerned in a broader context (Alasuutari, P., 1995). Therefore, the research design has made up of able with prpper methods and tools to collect both qualitative and quantitative data.

**Methods:** (1) Quantitative Method (2) Qualitative Method.

1. Household Survey: general information is taken from the head of household and detailed questionnaire filled with mother's interview.
2. Focus Group Discussion: with mothers
3. Case study: of representative cases of anaemia, malnutrition, postpartum depression.
4. In-depth interview: with traditional healers, TBAs, health workers, and clients.
5. Observation: of housing and traditional practices
6. Physical Examination : Body weight and height of baby measurement for nutritional status and eyes, nail or palm examined for clinical anaemia among mother and children.

#### Tools

1. Questionnaire (Semi-structured)
2. Guidelines for FGD, in-depth interview and case study
3. Check list for Observations
4. Edinberg Postnatal Depression Scale (EPDS)
5. Weighing machine and measuring tape.

#### Sample size

Probability sampling method was used to determine the number of household survey. A survey (NDHS, 2006) showed proportion of home delivery in Eastern Terai of Nepal was 81%. So, Probability of home delivery being selected  $p = 81$ , and not being selected  $q = 19$ .

According to formula, required Sample size  $(n) = 4pq / L^2$

Probability of being selected in sample is (95%) so,  $L = 5\%$  of  $p = 81 \times 5/100 = 4.05$

$n = 4pq / L^2 = 4 \times 81 \times 19 / 4.05^2 = 6156 / 16.4 = 375$ . So, sampling size was 375 households, sample of children is 724 and total sample size in the study was 1514.

## Informants

Table 4 Informants of the Study

Households (head of the family)	375
Traditional healer (TH, TBAs)	20
Modern health care providers	10
Mothers	375
Patients/ cases	10
Physical Examination of under 5 children	724
Total	1514

## Techniques

Clusters took by purposive sampling method to ensure both traditional and modern practices, rural and urban. Another reason for purposive sampling is to choose a household where a mother with under five child present. Then a roster made by naming heads of households where a mother with at least under five years children would present and randomly selected to visit so. Apart from this 3 FGDs done with 30 mothers in three districts. There were ten in-depth interviews with traditional healers, 10 case studies, in-depth interviews with 10 TBAs, and 10 health workers done in the study. In this study, height and weight of under five children measured to assess nutritional status. Anaemia of both mother (375) and children (724) also examined during household visits.

Edinburg Postnatal Depression Scale (EPDS) tool used to conduct interviews with mothers. Mothers with scale scoring more than 13 screened of possible PPD in the field. Tools filled by history taking with mothers. The researcher is public health professional and paramedics having mental health training. A psychiatrist and medical officers took as consultants in the study.

## Data collection procedures and data analysis

Quantitative data collected from the study areas entered into the computer for processing where SPSS-20 software used for data analysis. After analysis findings are presented in text, tables and graphs.

### **3.3 Ethical issues for the research**

Researcher took verbal consent from respondents (lactating mothers) and head of the family. During interview respondent ensured about information would be kept confidential. Before starting an interview it was also ensured that findings publish only as a collective finding. Study findings will be used only for the benefit of *Rajbanshi* community.

Researcher took approval of research proposal for the study from Research Committee of Tribhuvan University Institute of Humanities and Social Sciences.

Researcher also notified and took verbal permission taken from DDCs, DPHOs and Rajbanshi related organizations in Morang, Jhapa and Sunsari for the study.

# CHAPTER 4: RESULTS AND FINDINGS

## 4.1 Demographic Characteristics of Households

Demographic characteristics of Rajbanshi households taken into account and compared the maternal and child health on the basis of the number of children, education, economic condition, occupation, urban-rural settings, and habits.

Table 5 Characteristics of Head of Households

	Variable	Frequency	Range	Mean	SD
Sex	Male	367	55	34.70	10.39
	Female	8	40	42.25	15.90
	Number of children	724	2	1.09	0.29
	Family size	375	5	4.14	0.99

Source: Field Survey, 2010

N = 375

Table 5 shows that demographic characteristics of the head of households like age, sex, number of children and size of the family. Out of 375 households, 367 head of households (87%) were male and 8 head of households (2.31%) were female. The proportion of 31-35 years age group was 30.13%, 26-30 age group 26.13%, 36-40 age groups 21.33%. The table also indicates the mean age of the head of the household in male was 34.70 years and mean age of head of households in female was 42.25 years. Therefore, the mean age of male head of households was higher than the female head of household. The range of age of head of household is 55 years in male and it 40 in the female. The average size of the family was 4.14 people and an average number of living children was 1.09 in the family.

Table 6 Demographic features of the respondents (Head of Households)

Variables		Frequency	Percent
Education	Illiterate	70	18.67%
	Nonschool Literate	107	28.53%
	Class 1-10	111	29.60%
	SLC/IA	66	17.60%
	BA and above	21	5.6%
	Total	375	100%
Occupation	Agriculture	62	16.53%
	Service	56	14.93%
	Labour	221	58.93%
	Business	33	8.80%
	Other	3	0.80%
	Total	375	100%
	Very Poor	144	38.40%
Economic	Poor	109	29.07%
	Rich	122	32.53%
	Total	375	100%

Source: Field Survey, 2010

N = 375

Table 6 shows the educational, occupational and economic status of head of households. For the study purpose educational level classified into different levels into illiterate, no schooling literate, Class 1-10, SLC/IA, BA and above. Out of 375 head of households proportion of Illiterate was 18.67%, non-schooling literate was 28.53%, Class 1-10 class was 29.60%, SLC-IA was 17.60%, BA and above was 5.6%. A significant proportion was fall under SLC/IA and below. Sociolinguistic Survey done in 2001 has identified that Rajbanshi use was reportedly often combined with Nepali, Hindi or Bengali use in the market, for singing songs and with village leaders. Respondents stated that they prefer their mother tongue to Nepali. Only a small percentage (around 10%) of the community would likely be able to work at a deeper level in the national language, Nepali (Epple, 2001). According to Rajbanshi (2006) people now have easier access to the outside world. They have more opportunities to listen and to learn Nepali from the media. But their Nepali is much weaker than the mother tongue among illiterate (Rajbanshi, 2006).

The table also shows occupation of the respondents. Out of 375 head of the households labour was 58.9%, 16.53% agriculture, 14.93% services, 8.80% business and other 0.80% in proportion. The table also shows the economic condition of respondents. In the study economic condition of sample population classified into three categories: (1) Very poor: who has food enough for less than 6 months, (2) Poor: who has enough food for 6 months or more to less than 1 year and (3) Rich: who has enough food for more



than one year. The criteria based on the guidelines set by Government of Nepal, Ministry of Health and Population, Department of Health Services for the purpose of providing primary health care services to the people through programmes in health institutions. In the study among 375 sample households, 38.40% was very poor, 29.07% was poor and 32.53% was rich.

Table 7 Age and education of Respondents (Mothers)

Variables	Mother	Frequency	Percent
Age	17-20	46	12.27%
	21-25	89	23.73%
	26-30	169	45.07%
	31-35	59	15.73%
	36-40	12	3.20%
	Total (Mean= 25.99, Range= 21, SD=10.57)	375	100.00%
Delivery	Under 20 Years	46	12.27%
Education	Illiterate	130	34.67%
	Non schooling Literate	74	19.73%
	Class 1-10	93	24.80%
	SLC/IA	76	20.27%
	BA & +	2	0.53%
	Total	375	100%

Source: Field Survey, 2010

Table 7 shows the demographic characteristics of respondents (mothers) in the study. Out of 375 mothers, 12.27% was recorded from 17-20 yrs age group, 23.73% was from 21-25 yrs of age group, 45.1% was from 26-30 yrs age group, 15.73% was from 31-35 yrs age group, and 3.2% was 36-40 yrs of age group. Under 20 years of age, delivery rate was 12.27% in the study population. The table also shows the educational level of mothers. There was 34.67% illiterate, 19.73% non-schooling literate, and 24.80% up to grade class 1-10, SLC/IA mothers 20.27% and 0.53% BA and above in the study. Illiterate mothers were found more than one-third (34.67%) in proportion.

## 4.2 Traditional and Modern Practices

### Traditional practices

Traditional healers are *guru gosai*, *gosai*, and *dhami* or *Ojha*. They are keys of traditional health care practices. *Guru Gosai* is senior to *gosai* and *dhami* or *Ojha*. *Guru Gosai* performs all rituals from birth to death. *Gosai* or *dhami* or *Ojha* do only health care practices. Each traditional healers has a certain catchment area that covers around 20-25 households.

Traditional healers have traditional knowledge and guided by traditional indigenous knowledge and psychology. They are treating almost all kind of diseases like fever, pain, backache, asthma, jaundice, minor mental health problems to even serious mental health disorder schizophrenia. Traditional perspective and terminology describes disease and conditions as *vasota* (bhut lagne), *chhutiapari* (bhut during delivery), *gahili* (pain, tingling sensation on arms and legs), jaundice, high blood pressure, diabetes, deformity of arms and legs, *garva fulla* eclampsia during pregnancy, *aali badhnu* to prevent still birth, *fulli katnu* in eye problems treated by traditional healers. They treat the menstrual problem and fertility disorders. They used to give *buti* to wear to have a safe delivery. Mother who has ever lost baby usually goes to *gosai* to take a buti to have a safe delivery.

A traditional healer said that women with sterility usually come for treatment to get pregnant. *Gosai* considered diarrhea, vomiting, abdominal pain is major health problem in children. *Pithaya* is a mother who has history of death of baby or stillbirth. So a protective measure for a pregnant woman *aali barne* done to avoid still birth. A delivered woman called *chhuwati* consults *gosai* to protect her child from bad effects of dead child's. They treat it with traditional system and if not get well soon be referred to a doctor for modern care. Traditional healers are also treating mental health problems as well as geriatric problems of senior citizens.

Traditional healers do believe in fate of the clients. Client who has good fortune then treatment will work and s/he get well, similarly if someone has bad fortune treatment does not work and s/he would not be recovered.

A traditional healer described traditional treatment procedure as follows:

"I treat my patients by *jharphuk* and *phukphak* by chanting mantras. Usually I give her or him buti to wear over neck or upper arm. Sometime I give *jadibuti* to take. I make *buti* from plants leaves, stem and roots and other materials. I put and cover these medicines into nail sized small copper box and jammed with wax. I give them to wear on the day of *Purnima* full moon or new moon day *aushi*. While doing a *jharphuk* I do *ferani* or *bhakal* by promising the deity to offer of pigeon, guava, milk, sindoor, rice, sweets or goods after getting well for patient. After recovery I again worship the deities with what was promised before. Deities are *dashguru thakur*, *hanuman thakur*, *mata*, *bramahini*. People of other castes are not allowed to go to than or temple of these Rajbanshi deity. When a woman or a child becomes ill, I read mantras 5 times. If not recovered I read another one time more. Mantra starts with the name of deity. When I read the Mantra it makes deity to run away from his or her body. If patient is serious, I look at *jokhana* to find out cause of illness. I take water into a small bronze pot and put holy basil *tulasi* leaf where movement of leaf indicates the cause of illness in patient. According to *Jokhana* I pray deity with respective Mantra and offer with *ferani* as well. I sacrifice pigeon for deity

*brahmahini*, rice pudding for deity *mata*, and duck for deity *gaheli*. People give me as per their will. There is no fixed rate of my service charge. Some give me cloths; pant, shirt, muffler and some give me money ranging from Rs. 50 to 200." (TH1)

### Traditional belief in cause of illnesses

According to Rajbanshi culture, the cause of disease in the mother is usually by *ghar deota* such as *thakur brahmami* and *kalhi*. She becomes angry if someone fails to worship properly or someone fails to keep up the cleanliness of houses. If traditional diagnostic procedure *jokhana* tells that *ghar deota* is angry then treatment done by worship. Another traditional healer share following causes of illness as:

"The main reason of illness in mother and child is the anger of *ghar deota*: *sadguru Thakur*, *hanuman Thakur*, *mata*, *brahmahini*. Another reason of illness is touching children by such woman who has lost baby already. *Pithiya* is a mother who has a history of the death of baby or stillbirth. When *pithiya* touches a healthy child it can cause malnutrition and other illnesses in children. Women suffered from still birth when to get pregnant need treatment called *aali badhne* for safe delivery. I used to give her *buti* to wear over the neck or upper arm on full moon day *purnima* or on new moon day *aushi*." (TH2)

"There are *Thakur bramhani* in every *Rajbanshi* household. One should worship her in every *Mangsir* and *Ashar* months. First, of *Baishak* is also a holy occasion to worship *Thakur brahmami*, *kalhi*, and *ghar deota*. If someone fails to worship *Thakur brahmami* then she gets angry and she can cause any disease in the family members. " (TH3)

*Rajbanshi* culture believes various causes of disease or illness. Deities called *cheta*, *Thakur*, *satguri*, *neman*, *akharia*, *barmahini* called *kuldeota* are major cause disease or illness. If one forgets to worship routinely the child gets sick. Second, *pithiya/chhatka* cause the disease or illness when touch children. Third, witchcraft *bokshi* or who use *tantra/manta* is also one of the causes. Fourth, evil spirit or dead children are also the cause of sickness. Some traditional healers said that carelessness, dirty water and poor sanitation are causes of diseases.

### Traditional Treatment Practices

Traditional health care in *Rajbanshi* culture comprises of treatment package. When a sick person comes with any complaints then *jokhana* diagnose the cause. The treatment depends on the *jokhana*. Basically, traditional treatment done by (1) chanting mantra (2) giving herbal *jadibuti* to consume, (3) wearing *buti* over neck or upper arms,

(4) Promising *ferani* or *bhakal* and (5) sacrifice of animals and different types of goods. They use single or multiple methods according to disease and severity.

It is interesting how traditional healers make the *jadibuti* for the treatment. They use local medicinal plants called *patalshree*, *gwagashree*, *kalijhar*, thin grass white blades *seto dubo* etc. to make the *jadibuti*. They also use *jadi* oil, *jhapuwa*, and the root of *nigro* like grass, the root of plants grown where the dead bull had disposed before 12 years or more and some insects are also used in preparing *jadibuti*. They also

use plants locally called *sarpako phal*. Usually, *Gosai* or *guru gosai* do treat patients with herbal and organic combined *jadibuti*. Normally a traditional healer conducted treatment by enchanting mantra with or without *jadibuti* called *jharphuk*. According to Das (2013) a total of 73 medicinal plants belonging to 44 families of angiosperms used in the healing practice of 36 types of diseases including diabetes, heart problem and neurological disorders by Koch Rajbanshi people of North Salmara Subdivision of Bongaigaon district, Assam.

*Gosai* or *guru gosai* used to chant mantra during treatment. Chanting of mantra may vary according to what their *guru* had taught to do. Most of the traditional healer *gosai* or *guru gosai* are aware of the patient. If the patient is like in serious condition or has bleeding, they do their traditional process briefly and refer to hospitals. Traditional healers are cautious when they give their *jadibuti* to take. They choose the day of full moon day *purnima* or new moon day *aunshi* to give *jadibuti*. Treatment for a woman during irregular menstruation, infertility and even during pregnancy by traditional healer is very popular. A traditional healer said that woman during pregnancy may get worm into her stomach called *kala-juga* also treated by taking herbal combination *jadibuti*. Traditional healers also give counseling to pregnant women during her pregnancy to take rest, to avoid heavy workload, not to sleep on the day and to take nutritious food.

Witchcraft or *vasota* is also common in *Rajbanshi* that is treated by enchanting mantra by *Gosai* is called *jharphuk*. A woman who lost baby *chhutiapari* is considered culturally unclean will be treated by the sacrifice of pigeon and chanting of mantras that is called *ferani*. Jaundice is treated by combination herbal *jadibuti*, deformity of arms and legs is treated by giving *jadibuti* and massage over affected parts with *mantra* treated mustard oil. *Jadibuti* given for *aali badhne* is made up of Banana plant *kurkuria*, thread, pigeon, white cloths, sewing niddle, sacred basil *tulasi* leaf, betel leaf, and nut. Eye problem *fulli katda* is treated by spirkling of *mantra* treated water over eyes with holy basil *tulasi* leaf from the pot. They also use *neem* leaf, the skin of mango plant, different grasses in preparing of *jadibuti*.

Traditional healers said:

"When a patient comes with health problems I look *jokhana* at first and I will do *jharphuk* once and then refer to the hospitals." (TH3)

"I pay attention to who had still birth before or who have already lost baby. I give *jadibuti* on *ausi* or *purne*." (TH4)

"In making a *jadibuti* I use plant *rakta gaheli*, sacred basil *tulasi* leaf, *neem* leaf, *ulta chirchiri*, *kesaliya*, Indian Gentian *chirayato*, lajawati grass *lajani*, a grass called *bhootaka*, *birna* grass planted and found over burial, datura stramonium *dhatu* leaf, skin of mango plant etc." (TH5)

### Changes in Care of Pregnant Women

There is still traditional care done for a woman during pregnancy. Family provides pregnant and lactating mother nutritious foods. It is believed that a pregnant woman should take extra food than usual for her ingrowing foetus. *Rajbanshi* mothers were found aware of also taking TT vaccine, and iron tablets during pregnancy. However taboos are also abundant there. Culturally a pregnant woman prohibited to go

outside from house in crowd places or haat bazar, to cross bridge, to see bad things, and not to lift heavy things or to do any heavy works. Due to increased awareness on health, government's health program intervention on safe motherhood, social interaction and socio-economic development, *Rajbanshi* adopted their health care practice to go modern health care like private clinics or hospitals even after consultation of *gosai* or *guru gosai*.

### **Practice of Traditional Healers**

Traditional healers have realized their limitation in the treatment, so they refer to the doctor or health institution. All traditional healers said they try when patient is not so serious. If condition of the patient becomes worse or patient comes with emergency condition then they refer hospitals immediately after just one *jharphuk*. Traditional healers are also aware of modern health care services available in the community. Some of the traditional healers have got trainings from health posts. So, they treat cases but hold only for 1-2 days and if remarkable progress is not resulted, they refer to clinic or hospital.

A traditional healer explained about the referral system.

"I treat my patient by *jharphuk* then wait and see for 1-2 days. If it does not work well then I refer the case to doctor or hospital." (TH8)

### **Traditional Preparation for delivery**

In *Rajbanshi* language, a pregnant woman is called *dorjuwa*. Traditional Birth Attendant (TBA) is called *sudeni* or *dhai aamaa* and she looks after a woman during pregnancy and delivery. Pregnant woman prohibited to go to any temple, to go to another's house, a place where death ritual performed are taboos. In *Rajbanshi* culture first baby birth must take place in natal house *maita ghar*. After first baby delivery, she does not need to go natal house for more delivery. Mothers are practicing both traditional and modern system. Most of mothers, are following modern cares during pregnancy and for that, they start to collect money for coming delivery. Some mothers managed to stay nearby the hospitals for emergency care. Many pregnant women make clothes for newborn from her old *dhoti* or other clothes.

### **Roles of family members**

By culture, *Rajbanshi* believes that pregnancy and deliveries are special states during which support and care needed. All women said that their family members are supportive during pregnancy and delivery. Husband used to love more and helped for cooking food, washing clothes, bringing nutritious foods from bazaar during pregnancy. And they also take care of new-born. Mother in law also extended hands in the cleaning of the house, treating delivered mother by a body massage. Mother in law also showed love and affection to both mother and the newborn. Neighbours also came to see and became a part birth ritual during and after delivery. Neighbours involved during and after delivery in the ritual of the naming of the baby and they also provided necessary help.

## **Decision making**

Decision making is crucial point time. The family decides for selecting traditional or modern care, choosing the right place of health institution and service provider and means of transportation. Sometimes the delay in decision-making and delay in transportation may cause an adverse effect on delivery. Usually, husband, mother in law, father in law and mother herself take decision for delivery. However, the decision largely determines what the result will be.

## **Traditional procedure of delivery**

TBA traditionally manages home delivery. She conducts only normal deliveries. If labour gets prolonged she refers to the hospital. TBA also suggests hospital delivery. Sometimes family member also calls health workers for home delivery along with TBA. If there is normal home delivery, they use the delivery kit with a sterile blade, thread, cover plastic etc. in home delivery. But today, most of the pregnant women prefer hospital delivery. There is the treatment of hot massage with mustard oil mixed with ginger and onion to be given to mother right after home delivery. Boiled rice *jaulo* and ghee, carom *juwano*, meat and other hot food will be given to a delivered mother. After delivery, mother in law cleans the house and took care of children. After one day of birth, baby is given bath with warm water and after bath be placed on a *nanglo* covering with new coloured clothes. Neighbour and relatives also use to come to see mother and baby.

## **Traditional Ritual after Delivery**

After delivery, a mother called *puwati*. *Nwaran* or *pachhati* or *chhatiyar* takes on day-6 for male baby or on day-3 for female baby to make ritually clean. On the day, oil massage on baby done and wearing of black thread to the baby reformed. Leaf of jujube *bayar* and fishing net are kept near the door. During winter season the baby cleaned by rubbing with a soft cloth to protect from cold and during summer baby cleaned by rubbing with a soft cloth and warm water. A local barber *hazam* called at the house to shave the head of the baby and cut nails to make ritually clean. Father and mother of the baby also cut their nail on the day. They burn *pina*/mustard oil and *guitha* on a pot and take it five rounds of the house and put inside the house. Incense sticks burned with the belief that it will prevent baby from the common cold. Five buckets of water would be put over tube well to worship *jalkumari deota*. Postpartum woman wears *sindoor* on her forehead. A black thread tied on the wrist and legs of a newborn baby. Now people are also performing this ritual on the second day with the short cut method.

In this way, naming ritual *nwaran* takes place in the presence of neighbours and relatives. People believe that family regains ritual cleanliness after delivery. So, *chhatiyar* removes impurity and gives pureness in the house.

A woman who has been delivered a baby is given cooked watery rice *jaulo* and other nutritious hot food immediately. Apart from *roti*, beaten rice *chiura*, ginger, onion, potato pickle, musuro pulses are given but rice and green vegetables are not given. Soup and meat or fish are given to the mother after delivery. Babies were breast feed and put to sleep on a baby bed *doli*. Delivered woman is not allowed to walk and

work in water to protect from cold. Warm water and nutritious food are given to the mother. Massage of mother and baby did with garlic mixed mustard oil on the body for one and half months and *jamain* given to eat during this period. Mothers are taking babies for vaccination and they also go for PNC. In this way, mothers practiced modern care today.

Mothers said that they got love and affection from the family after having a baby. Rajbanshi mothers are also seemed responsible in caring baby and themselves. They are also aware of taking nutritious food and breast-feeding to their baby. They like to apply warm ghazal on the eye brows of their babies. B

### **Traditional belief on abortion or prolonged labour**

Traditional healer described natural abortion is a state that caused by deity *chhutia*. They also described that prolonged labour is due to the weakness of mother. It is because of the carelessness of mother and abnormal position of the baby. They are treatable by *jharphuk* and *jadibuti*. If it does not work then the woman referred to hospital. They also give *buti* for the safety of the baby inside the womb. But now they do not use their knowledge in inducing abortion. Sometimes clients come to them to have an abortion. But they do not use the knowledge although they are able to induce abortion by *jadibuti*. Traditional healers are aware that abortion done by an unauthorized person is illegal so they refer cases to the hospital or clinics.

### **Mental Changes in Mothers during Postnatal Period**

In the study, most of the poor and illiterate mothers were found worried about their delivery. They worried about how to manage good food, proper care, and about future. Some of the mothers also felt the mood change after delivery. A poor mother said that she worried about her baby how to feed baby properly by breastfeeding when she is not getting even enough food, and how to make baby clean and safe etc. Many mothers said that they felt tiredness or weaknesses. Mothers complained of loss of blood, joint pain, muscle pain, and bodyache. Mothers had felt physical or mental or both changes after delivery.

### **Preferable Sex of Baby and Care of Mother**

Traditional healers and mothers said that family becomes happy when boy child is born. If a girl child is born that time family members become unhappy. Some blame the mother for having a girl child. Thus, the *Rajbanshi* family preferred sons. They said it is because of boy continues clan of the family where daughter goes to other's house and she takes away property in the form of dowry *dahej* from the house. A mother said:

"There is the difference in taking care of mother and baby on the basis of the sex of the baby. Usually, mother and baby get good care if boy baby is born. On the other, mother and baby may get less care if a girl child is born." (Mother1)

TBAs had also said that families become happier with a male child.

"I get more gifts when male baby born." (TBA)

However, it is said that male and female babies cared and reared equally without any discrimination in families. Guardian or elder members of the family care equally to the children. They look after and take care of the children. Children are not allowed to go away from house alone and are kept always under surveillance. Parents or guardian keep supervision even when they go to play or anywhere.

### **Traditional Belief of Cause on Malnutrition**

*Pithiya* is a mother who has lost a baby. They believed that once she touches a baby it can cause malnutrition and diseases. A Traditional healer said:

"The dead baby attracts another healthy baby to make a friends and that's why it causes diseases in the child to kill."

Generally, malnourished children cared with breastfeeding, given nutritious diet and oil massage. Traditionally, for malnourished children they did not feel any need of medical care in the hospital. Now awareness increased even FCHVs are giving counseling with information to mothers on malnutrition with physical symptoms and effects in children. Children are now taking Vitamin A, medicine for parasitic worms and getting routine growth monitoring service by health workers.

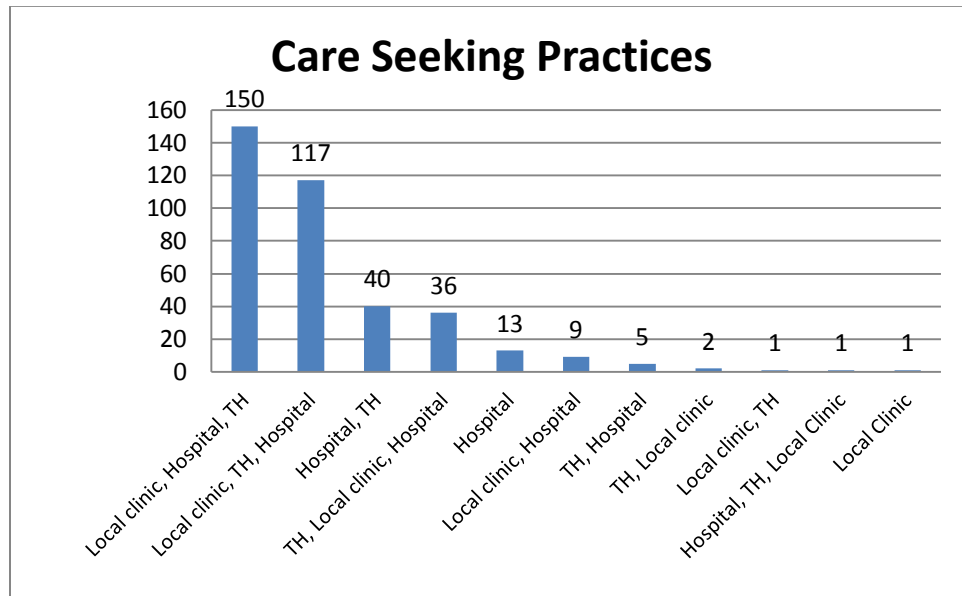
### **Traditional Preventive measures**

In *Rajbanshi* community, there is a number of traditional measures to protect from disease or illnesses. *Aali Badhne* is a preventive measure for safe delivery. They believed that a tika of the *ghazal* is applied on fore head of a baby to protect from evil eyes. They said that a woman who practices *tantra/mantra* does not sit on the seat *Pirca*. So, they recognize them by this act. Children are taken away from such woman. A domestic weapon like knife or *kachiya* is kept under the bed of a child to protect the child from evil spirits.



## Health Care Seeking Practice

Figure 3 Care Seeking Practices



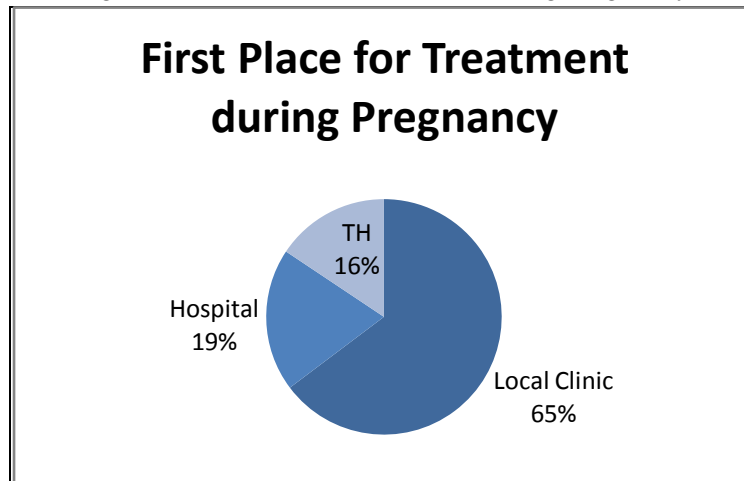
Source: Field Survey, 2010

N=375

Figure 3 shows health care practice during sickness. People were practicing multiple care and treatment concurrently. Out of 375 sample 40% (150) of sample preferred local clinic/ hospital/ traditional healer (TH), which followed by local clinic/traditional healer/ hospital 31.2% (117), hospital/ traditional healer 10.67% (40), traditional healer/ local clinic/hospital 9.6% (36), hospital only 3.47% (13), local clinic/hospital 2.4% (9), traditional healer/hospital 1.33% (5), traditional healer/local clinic 0.53% (2), local clinic/traditional healer 0.27% (1), hospital/traditional healer/local clinic 0.27% (1) and local clinic 0.27% (1). According to the table 11.47% (43) went first to traditional healer for treatment. Remarkable proportion (93.87%) practiced both traditional and modern practice concurrently.

## Practice during Pregnancy

Figure 4 First Place for Treatment during Pregnancy



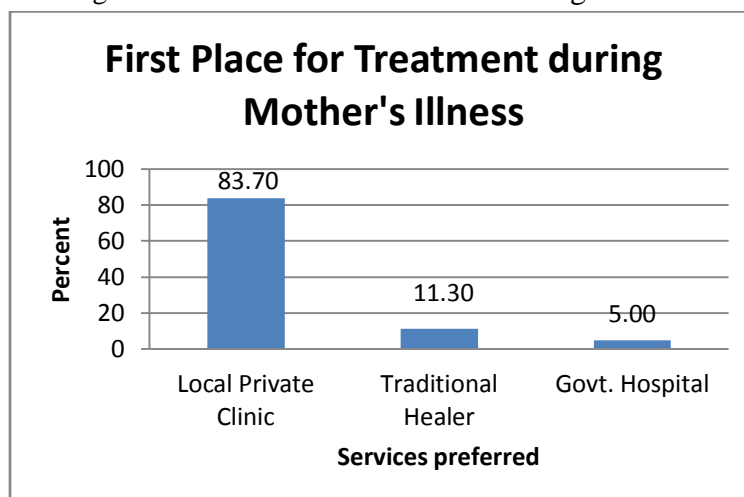
N=375

Source: Field Survey, 2010

Figure 4 indicates the first option for treatment during pregnancy. According to the figure among 375 samples 65% mothers preferred local clinics and 19% preferred hospitals at first. Remarkable proportion 84.00% adopted modern health care from local clinics and hospitals. Only 16% used traditional healer (TH) at first during pregnancy.

## Practice during Maternal Illnesses

Figure 5 First Place for Treatment during Maternal Illnesses



N=375

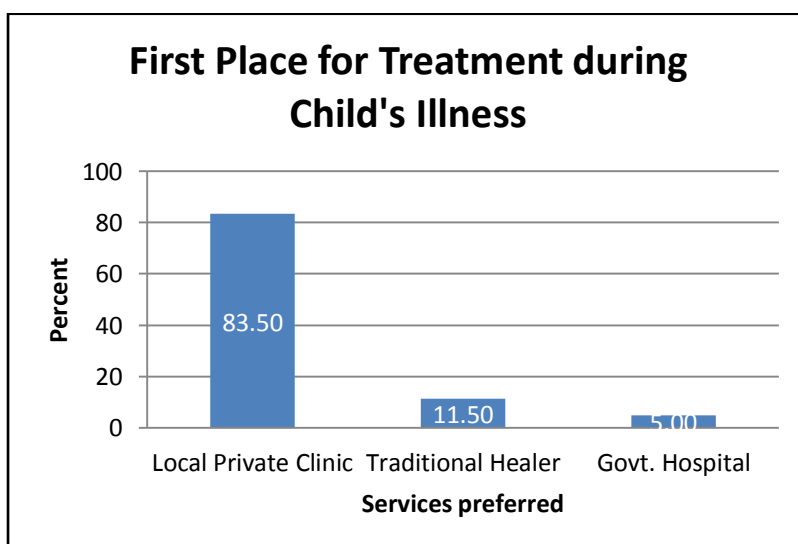
Source: Field Survey, 2010

Figure 5 shows practice of maternal care during illnesses. Out of 375 mothers 83.70% mothers went to local private clinics and 5.00% mothers went to government hospitals at first for mothers' illnesses. Bulk

proportion 88.70% attended modern health care facilities. Mother attending private clinics was remarkably higher than mothers attended government hospitals for the treatment. According to the table 11.30% mother preferred traditional healer since they went at first for the treatment.

### Practice of Child Health Care

Figure 6 First Place of Treatment for Child's Illness



Source: Field Survey, 2010

N=375

Figure 6 indicates practice of child care during illnesses. Out of 375 mothers 83.50% preferred local private clinics and 5.00% preferred government hospitals for child health care. Bulk proportion 88.50% child treated by modern health care. Majority children treated by private clinics and government health facilities. 11.50% mothers preferred traditional healers as a first option to treat the children.

## **Delivery Practice by Community Health Workers**

In order to lower maternal mortality Nepal has introduced Safe motherhood program in the country with priority since 1994 to make the sure safe delivery. Now the program has been intensified to increase access and use by providing incentives for both service users and service provider under government policy and program. Mothers were advised to take services from nearby health institutions during pregnancy for delivery and after delivery through information, education and communication (IEC) program, Even if of home delivery there were community-level health worker attending modern delivery practice as per government protocol and guidelines. A health worker said:

"First, I cut my nails and wash hands with soap and water. I clean ground to make the delivery site. There will be clean blades, clothes ready. First, I assess the general condition of mother and then check thoroughly per vagina. During examination, if external and internal os fully are dilated and watery discharge is present, I will try it for normal delivery. But if there is not fully dilated os or blood discharge is present, I will refer the mother to the hospital." (Health Worker1)

## **Delivery Practice by TBA**

Traditional birth attendants (TBAs) are readily available in *Rajbanshi* community. TBAs are key persons to conduct delivery, to give counseling during pregnancy. They were also aware of changing the behavior of clients, availability of modern health facilities and present role and responsibilities of their profession. A TBA said:

"There is huge difference seen in practice between the present and the past. During past days, there was traditional healer who used to *jharphuk* and chanting mantras in water pot with holy basil *tulsi* leaf and used to give pregnant woman to drink and some water sprinkled on the body. After that traditional healer lets family call TBA or let TBA start delivery. We TBA used to massage over the stomach of the pregnant mother. Now we learned that it was a risky practice. We did not have knowledge about any check up during pregnancy that time. So, we did not even recommend for antenatal check up. Maternal death was common in the community during past days. Now maternal death is rare. Today, every woman goes to nearby health institutions for ANC and they take TT and Iron tabs. They also take counseling or suggestion from health workers and female community health volunteers. So, mothers go to the hospital for delivery. Some mothers still call TBAs for home delivery but when it gets prolonged then I referred to the hospital." (TBA1)

Even today traditional healers in Rajbanshi community have their own perspective to view pregnancy and delivery condition. A traditional healer described as deity *chhutia* is a cause of abortion. A traditional healer said:

"*Chhutia* is a deity responsible for making prolonged labour or abortion. A woman whose baby died is called *Chhutia*. *Chhatka* is one who had an abortion. Prolonged labour or abortion occur when *chhatka* touch a mother". (Traditional Healer3)

### **Hospital Delivery: Experience of Mothers (Respondents)**

A woman shared her experience of hospital delivery. She said:

"I gave birth of a healthy baby son by operation in Koshi zonal hospital. I stayed there for 9 days. But I became unable to move after surgery so it was very difficult for me to look after my baby. My husband and mother in law took care of baby and me. I found difficult to move even go to the toilet. In that condition, it was unable to do our *Rajbanshi* ritual as per our tradition on proper days. When I got discharged from hospital on the day-10, I took a bath with my baby with the warm water. A local barber *hajam* cut off nails of the baby. House cleaned and applied with red mud. We prayed and worship deity ghar deota and did pooja as per ritual. Family members, neighbors and pandit sat together and gave a name to the baby. Pandit also made a *janmakundali* of the baby. After 45 days I went to the hospital for post natal check up. I feed my breast exclusive for 6 months and after that I feed additional food to the child. I took care of my baby traditionally by applying ghazal over eyebrows, and laid the baby for sun bath." (Mother7)

A woman when asked for her age at marriage said:

"I was 19 years when I got married and gave birth to my first child at 20 years of age. Now I remembered that hospital delivery was one of the big problems that prevented me to do rituals according to the culture and to fulfill my desires. However, I am happy because I got a male baby. My family members also took care of me and my new baby. My husband is also happy because we got a son for inheritance." (Mother8)

Another very poor woman shared her history of past delivery as follows:

"I had prepared my delivery by saving money and buying a delivery kit before my delivery. But I got other health problems like lumber pain, abdominal pain etc. Due to lack of enough money I was unable to go to the hospital and forced to have delivery at home by TBAs. But it took a long time to get recovered after delivery. I had faced difficulty in using toilets due to weakness. There was a lack of helping hands. I worried in managing good food for my baby and even for me. I was also worried about performing my routine house jobs. However, I performed *chhattiyar* of my baby on the 6th day of the delivery." (Mother9)

## Modern Care Practice during Delivery

Modern care practice is now easily accessible in both private and public sectors. Sub-health post, health post, Primary health care center are present at periphery and Koshi zonal hospital, BPKIHS are there as a referral center in the public sector. In private sector medical college, private hospitals and nursing home are abundant in Biratnagar. A large number of private clinics are also available even at newly urban VDCs in *Morang*, *Jhapa*, and *Sunsari* districts since the number of trained health workers increased in the community.

### Delivery Practice by Economic Status

Table 8 Delivery Practice by Economic Status in percentage and hypothesis test

Practices in Last Delivery and Economic Status				
Economic	Traditional	Modern	Total	p-value
Very poor	67 (17.87%)	77 (20.53%)	144	$\chi^2 = 36.41$ d.f. = 2 p = <0.0001
Poor	33 (8.00%)	76 (20.27%)	109	
Rich	15 (4.00%)	107 (28.53%)	122	
Total	115 (30.67%)	260 (69.33%)	375	

Source: Field Survey, 2010

N=375

Table 8 shows the practice of delivery (last baby) on the basis of economic status. Of 375 samples 115 (30.67%) practiced traditional system and 260 (69.33%) practiced modern system. Among very poor 144 samples 67 (18.87%) practiced traditional and 77 (20.53%) practiced modern system. Likewise, among poor 109 samples 33 (8.8%) practiced traditional and 76 (20.27%) practiced modern system. Among rich 122 samples 15 (4%) practiced traditional and 107 (28.53%) practiced modern system. The delivery practice among different strata of economic condition was statistically highly significant (p = <0.0001).

## Delivery Practice and Occupation

Table 9 Delivery Practice by Occupation

Practices by Occupation (n=375)				
Occupation	Traditional	Modern	Total	P-value
Agriculture	10	51	62	$\chi^2=38.05$ d.f.= 4 p= <0.0001
Service	9	56	56	
Labour	91	117	221	
Business	5	33	33	
Other	0	3	3	
Total	115	260	375	

S Source: Field Survey, 2010

N=375

Table No. 9 shows the practice of traditional and modern system by occupation. Out of 375 samples 115 (30.67%) practiced traditional system and 260 (69.33%) practiced modern system. Among agriculture occupation 62 samples 10 (2.67%) practiced traditional and 51 (13.6%) practiced modern system. Likewise, among 56 service occupation 9 (2.4%) practiced traditional and 56 (14.93%) practiced modern system. Among labor occupation 221 samples 91 (24.27%) practiced traditional and 117 (31.2%) practiced modern system. Among business occupation 33 samples 5 (1.33%) practiced traditional and 33 (8.8%) practiced modern system. The delivery practice among different occupation was statistically highly significant (p= <0.0001).

## Delivery Practice by Education

Table 10 Delivery Practice by Education Level in Percentage and Hypothesis Test.

Delivery Practice by Education Level				
Education	Traditional	Modern	Total	P-value
Illiterate	40	30	70	$\chi^2= 43.14$ d.f.= 4 p= <.0001
Literate NS	39	68	107	
Class 1-10	25	86	96	
SLC/IA	6	60	66	
BA+	5	16	36	
Total	115	260	375	

Source: Field Survey, 2010

N=375

Table 10 shows the delivery practice (last baby) on the basis of education of head of household. Among 375 samples 115 (30.67%) practiced traditional system and 260 (69.33%) practiced modern system.

Among illiterate 107 samples 40 (10.67%) practiced traditional and 30 (8%) practiced modern system. Likewise, among 107 non-schooling literate 39 (10.4%) practiced traditional and 68 (18.13%) practiced modern system. Among class 1-10 (96) samples 25 (6.67%) practiced traditional and 86 (22.93%) practiced modern system. Among SLC/IA 66 samples 6 (1.6%) practiced traditional and 60 (16%) practiced modern system. Among BA+ 36 samples 5 (1.33%) practiced traditional and 16 (4.27%) practiced modern system. *Rajbanshi* by education who were illiterate to Class 10 used traditional practices by 26.93% and who were SLC and above used to traditional practices by only 2.93%. Therefore, delivery practice among different education levels was statistically highly significant ( $p = <0.0001$ ).

### Delivery Practice by Urban-Rural Setting

Table 11 Delivery Practice (first baby) in Urban-Rural Setting in Percentage.

Urban-Rural Setting: First Delivery			
	Delivery		Total
	Home	Hospital	
Urban	33 (8.80%)	14 (3.73%)	47
Rural	232 (61.87%)	96 (25.60%)	328
Total	265 (70.67%)	110 (29.33%)	375

Source: Field Survey, 2010

N=375

Table 12 Delivery Practices (Last baby) in Urban-Rural Setting in Percentage.

Urban-Rural Setting: Last Delivery			
	Delivery		Total
	Home	Hospital	
Urban	6 (1.60%)	51 (13.60%)	57
Rural	109 (29.07%)	209 (55.73%)	318
Total	115 (30.67%)	260 (69.33%)	375

Source: Field Survey, 2010

N=375

Table 11 and 12 are indicating the practice of delivery between first and last baby in the urban and rural setting. Home delivery during first baby delivery was 33 (70.21%) in urban and 232 (70.73%) in rural. Home delivery during last baby delivery was 6 (10.53%) in urban and 109 (34.28%) in rural. Likewise, hospital delivery during first baby delivery was 14 (29.79%) in urban and 96 (29.27%) in rural. Hospital delivery during last baby delivery was 51 (89.47%) in urban and 209 (65.72%) in rural. Delivery practice is gradually changing towards hospital delivery from home delivery both in urban and rural setting but the degree of increment is higher in urban.



## Cost of Treatment for Delivery

A respondent, when asked, recalled total cost of treatment paid in a government hospital. Her total bill cost was Rs. 6,150.00 at Koshi zonal hospital under following heads: Health Workers fees: Rs. 2000.00, Hospital charge: Rs. 2200.00, Transportation: Rs. 450.00, Food: Rs. 1000.00, and other: Rs. 500.00. But it is quite high in private hospitals in Biratnagar ranging from Rs. 10,000.00 to 20,000.00 for a normal delivery and doubled if complicated delivery occurs. It is beyond paying capacity of very poor and poor people. Now, Government of Nepal has encouraged mothers for hospital delivery. Through safe motherhood program mother gets transportation cost Rs. 500.00 and free delivery service available from the hospital in Biratnagar and from birthing centers at the community level. But a limited number of hospital and birthing center are there which give free healthcare during delivery.

## Ante/Post Natal Care

### Access of Primary Health Care Services to Mothers

Table 13 Access of Primary Health Care to Mothers

Primary Health Care Access to Mothers		
Indicators	Frequency	Percent
TT vaccine taken	361	96.27%
ANC check up during pregnancy	360	96.00%
PNC after delivery	61	16.27%
Iron tablet taken during pregnancy	361	96.27%
Ever use of Contraceptives	217	57.87%

Source: Field Survey, 2010

N=375

Table 13 indicates access of primary health care services that is modern health care service provided through local government health institutions to mothers at the community level. Out of 375 samples, 361 (96.27%) mothers were taking TT injection and Iron tablets during pregnancy. Similarly, 360 (96%) mothers were taking ANC care and 217 (57.87%) women had ever used family planning contraceptives. Above figure indicated that the status of *Rajbanshis'* mothers in term of access to primary health service was found better in condition than national and district level.

## Family Planning

Table 14 Use of Family Planning Contraceptive by Rural-urban Setting

Contraception by Rural-Urban Setting		
	Frequency	Contraception
Urban	52	25 (48.08%)
Rural	323	195 (60.37%)
Total	375	220 (58.67%)

Source: Field Survey, 2010

N=375

Table 14 indicates Contraceptive Prevalence Rate (CPR). CPR in *Rajbanshi* was 58.67%. It was very interesting to note that use of contraceptives in urban is 48.08% but it was 60.37% in rural. It indicates that awareness about family planning among rural mothers and availability of contraceptives was better in rural than urban areas.

## Access of Primary Health Care Service to Children

Table 15 Access of Primary Health Care to Children

Primary Health Care Access to Children		
Primary Health Care	Frequency	Percent
Vaccination	718	99.2%
Vitamin A taken	706	97.9%

Source: Field Survey, 2010

N=375

Table 15 shows the access of primary health care services provided by the government to children. Of 375 samples 718 (99.2%) children got the vaccination and 706 (97.9%) children got Vitamin A. capsule.

### 4.3 Modification of Traditional and Modern Health Cares

Health care practice is largely influenced by various factors. Due to numbers of reason like social, cultural, availability of modern care, government's policy etc. now practices of mothers changed from traditional to modern care gradually. The trend of hospital delivery was remarkably increased and traditional home delivery decreased in between births of the first and last baby. They are also presented below as findings.

#### Change in Delivery Practice

A TBA told about the trend of delivery practice in the community. "I started this job when I was young. Now I serve 3-4 pregnant women a month. People usually prepare for clothes for baby and manage money for forthcoming delivery. Pregnant women go to Health Post for ANC check up and vaccination. I am happy because I am always successful in delivery. Nobody died by my hands so far. When a case of hand or feet prolapsed comes I will refer to hospitals. Now people are using vehicles like ambulance, motors which were not available before. Now the government has also provided Rs. 500.00 to mothers for transportation during hospital delivery."

Table 16 Changes in Delivery Practice

Trend of delivery Practice			
	1st delivery	Last delivery	P-value
Home	265	115	$\chi^2 = 118.43$
Hospital	110	260	d.f. = 1
Total	375	375	P = <0.0001

Source: Field Survey, 2010

N=375

Table 16 shows the changes in delivery practice. Out of 375 mothers, home deliveries were 265 (70.67%) during the first baby and which decreased to 115 (30.67%) during last baby delivery. Hospital deliveries were 110 (29.33%) during the first baby which increased to 260 (69.33%) during last baby delivery. The remarkable changes in practices is statistically highly significant ( $p < 0.0001$ ).

Table 17 Change in Use of Service Provider

Trend of Service Provider Used			
Service Provider	First Delivery	Last Delivery	P-value
TBAs	30	7	$\chi^2 = 297.78$ d.f. = 4 p = <.0001
HWs	25	5	
TBA/CHW	254	102	
HW/Nurse	43	12	
HW/Nurse/Doctor	23	249	

Source: Field Survey, 2010

N=375

Table 17 indicates the practice of using different service providers. During first baby delivery among 375 mothers TBAs used by 8% which decreased by 1.87% during last baby delivery. Similarly, there was also change in using health workers at the community level. Mothers used health workers (untrained) during first baby delivery by 6.67% which decreased by 1.33% during last baby delivery. Mothers used TBA/CHWs by 67.73% at first baby delivery which decreased by 27.2% during last baby delivery. Mothers used HW/Nurses by 11.47% during first baby delivery which decreased by 3.2% during last baby delivery. But, there was a remarkable increment in using HW/Nurse/Doctor in hospitals. During first baby delivery, only 6.13% mothers went to HW/Nurse/Doctor in hospitals which increased by 66.4% during last baby delivery. There was remarkable change seen in using skilled service providers by mothers (p = <.0001).

## Number of Child Births and Occupation

Table 18 Number of child births by occupation

Number of child births by occupation					
Births	Agriculture	Service	Labour	Business	Total
1 Child	31	23	62	18	134
2 Child	20	24	82	6	132
More than 2	14	9	77	9	109
Total	65	56	221	33	375
Proportion of >2 children	21.547%	16.07%	34.84%	27.27%	

Source: Field Survey, 2010

N=375

Table 18 shows a number of births presented by occupation. The family having more than 2 children was highest in labour occupation (34.84%) and it was lowest in service occupation (16.07%). Therefore, people with labour occupation had the burden of a larger number of children to nurture in the family.

## Number of Child Births by Economic Condition

Table 19 Number of Child Births by Economic Condition

Number of Child Births by Economic Condition				
Births	Very Poor	Poor	Rich	Total
1 Child	46	36	52	134
2 Childs	44	47	41	132
More than 2	54	26	29	109
Total	144	109	122	375
Proportion of >2 children	35.5%	23.85%	23.77%	

Source: Field Survey, 2010

N=375

Table 19 shows a number of children among different economic strata. The family having more than 2 children was found highest among very poor families 35.5% and lowest in rich 23.77%. There was the tendency of having more child births in very poor than rich family. Therefore very poor had the burden of a larger number of children to nurture in the family.

In the study economic condition of sample population classified into (1) Very poor: one who has enough food for 5 months, (2) Poor: one who has enough food for 6 to 11 months and (3) Rich: one who has

enough food for 12 months or more (DoHS, 2067/68). The categories based on the classification made by Ministry of Health and Population to offer free health care especially for very poor and poor people.

### Number of Child Births by Education

Table 20 Number of Child Birth by Education Level

Number of Child Birth by Education Level						
Births	Illiterate	NS Literate	1-10 class	SLC/IA	BA+	Total
1 Child	19	23	49	31	12	134
2 Child	20	39	41	24	8	132
More than 2	31	45	21	11	1	109
Total	70	107	111	66	21	375
Proportion of >2 children	44.29%	42.06%	18.92%	16.67%	4.76%	100%

Source: Field Survey, 2010

N=375

Table 20 shows child births among different education levels. The proportion of more than 2 children in a family was highest among illiterate 44.29%, followed by non-schooling literate 42.06% and it was lowest in literate, BA and plus 4.76%. Therefore, illiterate people were having the burden of more children in the family. It also indicated that higher the education lower the births and lower the education higher the births.

### Child Mortality Rate by Rural-Urban Setting

Table 21 Child Mortality Rate by Urban-rural Setting

Child Mortality Rate		
Setting	Number	Under 5 Mortality Rate
Urban	5	
Rural	54	75.35/1000 LB
Total	59	

Source: Field Survey, 2010

N=783

Table 21 shows Child Mortality Rate in Rajbanshi and its distribution in the urban and rural setting. Child mortality estimated 75.35/1000 live births in Rajbanshis. There were 59 child deaths recorded from 375 mothers. Among them, 54 deaths were from rural and 5 were from urban. So, child mortality rate was higher in rural.

### Child Mortality by Number of Children

Table 22 Child Mortality

Births	Number	Proportion
1 Child	0	0%
2 Child	7	11.86%
More than 2	52	88.14%
Total	59	100%
Per 1000 live Births	75.35	

Source: Field Survey, 2010

N= 375

Table 22 indicates the child mortality in the community. Child mortality was highest (88.14%) in those family having more than 2 children and lowest (0%) in those family having one child. Table indicated that more childbirth more deaths and fewer children less death observed in the study.

### Child Mortality by Economic Condition

Table 23 Child Mortality by Economic Condition

Economic condition	Death	Alive	Total	P-value
Very Poor	30	114	144	$\chi^2=4.6$
Poor	14	95	109	d.f.= 2
Rich	15	107	122	p= 0.1003
Total	59	316	375	

Source: Field Survey, 2010

N= 375

Table 23 indicates child mortality rate by economic condition. Out of 59 child deaths, 30 (50.85%) were from very poor, 14 (23.73%) were from poor and 15 (25.42%) were from rich families. It was statistically insignificant (p= 0.1003).

## Child Mortality by Occupation

Table 24 Child Mortality by Occupation

Child Mortality by Occupation				
Occupation	Deaths	Alive	Total	P-value
Agriculture	4	58	62	$\chi^2 = 8.11$ d.f. = 4 p = 0.0876
Service	6	50	56	
Labour	43	178	221	
Business	5	28	33	
Other	1	2	3	
Total	59	316	375	

Source: Field Survey, 2010

N= 375

Table 24 indicates child mortality rate by occupation. Out of 59 child deaths, 42 (72.88%) were from labour, 6 (10.17%) were from service, 5 (8.47%) were from business, 4 (6.78%) were from agriculture. It was also statistically insignificant (p= 0.0876).

## Child Mortality by Education

Table 25 Child Mortality by Mother's Education

Child Mortality by Mother's Education				
Education	Death	Alive	Total	P-value
Illiterate	32	98	130	$\chi^2 = 19.79$ d.f. = 4 p = 0.0005
NS Literate	15	59	74	
Class 1-10	9	84	93	
SLC	3	73	76	
BA	0	2	2	
Total	59	316	375	

Source: Field Survey, 2010

N= 375

Table 25 indicates child mortality rate in *Rajbanshi* by education. Out of 59 child deaths, 32 (54.24%) were from illiterate, 15 (24.42%) were from non-schooling literate, 9 (15.25%) were from class 1-10 and 3 (5.08%) were from SLC/IA. Child mortality among different educational level was statistically highly significant (p=0.0005).



## Anaemia between Mother and Child

Table 26 Anaemia among Mother and Child

Anaemia between Mother & Children		
Births	Mother (N=375)	Children (N=724)
1 Child	12	8
2 Child	18	9
More than 2	26	13
Total Number	56	30
Percentage	14.93%	4.14%

Source: Field Survey, 2010

Table 26 shows the prevalence of anaemia between mother and child. Prevalence of anaemia among mothers was 14.93% and anaemia among children was 4.14%. Based on the number of children in the family, the prevalence of anaemia was higher in those families where there were more than 2 children.

## Maternal Stress by Economic Status

Table 27 Maternal stress by Economic Status

Maternal Stress and Economic Status				
Economic Condition	Mental stress	No mental stress	Total	p-value
Very poor	49	95	144	$\chi^2 = 26.92$ d.f. = 2
Poor	16	93	109	
Rich	12	110	122	
Total	77	298	375	p = <.0001

Source: Field Survey, 2010

N= 375

Table 27 indicates maternal stress found by economic status. Out of 77 stressed mothers 49 (63.64%) were economically very poor, 16 (20.78%) were poor and 12 (15.58%) were rich. Therefore, mental stress in mothers associated with the economic condition of the family which was statistically highly significant (p=<.0001).

## Maternal Stress by Education

Table 28 Maternal Stress by Education

Maternal Stress and Education of Mother				
Education Level	Yes (Mental stress)	No (Mental stress)	Total	P-value
Illiterate	33	97	130	$\chi^2 = 13.37$ d.f. = 4 p = 0.01
NS Literate	20	54	74	
Class 1-10	19	74	93	
SLC/IA	5	71	76	
BA and +	0	2	2	
Total	77 (100%)	298	375	

Source: Field Survey, 2010

N = 375

Table 28 indicates maternal stress found on the basis of education. Out of 77 stressed mothers 33 (42.86%) were illiterate, 20 (25.97%) were non-schooling literate, 19 (24.68%) were class 1-10, and 5 (6.49%) were SLC/IA. In the study maternal stress associated with the mother's education. It was statistically highly significant (p=0.01).

## Smoking and Drinking Habit of Husband and Wife

Table 29 Smoking and Drinking Habits of Husband and Wife

Habits	Husband	Wife
Smoking	176	6
Taking Alcohol	293	5

Source: Field Survey, 2010

N = 298

Table 29 shows smoking and drinking habit of husband and wife. Husband's habit recorded as 46.93% smoking and 78.13% taking alcohol. Wife's habit recorded as 1.60% smoking and 1.33% taking alcohol.

## Effects on Maternal Mental Health

Table 30 Effects on Maternal Mental Health by Husband's Drinking and Smoking Habits

Maternal Stress and Husband's Smoking Habit	Husband 's Smoking habit	Yes (Maternal Mental stress)	No (Maternal Mental stress)	Total	Results
	Yes	49 (63.64%)	130 (43.62%)	179	$\chi^2 = 9.04$ d.f.= 1 p= 0.002
	No	28 (36.36%)	168 (56.38%)	196	
	Total	77	298	375	
Maternal sleeplessness and Husband's smoking habit	Husband's smoking	Yes (Maternal Sleeplessness)	No (Maternal Sleeplessness)	Total	
	Yes	38 (21.23%)	20 (10.20%)	58	$\chi^2 = 7.875$ d.f.= 1 P = 0.005
	No	141(78.77%)	176 (89.80%)	317	
	Total	179	196	375	
Maternal Stress and Husband's drinking habit	Drinking Habit of Husband	Yes (Maternal Mental stress)	No (Maternal Mental stress)	Total	
	Yes	67 (87.01%)	230 (77.18%)	297	$\chi^2 = 3.590$ d.f.= 1 P = 0.058
	No	10 (12.99%)	68 (22.82%)	78	
	Total	77	298	375	
Maternal Sleeplessness and Husband's Drinking Habit	Maternal Sleeplessness	Yes (Husband's drinking habit)	No (Husband's drinking habit)	Total	
	Yes	52 (89.66%)	6 (10.34%)	58	$\chi^2 = 3.832$ d.f.= 1 p= 0.050
	No	245 (77.29%)	72 (22.71%)	317	
	Total	297	78	375	

Source: Field Survey, 2010

N = 375

Table 30 shows the state of maternal mental health in relation to husband's smoking and drinking habits. In the study, there was association found between the mental stress of mother during delivery and smoking habit of the husband. Among 77 mental stressed mothers, there were 49 mothers (63.64%) who had smoker husband and 28 (36.36%) who had non-smoker husband that was statistically significant (p=0.002). Sleeplessness in the mother during delivery and smoking habit of the husband was also associated in the study. Out of 179 sleepless mothers 38 mothers (21.23%) had smoker husband and 141(78.77%) mothers had a non-smoking husband which was also statistically significant (p=0.005). There was also an association between maternal stress during delivery and alcohol drinking habit of the husband. Among 77 mental stressed mothers, 67 mothers' husband had alcohol drinking habit and 10 mothers' husband had a non-alcoholic husband which was statistically significant (p=0.058). Likewise,

there is also an association between sleeplessness in mothers during delivery and alcohol drinking habit of the husband. Out of 58 sleepless mothers 52 mothers (89.66%) had alcohol drinking husband and 6 mothers (10.34%) had a non-alcohol husband which was also statistically significant ( $P = 0.050$ ).

## 4.4 Impacts of Traditional and Modern Health Care on Child and Maternal Health

This chapter deals with maternal and child related traditional and modern health care systems. Apart from this maternal and child mortality rate assessed in the study since mortality rate is also one of the impact indicators in public health.

### Child Mortality Rate in Rajbanshi

Table 31 Child Mortality Rate in Rajbanshi

Child Mortality Rate		
Indicator	Number	Under 5 Mortality Rate
Live births	783	
Alive for 5 years	724	75.35/1000 LB
Deaths	59	

Source: Field Survey, 2010

N = 783

Table 31 indicates <5 child mortality rate among *Rajbanshi*. Sample 375 mothers reported a total of 783 live births. But now they have 724 under 5 yrs children present. So, 59 children died during past 5 years. Therefore, <5 mortality rate was estimated 75.35/1000 live births in *Rajbanshi*.

### Child Mortality Rate by Practices

Table 32 Child Mortality Rate by Practice

Child Mortality Rate		
By Practice	Frequency	Under 5 Mortality Rate
Traditional	50	
Modern	9	75.35/1000 LB
Total child deaths	59	

Source: Field Survey, 2010

N = 783

Table 32 indicates <5 years child mortality by practice. Out of 59 deaths, 50 deaths recorded from traditional practising families and 9 deaths recorded from modern care practising families. Therefore, CMR was higher among traditionally practised families.

## Nutritional Status and Child Morbidity Rate

Table 33 BMI, ARI and Diarrhoea in Children

Health Effect on Child				
BMI (Weight by Height) N=783				
	Underweight	Normal	Total	Percent
	272	103	375	72.53
<5 children ARI/year (N=724)				
	Infection	Normal	Total	per 1000
	142	582	724	196
<5 children DD /year (N=724)				
	Infection	Normal	Total	per 1000
	204	520	724	282

Source: Field Survey, 2010

N = 375

Table 33 shows nutritional status body mass index (BMI) and prevalence of common diseases in children. Some major public health indicators such as prevalence rate of stunted (weight by height), anaemia among children and prevalence of acute respiratory infection and diarrhoeal diseases in <5 yrs *Rajbanshi* children studied on the samples. Out of 375 children 272 children (72.53%) were found underweight. The prevalence of acute respiratory infection (ARI) was 196/1000 and prevalence of diarrhoeal diseases was found 282/1000.

## Maternal Mortality in Rajbanshi

Table 34 Maternal Mortality Rate

Maternal Mortality Rate		
Maternal	Death	Per / 100,000
death right after delivery	1	266

Source: Field Survey, 2010

N = 375

Table 34 shows maternal mortality rate in *Rajbanshi*. In the study area, there was only one maternal death recorded which occurred right after delivery. It indicated that estimated maternal mortality rate was 266/100,000 in *Rajbanshi*. In the study, the maternal death occurred in the family who adopted traditional care and mother died at home after home delivery. It was also noted that economic condition of that family was very poor and family members were illiterate.

## Nutritional Status of Mother: Anaemia

### Anaemia among Mothers

Table 35 Anaemia among Mothers

Anaemia among Mothers			
Prevalence of Anaemia among mothers	Sample (N) 375	Anaemia 56	Percent 14.93%
Prevalence of Anaemia by Treatment Practice	Practice	Anaemia (n=56)	Percent
	Traditional Practice	42	75%
	Modern Practice	14	25%
Prevalence of Anaemia by Residence setting	Urban-Rural Setting	Anaemia (n=56)	Percent
	Urban	4	1%
	Rural	52	13.87%
Prevalence of Anaemia by Education	Education Level	Anaemia	Percent
	Illiterate	16	28%
	Non schooling Literate	20	36%
	Class 1-10	14	25%
	SLC/IA	4	7%
	BA and +	2	4%
	Total	56	100%
Prevalence of Anaemia by Occupation	Occupation	Anaemia	Percent
	Agriculture	10	18%
	Service	5	9%
	Labour	38	68%
	Business	3	5%
	Total	56	100%
Prevalence of Anaemia by Economic Condition	Economic Status	Number	Percent
	Very poor	37	66.07%
	Poor	11	19.64%
	Rich	8	14.29%
	Total	56	100%

Source: Field Survey, 2010

N = 375

Table 35 indicates the prevalence anaemia among mothers. Prevalence of anaemia among *Rajbanshi* mothers is 14.93%. Out of 375 mothers 56 (14.93%) were found anaemic. Among 56 anaemic mothers 42 mothers (75%) were from traditional practice and 14 mothers (25%) were from modern practice during first delivery.

Of 56 anaemic mothers 16 mothers (28%) were from illiterate, 20 (36%) were from non-schooling literate, 14 (25%) were from class 1-10, 4 (7%) were from SLC/IA, and 2 (4%) were from BA and above. Likewise, among 56 anaemic mothers 38 mothers (68%) were from labour, 10 (18%) from agriculture, 5 (9%) from service and 3 (5%) from business occupation . Similarly, among 56, the proportion of anaemia was found between very poor class 37 (66.07%), poor 11 (19.64%), and rich 8 (14.29%).

## Nutritional Status of Children: Anaemia

Table 36 Anaemia among Children by Practice

Anaemia among Children			
Prevalence of Anaemia among children	Sample (N) 724	Anaemia 30	Percent 4.14%
Prevalence of Anaemia by Treatment Practice	Practice	Anaemia (n=30)	Percent
	Traditional Practice	21	70%
	Modern Practice	9	30%
Prevalence of Anaemia by Residence setting	Urban-Rural Setting	Anaemia (n=30)	Percent
	Urban	5	16.67%
	Rural	25	83.33%
	Total	56	100%

Source: Field Survey, 2010

N = 724

Table 36 indicates prevalence of anaemia among <five years children. Prevalence of anaemia was 4.14% in the samples. Out of 30 anaemic children 21 children (70%) was from traditionally practiced family and 9 children (30%) was from modernly practiced family. So, the proportion of anaemic child was higher in the traditionally practiced family than modernly practiced family. Likewise, out of 30 anaemic children 25 children (83.33%) were from rural and 5 children (16.67%) were from urban. So, the proportion of anaemia among rural was higher than an urban setting.

## Under Weight in Children

Table 37 Prevalence of under Weight (Low BMI) in <5 children

Indicator	Number	Rate
Under Weight (Low BMI)	272	72.53%
Male	150	55%
Female	122	45%

Source: Field Survey, 2010

N = 375



Table 37 indicates the prevalence rate of underweight or stunted among children. Out of 375 under five years of children 302 had a low body mass index. Male female ratio was 55:45. The prevalence rate of underweight was 72.53% among Rajbanshi children.

#### 4.5 Mental Health Status of Mother – Post Partum Depression

Post Partum Depression (PPD) is a one of the indicators of mental health status of a mother. Mother's history was taken according to the EPDS tool.

##### Postpartum Depression (PPD) in Mothers

Table 38 Prevalence of PPD

Prevalence of PPD among mothers		
PPD	Frequency	Percent
Mothers	46	12.27%

Source: Field Survey, 2010

N = 375

Table 38 shows that prevalence of postpartum depression among *Rajbanshi* mothers. Prevalence of PPD was 12.3% in Rajbanshi mothers.

##### Post Partum Depression and Education Level of Mothers

Table 39 PPD among mothers by Education

PPD among mothers by education level		
Education	Frequency	Percent
Illiterate	21	45.65%
NS Literate	11	23.91%
Class 1-10	12	26.09%
SLC	2	4.35%
BA and +	0	0%
Total	46	100%

Source: Field Survey, 2010

n = 46

Table 39 indicates PPD found in mothers by education levels. Out of 46 PPD mothers, 21 (45.65%) were from illiterate, 11 (23.91%) were from unschooling literate, 12 (26.09%) were from class 1-10, 2 (4.35%) were from SLC/IA. No mothers from BA and above had PPD. Therefore, PPD was more prevalent in illiterate mothers.

## Post Partum Depression and Delivery Practice

Table 40 PPD and Delivery Practice

PPD among Mothers by Practice		
Practice	Frequency	Percent
Traditional	34	73.91%
Modern	12	26.09%
Source: Field Survey, 2010		n = 46

Table 39 indicates PPD found in mothers by education levels. Out of 46 PPD mothers, 21 (45.65%) were from illiterate, 11 (23.91%) were from non-schooling literate, 12 (26.09%) were from class 1-10, 2 (4.35%) were from SLC/IA. No mothers from BA and above had PPD. Therefore, PPD was more prevalent in illiterate mothers.

## Post Partum Depression and Occupation

Table 41 Mothers with Post Partum Depression by Occupation

PPD mothers by occupation		
Occupation	Frequency	Percent
Agriculture	12	26.09%
Service	2	4.35%
Labour	30	65.22%
Business	2	4.35%
Total	46	100
Source: Field Survey, 2010		n = 46

Table 41 shows the PPD mothers by occupation. Out of 46 PPD mothers, the highest proportion 30 (65.22%) was found in labour. And 12 (26.09%) was in agriculture, 2 (4.35%) each was in service and business occupation. Therefore, the prevalence of PPD was higher in labour and agriculture occupations.

## Post Partum Depression and Economic Status

Table 42 Postpartum Depression and Economic Status

PPD mothers by economic condition		
Economic Status	Frequency	Percent
Very poor	37	80.43%
Poor	4	8.7%
Rich	5	10.87%
Total	46	100%

Source: Field Survey, 2010

n = 46

Table 42 shows the distribution of PPD mothers (46) by economic condition. Out of 46 PPD mothers, the highest proportion of PPD 37 (80.43%) was found in very poor and was 4 (8.7%) in poor and 5 (10.87%) in rich. Therefore, the prevalence of PPD was high in very poor.

## Post Partum Depression in Mothers and Husband's Smoking

Table 43 Post Partum Depression Mothers and Husbands' Smoking Habit

Husbands	Mothers			P-Value
	PPD	No PPD	Total	
Smoker Husband	35	144	179	$\chi^2 = 16.90$
Non-smoker Husband	11	185	196	d.f.=1
Total	46	329	375	p= <.0001

Source: Field Survey, 2010

N = 375

Table 43 is showing the relation between Post Partum Depression and smoking habit of the husband. The smoking habit of the husband was found associated with PPD among mothers. Out of 46 PPD mothers 35 (76.09%) mothers' husbands had a habit of smoking and 11 mothers' husband (23.91%) did not have a habit of smoking. It was also statistically significant ( $p < .0001$ ). The prevalence rate of smoking in adolescents and adults with attention deficit disorder (ADD) or hyperactivity tends greater than that seen among people without ADD (Pomerleau, 2003). The level of anxiety within spouses, marriages, families and communities has increased significantly over the past year because of worldwide economic problems (Richard, 2005). Depression makes smoking more likely, and smokers are more likely to have symptoms of depression and anxiety (Robins, 1991).

## Post Partum Depression and Husbands' Drinking Habit

Table 44 PPD and Husbands' Drinking Habit

PPD among mothers and drinking habit of husband				
Husband's	PPD among Women		Total	p-Value
Drinking Habit	Yes	No		
Yes	41	256	297	$\chi^2 = 2.49$
No	5	73	78	d.f.=1
Total	46	329	375	p= 0.0764

Source: Field Survey, 2010

N = 375

Table 44 shows PPD of women and drinking habit of their husband. Out of 46 PPD women 41 (89.13%), women had a husband with a drinking habit and 5 (10.87%) husbands did not have a habit of drinking. But statistically, it was not significant (p= 0.0764).

## Post Partum Depression and Sleeplessness in Mothers

Table 45 Sleeplessness and PPD among Women

Sleeplessness and PPD among Women				
Sleeplessness	PPD	No PPD	Total	p-value
Yes	34	24	58	$\chi^2 = 131.94$
No	12	305	317	d.f.=1
Total	46	329	375	p= <.0001

Source: Field Survey, 2010

N = 375

Table 45 indicates an association between sleeplessness and PPD among mothers. In the study among 58 sleepless women 34 (58.62%) were suffering from PPD after delivery. it was statistically highly significant (p= <.0001).

## Maternal Stress and Sleeplessness

Table 46 Maternal Stress and Sleeplessness in Mothers

Maternal Stress and Sleeplessness in Mothers				
Sleeplessness	Mental Stress	No Stress	Total	p-value
Yes	51	7	58	$\chi^2 = 186.15$
No	26	291	317	d.f.=1
Total	77	298	375	p= <.0001

N = 375

Table 46 shows that maternal stress was associated with sleeplessness in mothers. Out of 58 sleepless mothers 51 (87.93%) were suffering from mental stress. It was statistically highly significant (p= <0.0001)

## Postpartum Depression and Mental Stress in Mothers

Table 47 Postpartum Depression and Mental Stress in Mothers

Postpartum Depression and Mental stress				
Mental stress	PPD	No PPD	Total	P-Value
Yes	42	35	77	$\chi^2 = 160.94$
No	4	294	297	d.f.=1
Total	46	329	375	p= <.000

Source: Field Survey, 2010

N = 375

Table 47 shows postpartum depression and reported mental stress. Among 46 postpartum depression 42 (91.3%) reported having mental stress. And only 4 (8.7%) PPD mothers reported not having mental stress. This was statistical, highly significant (p= 0.000). So, mental stress was one of the causes of PPD among Rajbanshi mothers.

## 4.6 Socio-Cultural and Psychological Effects on Health of Mother and Child

Culturally there are a number of good practices found in caring for pregnant and delivered woman who has a child. Giving nutritious food and to press lactating woman letting her create an environment where she acts only well is a woman practice. Care and support by husband, mother in law and other family make delivery safe. Many newborn care practices are typical and neonatal friendly.

First, of Baishak is also an occasion to worship *Thakur brahmani*. If someone fails to worship *Thakur Brahmani* she can cause a disease in the family. Usually, a woman who was unable to give birth or stillbirth treated for fertility and safe birth. They look *jokhana* and treat with *jadibuti*. These practices have prevented women from having to a proper care in time that may cause a life-threatening state in mothers. They suppose that a woman who has died the baby called *pithiya* is a cause of disease or illness. They believe if she touches a pregnant woman would have stillbirth or if she touches even child may cause disease or illness. Because traditional healer believes that a mother who had lost a baby already would attract another child to die. So, this kind of attitude of traditional healer on such mother results in discrimination and violates the human right. A woman or who had stillbirth called *chhatka* and if touched child becomes which can cause a delay in getting proper modern health care.

Reproductive health status of women has made not only ground for discrimination, such kind of practices have made ground for maternal and child mortality in *Rajbanshi* community. Apart from *ghar deota*, they believe that the role of an unholy woman who lost the baby before and *chhatka* woman who had stillbirth are responsible for causing different disease in the child. If *chhatka* or unholy woman touches a child may cause diseases like malnutrition and others. There was also a belief in an evil spirit or *bokshi*. Gender and the Social Construction of Illness is one such supplementary piece that provides a sociological understanding of gender and illness. So, if a woman gets some reproductive health problems like suffered stillbirth or had lost her baby would be victimized double. Firstly, she will have a medical or biological problem in her body and secondly, due to stigma and discrimination she would have the burden of mental health problem also. It can lead to mortality and morbidity in both mother and child.

*Rajbanshi* tradition of cutting umbilical cord is only by a *chamar* who considered socially low-caste. They are in limited number in the community. Sometimes, they are not available when needed. It causes delaying in cutting umbilical cord resulting excessive bleeding and results even maternal death. So, such kind of traditional practices makes vulnerable to mother and child. Such types of risky behaviors were then discouraged by the government. So, training and orientation to FCHV, mothers groups and health workers are given to educate mothers for delivery in hospital, delivery by skilled health workers along with safe delivery kits to distribute in the community. Now the situation been changed. Family members, TBA, skilled birth attendants are also been trained to use safety kit during home delivery which has sterile blade, thread, sheet etc.

Son preference culture and practice has guided to have more childbirth until of a son borns for a couple. So, it may lead maternal morbidity and mortality when more than two children born. The practice of care of mother did properly when boy baby borns, but when girl baby born the care of mother and baby becomes poor. This kind of gender discrimination also leads mortality of mother and child. With the

increase of health facility at periphery level, harmful practice like shaving head of newborn has been decreasing in Rajbanshi community. There was also decreasing in the practice of waiting for a particular caste of people chamar to cut umbilical cord at the community. There are some cases of neonatal or maternal deaths due to bleeding caused by delay in cutting the umbilical cord are now rare which was common before. In modern medical system and social realities issues of socioeconomic class, gender, ethnicity, and occupation often play out in the context. Epidemiological distribution of disease is not fair from one social group to another. Generally, very poor, labor, rural and traditional practice people have different rates of illness and mortality than general in *Rajbanshi* community.

According to the study on *Rajbanshi* of Nepal, traditional healers care the mental health problems. Traditional healers are treating mental health problems like anxiety and depression. According to social construction theory diseases are socially constructed within the context each particular culture. About 25-30 percent of OPD patients in hospitals are suffering from mental health problems. This number is growing because of conflict in society and unemployment increasing in the country. Traditional healers are the first choice of 11.47 percent people and they are one of the options who take care also of modern health facilities. So, traditional healers have a strong hold on the people since they are a part of their tradition and culture. Therefore, the bond with traditional healers was strong than any other community. Traditional healers are also claiming that they can treat almost health problems. Due to contact of traditional healers with modern care and getting orientation from health post they are aware of a medical emergency like diarrhea, pneumonia in children and delivery in women. The behavior of traditional healers also socially constructed to refer patients to modern care when danger signs noticed.

# CHAPTER 5: DISCUSSION AND CONCLUSION

## 5.1 Discussion

### Traditional Practices

*Guru Gosai, Gosai and Dhami or Ojha* are traditional healers in *Rajbanshi* community. Traditional practice was being used as the first option for caring pregnancy (16%), caring child (11.50%), caring mother (11.30%), and caring general population (11.47%) among *Rajbanshi*. Likewise modern care was the first option for caring pregnancy (84%), caring child (88.5%), caring mother (88.70%), and general population 88.53%. In rural areas 10.93% and in urban people 0.54% people were getting service from traditional healers as a first option prior to taking modern care. Respondents also reported that they are traditional people in their social life. They have their own tradition and culture. *Gosai* and *Gurugosai* are playing a vital role in the culture. So, *Rajbanshi* is familiar with both traditional and modern health cares. Increased trend of taking modern care in *Rajbanshi* community is socially constructed due to quick relief during emergency and illnesses, high treatment success rate by modern care, easy access to modern health services to periphery level and modern care based government health policy and program. Governmental and non-government organizations have trained traditional healers and TBA on different health topics and danger signs related to maternal and neonatal health. They have asked to refer patients to health institutions when danger signs appear. So, traditional healers are also familiar with the modern care and their behavior. Traditional health care system was found even accessible and affordable to poor, illiterate and rural people. Emergency cases and severe patients are not treated by traditional care due to its limitation, availability of modern health care facilities and increase awareness people. Gradual change in practice has been socially constructed. The government of Nepal has announced and managed free delivery service program, free health care for poor and target people but people still they have to pay cost directly or indirectly in the name of local management committee's decision, lab investigation, quality care, food, and transportation. There are still reported cases of being unable to get free service or treatment even from public hospitals. Therefore, very poor, illiterate people engaged in labor work and living in rural areas are forced to seek care from traditional healer which is easily available and affordable. They do not have enough money and also unable to borrow enough money to get the hospital. In this situation, there would be the only option to take care from a traditional healer who also performs death ritual in the case of patient dies.

### Traditional Practices during Pregnancy, Delivery and After Delivery

Traditional healers *Guru Gosai, Gosai, Dhami or Ojha* have their own perspectives to look after any health problems. *Guru Gosai* involves in birth, marriage and death rituals. *Gosai* and *Dhami or Ojha* give health care services. They are master of the *Rajbanshi* tradition and culture that's why they are also



respected. Traditional healers claimed that they have successfully treated sterile couple enabled them to have children. Traditional healers believe in a deity, fate, and tradition. They treat almost everything and claim that most of them get well. They have their own terminology of illnesses and condition. Health problem like *garva fulla* is a condition of oedema during pregnancy and *aali badhne* is the prevention of another stillbirth these however are considered risky conditions in modern medical science. They have treated the mothers by herbal medications like Buti and *Jadibuti*, *Jharphuk* and worship of a deity. If condition would not be better in 1-2 days they send patient to health institutions for modern care. However, referral system of traditional healers is good. It was noted that behavior of traditional healers is also socially constructed to refer patient after 1-2 days trail because they would not like to take the risk since modern care is locally available now.

Traditional healer looks patients by *jokhana* to find whether *ghar deota*, *kul deota*, *boksi* or others are causing disease or not. After diagnosis, they do *jharphuk* or worship of deities so and wait for 1-2 days to see results. If the condition is not improved by their traditional treatment they send mother or child for medical care in private clinics or health institutions. Now there is, at least, one government health post and a number of private clinics available in each village development committee. But private clinics and private practitioners are easily accessible as compared to public health post service. Now almost all VDC and its entire clusters have access to road and transportation. The local community has managed ambulance facility even in rural areas. In urban areas, there are a large number of private clinics, nursing homes and hospitals available to give health services.

*Morang*, *Jhapa*, and *Sunsari* are districts where Government of Nepal has introduced Community Based Maternal and Neonatal health program focusing pregnant mother and neonatal. Where Female Community Health Volunteers (FCHVs) contact each newly pregnant woman and give them counseling. They advise mothers to take modern health care like an antenatal check up (ANC), take TT vaccine and take Iron tablets from health institutions.

In *Rajbanshi* cultured family they consider a pregnant or delivered woman will need more nutritious foods. There is belief that a pregnant woman should take additional food for their fetus than usual diet taken. Family also suggests a pregnant woman to go to health institution for ANC check up. Pregnant women and delivered mothers are being loved and cared by family members. Mothers are also getting aware of taking TT vaccine, and to have iron tablets during pregnancy and after delivery. Husband or mothers in law advise to take rest and allow for only light works. A pregnant woman is not allowed to go outside to a crowd, bazar and to cross bridge. A pregnant woman is suggested to hear and watch only good things. Otherwise watching and hearing of bad things can harm to baby into womb.

### **Traditional Perspective on Causes of Diseases**

According to *Rajbanshi* culture, causes of diseases are: (1) Deity, (2) Witchcraft or woman who uses Tantra, Mantra, (3) Evil spirits or dead children, (4) *Pithiya/Chhatka*: touching or watching by women whose baby died or had stillbirths or abortions and (5) dirt or poor sanitation of houses.

If someone fails to worship kuldeota deity *cheta*, *Thakur*, *satguri*, *neman*, *akharia*, *barmahini* can cause disease. The anger of deity is major cause diseases. *Chhatka* is a woman who has had an abortion. When

*chhatka* touches a pregnant woman it can cause prolonged labor or abortion. Prolonged labour is due to the weakness of mother or it is due to carelessness and abnormal position of the fetus. Causes of diseases in children are different. In children causes of diseases are *kul deota*, witchcraft. Touching children by a *pithiya* cause the malnutrition in children. Some traditional healers also believe the cause of disease in children is carelessness, bad water, and poor sanitation.

### **Traditional Treatment Procedure**

Traditional healers find out the cause of disease or illness after looking *jokhana* in a patient. After *jokhana*, they prescribe treatment accordingly. *Rajbanshi* traditional treatment comprises of the treatment package. They worship the deity of house *Ghar deota* and do *jharpuk* by chanting mantras and sacrifice of animals or offer goods to deity. Sometimes they sacrifice animal or goods while treating in a treatment package. The treatment is done in a package by doing *jharpuk*, using *jadibuti*, *buti*, and promising *ferani* or *bhakal*. In *jharpuk* or *phukphak* they chant mantra 5 or 6 times. They use single or multiple methods according to the disease and severity. If it would not recover after 1-2 days be referred to a doctor.

The traditional healer does *jharpuk* using plant holy basil *tulasi* and bodhi pipal leaves. During *jokhana* process, the position of holy basil *tulasi* leaf into a water pot shows cause of illness. Traditional healers are treating almost all kind of disease and ailments of mother children. They are treating the menstrual problem, abortion, still birth, infertility in the mother. They are also treating fever, malnutrition in children. Traditional healers are also looking after a number of mental health complaints in women with anxiety, depression, insomnia, pain and backache.

### **Changes in traditional practices**

Traditional healers are a part of health care system in *Rajbanshi* community. They also know their limitations and so they do refer to health institutions. Since traditional healers have a piece of training from health posts they are aware of modern medications. They treat a case and hold usually for 1-2 days and if there is no sign of progress they refer the patient to a health facility. Usually, they refer people to clinics or hospitals are due to social construction. Geographically, *Rajbanshi* communities inhabited on plain areas and they have easy access to transportation to get health institutions. Due to efforts of government's public health programs focusing on mother and child and increased availability of health workers and volunteers at community now situation been changed. For example, out of 375 mothers 69.33% had traditional home delivery during first baby delivery that decreased by 29.23% during last baby delivery. Therefore, the practice of traditional home delivery has been decreased and hospital delivery been increased remarkably between first and last baby births in *Rajbanshi* mothers.

### **Modern Care Practices in Rajbanshi**

The situation in *Rajbanshi* community is *dual* in practices. People were adopting both traditional and modern care practices concurrently. A study conducted in *Jajarkot* also find people were adopting modern, traditional, and natural treatment through the use of herbal medicine and the home/family treatment by food and local herbs (Subba, 2003).

Traditional and modern care practice associated with the economic condition, occupation, education and geographical situation. Out of 375 samples, 30.67% practiced traditional and 69.33% practiced modern care during last baby delivery. Among very poor 18.87% practiced traditional (n=144). Among rich 4% practiced traditional (n=122). Very poor people adopted traditional care more and rich people adopted modern care practice more which was statistically highly significant ( $p < 0.0001$ ).

Practices were also studied by occupation. People by agricultural occupation out of 62 samples 2.67% practiced traditional and 13.6% practiced modern care system. Out of n=56 among service occupation, 2.4% practiced traditional and 14.93% practiced modern system. Out of 221 among labor occupation, 24.27% practiced traditional and 31.2% practiced modern system. Out of 33 among business occupation, 1.33% practiced traditional and 8.8% practiced modern system. Among different occupation ratio of using traditional and modern care are different. However, the ratio of traditional practice was high in labor and ratio of modern care practice was high in a business occupation. It was statistically highly significant ( $p < 0.0001$ ).

In Rajbanshi < 20 pregnancy rate was 12.27% which is better than national level 41.2% in Nepal (NDHS, 2011). Delivery practice on the basis of education of head of household was also studied. Out of 107 among illiterate 10.67% practiced traditional and 8% practiced modern system. Out of 107 among the non-schooling literate, 10.4% practiced traditional and 18.13% practiced modern system. Out of 96 among class 1-10 group, 6.67% practiced traditional and 22.93% practiced modern system. Out of 66 among SLC/IA, 1.6% practiced traditional and 16% practiced modern system. Out of 36 among BA+, 1.33% practiced traditional and 4.27% practiced modern system. Ratios of using traditional and modern care systems among different education levels were different. The ratio of traditional practice is high among low education levels. Likewise, the ratio of using modern care was high among high education levels. Therefore, practices of traditional or modern cares were associated with education levels that were statistically highly significant ( $p < 0.0001$ ).

### **Changes in Modern Care Practice**

During first baby delivery out of 375 mothers 260 (69.33%) had traditional home delivery and 115 (30.67%) had hospital delivery. During last delivery, out of 375, the proportion was 115 (29.23%) in traditional home delivery and 260 (69.33%) in-hospital delivery. Therefore, the trend of hospital delivery was increasing where the trend of traditional home delivery was decreasing between first and last deliveries. And the change in practice between first and last birth was statistically highly significant ( $p < 0.0001$ ). In the rural trend of home, delivery decreased from 70.73% to 34.28% between first and last delivery and trend of hospital delivery increased from 29.27% to 65.72% between first and last delivery. Likewise, in urban also the trend of home delivery decreased from 70.21% to 10.53% between first and last delivery and trend of hospital delivery increased from 29.79% to 89.47% between first and last delivery. Therefore, the trend of hospital delivery was increasing where the trend of traditional home delivery decreased. Change of practice both in rural and urban in between first and last baby delivery was statistically highly significant ( $p < 0.0001$ ). It was because of social, economic development, government's policy and safe motherhood program. In the safe motherhood program government of Nepal has managed incentives for both mothers and health workers. Woman gets Rs 500 from the government for transportation cost to go to the hospital for delivery. Health workers and hospitals also received

incentives for delivery conducted in health institutions (DoHS, 2069/70). So, mothers' behavior changed and socially constructed to have hospital delivery for a safer childbirth.

The change noted in the use of service providers in between first and last baby delivery. Using service of doctors or skill birth attendants has been increasing that's how more demand of hospital with skilled health workers has been socially constructed. Out of 375 mothers, use of TBAs was 8% during first baby delivery and only 1.87% used TBAs at last baby delivery. Similarly, use of Health workers at community was 6.67% during first baby delivery and 1.33% during last baby delivery. Use of TBA/CHW was 67.73% during first baby delivery that decreased to 27.2% during last baby delivery. Using HW/Nurse was 11.47 during first baby delivery was also decreased to 3.2% during last baby delivery. But, there was a remarkable increase in using Doctors/Nurse/HW at hospitals which were 6.13% during first baby delivery and increased to 66.4% during last baby delivery. Therefore remarkable changes noted in the use of skilled service providers between first and last babies delivery and it was statistically highly significant ( $p = <.0001$ ).

### **Habit of Use of Tobacco and Alcohol**

Smoking and drinking habits of both husband wife and mental health status of mothers studied in the study. Out of 375 among mothers, 1.60% was smokers and 1.33% had a drinking habit. Out of 375 among husbands, 46.93% was a smoker and 78.13% had a drinking habit. Therefore, risk behaviors like using tobacco and taking alcohol were remarkably higher in husbands. The study noted that out of 46 postpartum depressive mothers, 89.13% mothers had husbands with alcohol taking habit and 10.87% mothers had husbands with non-alcohol taking habit. Likewise, out of 46 PPD mothers 76.09% (35) mothers had a husband with smoking or tobacco taking habit and 23.91% (11) mothers had a husband with no smoking or no tobacco habit. Therefore, there was an association between PPD among mothers and husband's smoking/tobacco using habit. That was statistically highly significant ( $p = 0.00$ ).

### **Impact on Maternal Health**

Although traditional healers have not any scientific data on result and impact they just said their experience that now the number of deaths of mothers during pregnancy, delivery and after delivery has been remarkably decreased in the community than before. Remarkable changes experienced since last one decade. We used to notice 2-4 maternal deaths in the community usually due to bleeding before ten years. Now, transportation reached every VDC and even wards. The local community managed ambulance and other vehicle facilities. Health post, hospital, and clinics are now available in each locality. FCHVs and mothers groups are working there in each ward of VDC. Now, they often talk about care of a pregnant woman, preparation of delivery and role of a member on delivery during mothers' meeting.

By practice, a *Rajbanshi* mother initially goes to a traditional healer to make their *ghar deota* or *kul deota* happy and then visits hospitals for delivery and other treatment which is socially constructed. Therefore, mother and children treated by traditional and modern care system concurrently. Traditional healers also realized that this is the reason how maternal mortality has come down today. They also reported that FCHVs and health workers are now active to mobilize mothers groups in the community. Immunization program, vitamin distribution, iron tablets distribution programs are running effectively in the community. FCHVs are providing medicine for acute respiratory infection and for diarrhea at home. They

are also giving counseling service to mothers to improve the nutritional status of the child. TH and FCHV reported that they were also aware of danger signs of pneumonia and dehydration in children which are major killer diseases in children. Whenever they find any danger signs of pneumonia in ARI and dehydration in diarrhea they refer to the health post or hospital. These were major reasons responsible for decreasing morbidity and mortality observed in the community.

### **Maternal Mortality**

Maternal Mortality Rate has been estimated as 266/100000 in *Rajbanshi* community. One maternal death noted where home delivery conducted. The family was traditional practising very poor and rural family. Therefore maternal death was associated with economic status, dependency on traditional care and geographical condition. If we compare this with national data the overall Maternal Mortality Rate in 2009 for the eight study districts of Nepal was 229 per 100,000 live births, ranging from 153 to 301 by district (NMMMS, 2008/09). The MMR of Rajbanshi falls in between the range of eight districts of Nepal however MMR in Rajbanshi was higher than national level.

In *Rajbanshi* community out of 375 mothers' mental stress reported from 11.20% (42) and which was statistically associated with education, economic condition, practices and Postpartum Depression (PPD). Prevalence of PPD among 375 *Rajbanshi* mothers was 12.3% (46). Among 46 Postpartum Depression mothers 91.30% mothers had reported having mental stress. Out of 46 PPD mothers by economic condition 80.43% were very poor, by occupation 65.22% were from labour and 26.09% from agriculture, by education 45.65% were illiterate and by practice: 73.91% were traditional practicing families.

The study has found that economic conditions, education and smoking/drinking habits of husbands associated with mental stress in mothers and the mental stress in mothers were also associated with Postpartum Depression in mothers was statistically significant.

### **Impact on Maternal Health of Rural-urban Setting**

Contraceptive Prevalence Rate (CPR) was 58.67% recorded in the study, It was very interesting to note that the contraceptives use in urban was 48.08% and in rural it was higher as 60.37%. This is due to awareness and availability of contraceptives from FCHV and local health post. The CPR of Morang district was 62% in FY 2068/69 (HMIS/DPHO Morang, 2068/69) and CPR of Nepal was 43.73% in FY 2067/68. Therefore, the practice of use of contraceptives is Rajbanshi (58.67%) noted lower than Morang (62%) and higher than Nepal (47.3%).

In Rajbanshi, there is significant change observed in delivery practices. Home delivery conducted by 70.21% in urban and 70.73% in rural during first birth. It's almost same. But during their last baby birth, it has been declined to 10.53% in urban mothers and 34.28% in rural. Likewise, 89.47% urban mothers and 65.72% rural mothers have had hospital delivery during their last delivery. Delivery practice is gradually changing towards hospital delivery from traditional home delivery both in urban-rural setting but the degree was higher in an urban setting. According to the annual report of District Public Health Morang Report of FY 2068/69, the institutional or hospital delivery rate is 56% among expected number of deliveries in Morang district (HMIS/DPHO Morang, 2068/69). And Annual Report of Department of Health Services had noted institutional delivery in FY 2067/68 is 37% in Nepal (DOHS, 2067/68). Therefore, proportion of institutional delivery among Rajbanshi is better than Morang (56%) and Nepal

(37%). It indicates that today most of the maternal care in Rajbanshi mothers addressed by modern health care system.

### **Impact on Child Health**

Impact on child health depends on the reach of modern care available in the community. Access to modern health care for Rajbanshi community was good enough in terms of public health intervention such as neonatal and child health care services provided by the government. Among 375 pregnant women 96% had taken ANC care, 96.27% had taken TT injection, and 96% had taken Iron tablets. 57.87% women have ever used family planning contraception. Among <5 yrs children 99.2% were vaccinated and 97.9% had taken Vitamin A capsule.

Out of 724 children acute respiratory infection (ARI) was 196/1000 and diarrhoeal disease was 282/1000 in <5. In Nepal, the prevalence rate of ARI was 824/1000 and prevalence of diarrhoeal diseases was 500/1000 during FY 2067/68 (DoHS, 2067/68). Prevalence of anaemia among <5 children was 4.14%. Out of 30 anaemic children 21 (70%) were from traditionally practiced family and 9 (30%) were from modern care practiced family. So, the proportion of anaemic children recorded higher in the traditional practiced family than modernly practiced family. However, the prevalence of anaemia among Rajbanshi children (4.14%) was better than the status of Nepal 46% (NDHS, 2011).

Prevalence of underweight by height among under 5 was 72.53% in *Rajbanshi*. It is 41% in Nepal (NDHS, 2011). A study in Rupendehi district (Acharya, 2013) find out that more than the half the children (57.75%) were underweight who were born by mother less than 18 years of age whereas 75% were underweight born by mother aged above 35 years of age. More than half of the children were found underweight and Nearly 2/3rd of the children were found stunted. In India prevalence of underweight in Santhal tribe was 65.2% in west Bengal (Bisai, 2014). In a government report of India, the prevalence of underweight is 54% in schedule tribe and 34% in other (NFHS-3, 2005-6). Likewise, by the state, it was 60.8% in Chandigarh and 55.1% in Madhya Pradesh in India (IIPS, 2000).

Under five mortality rate in *Rajbanshi* estimated as 75.35/1000 live births. By practice 84.74% of child deaths recorded from traditional practice family and 15.25% of child deaths recorded from modern practice during first delivery (n=59). By economic condition 50.85% of child death recorded from very poor, 23.73% of child death recorded from poor and 25.42% of child death recorded from a rich family. By occupation 72.88% of child death recorded from labour, 10.17% of child deaths recorded from service holder, 8.47% of child deaths recorded from business and 6.78% of child death recorded from agriculture occupation. By education 54.24% child deaths recorded from illiterate, 24.42% of child deaths recorded from non-schooling literate, 15.25% of child deaths recorded from class 1-10 and 5.08% of child deaths recorded from SLC/IA. So, higher the education level, lower the child mortality rate. It was statistically significant ( $p=0.0005$ ). Nepal Demographic Health Survey 2011 showed Child Mortality Rate (CMR) is 54 per 1000 live births in Nepal. Therefore, the CMR of *Rajbanshi* was higher than the national level and it was reported as high from very poor, rural, illiterate, traditional practiced family.

### **Anaemia among Children**

Anaemia an indicator of nutritional status among <5 children has been studied by rural-urban setting. Out of the 156 anaemia, 82.05% was noted from rural and 17.95% was noted from urban. Out of 59 under five deaths 91.53% deaths recorded from rural and 8.47% deaths recorded from urban. Therefore impact on a child in terms of prevalence of anaemia and mortality are poor in rural.

### **Anaemia among Mothers**

In the study prevalence among mothers was 14.93% in *Rajbanshi*. The prevalence rate of anaemia among mothers was 35% (NDHS, 2011) in Nepal. According to the survey women in Terai were 42% anaemic and in Eastern development region 37% were anaemic women among aged 15-49 years. The anaemia in Rajbanshi women was better than the national level. Since *Morang*, *Jhapa* and *Sunsari* districts are Iron Intensification program launched by the government where Iron supplementation programme has been carried out by Female Community Health Volunteers in the community where they provide Iron tablets at home to each and every pregnant woman.

The proportion of anaemia among Rajbanshi mothers was also studied on the basis of education level. Out of 56 anaemia, 28% were illiterate, 36% were nonschooling literate, 25% in class 1-10, 7% were SLC/IA, and 4% were BA and above. The study noted that higher the education level, lower the anaemia proportion. Prevalence of anaemia among Rajbanshi mothers was 14.93% (n=375). Out of 56 anaemic women by economic condition, 66.07% was very poor, 19.64% was poor, and 14.29% was rich. By occupation 68% anaemic was from labour, 18% from agriculture, 9% from service and 5% of the business. By education 28% anaemic women were illiterate, 36% was nonschooling literate, 25% was from class 1-10, 7% was from SLC/IA, and 4% was from BA and above. By practice, 75% anaemic mothers have had home delivery and 25% have had modern practice or hospital delivery. Prevalence of anaemia was high between very poor, illiterate and traditional practicing Rajbanshi. Prevalence of anaemia between rural Rajbanshi was 52 (13.87%) and it was 4 (1%) in urban among 375 mothers. Therefore, the prevalence rate of anaemia found in rural Rajbanshi mothers was poorer than national level although average the prevalence rate of anaemia in Rajbanshi mothers is better than the national level.

### **Maternal Mental Health**

Mental stress is a self condition resulted by different factors told by mothers during interviews in the study. Mothers reporting mental stress to smoking habit of husband studied and find statistically associated. Among 77 mental stressed mothers 63.64% had a smoker and 36.36% had non-smoker husbands. The association between maternal stress and smoker husband was found statistically significant ( $p=0.002$ ). Among 67 stressed mothers 87.01% mothers had a husband with alcohol taking habit 10 (12.99%) mothers had a husband with no alcohol taking habit. The association between maternal stress and alcoholic husband was found statistically significant ( $p=0.05$ ). Mental stress was also associated with the economic status of mothers. Out of 77 mental stressed mothers, 63.64% were economically very poor, 20.78% were poor and 15.58% were rich. An Economic condition associated with mental stress in mothers was statistically highly significant ( $p<.0001$ ). Similarly, mental stress was also related with the educational level of mothers. Out of 77 mental stressed mothers, 42.86% were illiterate, 25.97% were

unschooling literate, 24.68% were class 1-10, and 6.49% were SLC/IA. Statistically, education associated with mental stress in mothers was also significant ( $p=0.01$ )

### **Postpartum Depression**

Prevalence of Postpartum Depression (PPD) in Rajbanshi mothers was 12.3%. Among 46 PPD mothers by education 46% were illiterate, 24% were non schooling literate, 26% were class 1-10, 4% were SLC/IA nil from BA and above ( $n=46$ ). By occupation 65.22% of PPD mothers was from labour occupation, 26.09% was from agriculture, 4.35% from service and business ( $n=46$ ). PPD in mothers by economic condition 80.43% was from very poor, 8.7% was from poor and 10.87% was from rich category. PPD was associated with health care practices. PPD was found more in traditional practicing mothers than modern practicing. Among 46 PPD mothers 73.91% mothers had delivered their first baby at home and 26.09% mothers had delivered in hospitals.

In the study it was found that smoking/tobacco using habits of husbands associated with PPD in mothers. Out of 46 PPD mothers 76.09% mothers had smoker husbands and 23.91% mothers had non-smoker. Smoking/tobacco using habit of husband and PPD in mothers was associated and found statistically significant ( $p= 0.002$ ). Out of 46 PPD mothers 91.3% had mental stress and 8.7% had no mental stress. Mental stress and PPD was statistically, highly significant ( $p=.000$ ).

Out of 58 sleepless mothers 38 (21.23%) had smoker husband and 20 (10.20%) had no smoker husband. Sleeplessness in mothers associated with husband's smoking/tobacco using habit was statistically significant ( $p= 0.005$ ). A study done in Japan has found that smoking habit of mother self-was definitely associated with PPD (Sato, Kitamiya, Yaegashi, 2013). In this study sleeplessness in mothers was also associated with husband's habit of taking alcohol was statistically highly significant ( $p= <0.0001$ ). Out of 58 sleepless mothers 51 (87.93%) was suffering from mental stress was also statistically highly significant ( $p=<0.0001$ ). Out of 58 sleepless mothers 34 (58.62%) were suffering from PPD. So, PPD associated with sleeplessness was statistically highly significant ( $p= <0.000$ ).

The study has uncovered mental disorders like Post Partum Depression (PPD), mental stress, sleepless, husband's habit of alcohol and tobacco use and impacts. By definition, Post Partum Depression (PPD) are transient, mild, time limited, and do not need treatment other than reassurance (Kennerly & Gath, 1989). Many new mothers may experience the “Baby Blues”. Up to 80% of moms, during the first few days or weeks, may express feelings of sadness, tearfulness, unwanted crying, sleeping problems, appetite disruptions, anxiety, and a feeling of general unhappiness (London Health Sciences Centre, 2011). Postpartum blues is the most common postpartum mood disturbance with prevalence estimates ranging from 30% to 75%. Symptoms begin within the immediate postpartum period and remit within days, include mood liability, irritability, fearfulness, generalized anxiety, and sleep and appetite disturbance.

Traditional family support and social support structure can play the role in lowering prevalence of PPD among Rajbanshi mothers. Low social support or social isolation have also been found risk factors for developing depression in the postnatal period (Baker and Taylor, 1997; Brugha et al., 1998; Nielsen Forman et al., 2000). Therefore, traditional family support and support structures can play a role on mother's health. Likewise, Functional help to the mother also relieves their normal workload. In Rajbanshi culture women provided with someone to take care of the mother, neonate, and older children



and do their household duties. There is also social recognition of her new role and status. In the cultures, Stern and Kruckman studied; there was a great deal of personal attention given to the mother. In China and Nepal, very little attention has been paid to the pregnancy; much more attention focused on the mother after the baby is born (Stern, G., & Kruckman, 1983).

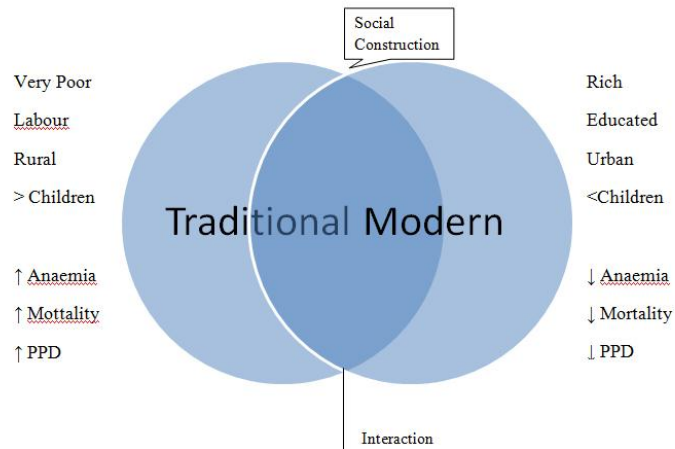
Now situation of Rajbanshi mother is changed in Nepal. Culturally *Rajbanshi* mothers are getting family and social support and recognition. Awareness in mothers and behavior has been changed because they have got 96% coverage of antenatal check-ups. It differs quite a bit from what Norwegian mothers' experience. The prevalence of depressive symptoms was 4.9% in Nepal, where it was 16.5% in Norway. It may appear from this study that depression in the postnatal period was more than three times as common in Norway as in Nepal (Signe, 2009). But in *Rajbanshi* community (12.27%) Postpartum Depression (PPD) is lower than in Norway.

Depressive symptoms in the postnatal period in Nepal were strongly associated with the woman's relationship with her husband, reflected through the custom of polygamy and the husbands' alcoholism. Postnatal depressive symptoms were also associated with previous depression, with experiencing mental stressful life events the previous year, depression during pregnancy, multiparity and smoking (Signe, 2009). The study finds the PPD experiencing mothers' husbands are taking alcohol (89.1%) and smoking (76.1%). Here the study has uncovered the associations between Postpartum Depression, husband's habit of using smoking/tobacco/alcohol, mental stress in mother as well socio-economic condition and cultural practices in *Rajbanshi*.

The habit of using tobacco and taking alcohol in Rajbanshi community was significantly associated with the health of mother and child in the study. Mothers whose husbands were smoker and drinker were significantly suffering from postpartum depression, maternal stress, and sleeplessness. When a mother suffers from physical or mental illness it obviously affects the health of her child also in terms of mortality, morbidity, and malnutrition in both mother and child.

According to Bourdieu (1989) success in the education system facilitated by possession of cultural capital and of higher class habitus. Lower-class pupils do not, in general, have these traits, so the failure of the most pupils is inevitable. He has explained how class inequalities in educational attainment legitimated in industrialised societies. During the course of field visit and analysis of data, a clear picture comes up in mind in which variables are grouping in two poles. Traditional care was more associated with poor people, illiterate, more than 2 children, labour, rural people, high child mortality, postpartum depression and maternal mortality wherein another side modern care associated with rich, literate, less than 2 children, urban people, low prevalence of anaemia, low prevalence of PPD, low child mortality and low maternal mortality grouped together. The Economic condition, education, occupation, and geographical variables associated with practice in adopting traditional or modern care and the practices were also associated with impacts such as maternal and child mortality, morbidity, mental health, and malnutrition.

### Practices and Impacts in Rajbanshi



The situation in *Rajbanshi* community is changing and the number of people adopting modern care practices increased. However, very poor, illiterate, urban and labour classes are still beyond the access of the modern health care and there was also high mortality between mother and child. Traditional healers were nearer to rural, poor and illiterate people. Variables like the richness and higher education and urban setting associated with lower mortality in mother and child. A mental health problem in mothers was also higher in poor and illiterate mothers. Traditional healers believe in the fate of people so they let the progress of disease upon the fortune of the patient could delay for proper medical care and support.

### **Uniqueness of the Study**

This study has uncovered general and stratified findings among Rajbanshi community. Both traditional and modern care were present in the community but very poor, illiterate, labour and remote people were adopting more traditional care and they were having higher maternal and child mortality, morbidity, and malnutrition. Despite changing trend of health care practice from traditional to modern, there was still traditional belief which are deeply rooted in mind and behavior of people by culture. Remarkable proportion i.e. 93.87% of the population was practicing both traditional and modern care concurrently. But there were still 11.47% people who were adopting traditional care before taking modern care. It is interesting to note that access to primary health care services like ANC, CPR, and vaccination was better than the national level. So, access and use of primary health care services for mother and child was very good. Therefore, indicators such as morbidity rate of ARI, diarrheal diseases in children and nutritional state in mother and child were better in comparison to Nepal.

But maternal and child mortality rates were found higher in Rajbanshi in compared to the national level of Nepal. It is due to poor health condition between very poor, illiterate, rural and traditional care dependent among Rajbanshi. Prevalence of PPD among mothers was not better which is also similar with national level. This study has explored the association of maternal mental health with husband's habits. It was found that there was significant association found between maternal stress and husband's habits of smoking and drinking. The study has pointed out the problem of PPD was localized between very poor, labour, illiterate and rural Rajbanshi. A Large proportion of children is underweight. It reflects their poor socio-economic condition and requires a nutritional program for children.

## 5.2 Conclusion

On the basis indigenous psychological perspective the study has uncovered findings on the culture of caring of mother and rearing of a child, traditional beliefs on causes of illness or diseases, diagnosis procedure, treatment package and preventive measures in *Rajbanshi* community.

Traditional healers start diagnosis by looking at *jokhana* when clients come with complaints about treatment. Treatment is determined by the *jokhana* which finds out the cause of illness or disease. The procedure of *jokhana* goes ahead with leaves of holy basil *tulsi* and water taken from a bronze pot. Movement of leaf indicates the cause of illness in the patient. Based on the *jokhana* traditional healer chants respective mantra and performs *jharphuk* and gives *jadibuti*. There are promises and offer of animals or goods to deity *ferani* or *bhakal* taken place. The *ferani* for *brahmahini* is a pigeon, rice pudding for *mata* and *gaheli* requires a duck.

Traditional practice in *Rajbanshi* culture comprises of the treatment package. The treatment procedure is done with (1) Chanting mantra *jharphuk* or *jokhana* (2) Herbal *jadibuti* to take, (3) *buti* to wear over the neck or upper arms (4) *ferani* or *bhakal* and sacrifice of animals and goods. They use single or multiple methods of healings practices according to the disease and severity. Witchcraft or *vasota* is treated by enchanting mantra *jharphuk* by *Gosai*. A mother who has ever baby died or stillbirth called *pithiya* and mother who has ever abortion called *chhatka* considered unholy and need treatment by chanting of mantras and sacrifice of a pigeon. Jaundice is treated by combination herbal *jadibuti*. Deformity of arms and legs treated by giving *jadibuti* and massage with mantra treated mustard oil over affected parts. For eye problem *fulli katda* there is sparkling of mantra treated water on eyes with holy basil *tulsi* leaf in a pot. In preparing *jadibuti* they use neem leaf, the skin of mango plant, different grasses. Traditional healers define natural abortion or prolonged labour is a condition caused by touching of *chhatka* and also due to weakness, carelessness of mother and abnormal position of the baby are treatable with *jharphuk* and *jadibuti*.

Preventive measure in traditional care for safe delivery *aali barne* takes place when a woman becomes pregnant. A *buti* is given by traditional healer to wear over the neck or upper arm on full moon day *Purnima* or on new moon day *aushi*. The *buti* which is given for *aali badhne* made from banana plant *kurkuria*, thread, pigeon, white cloths, niddle, sacred basil *tulsi* leaf, betal leaf, and nut. A *tika* of ghazal applied over the forehead to protect baby from evil eyes. If a woman does not sit on a seat *pirca* known as one who practices tantra/mantra. Children are taken away from such woman and she would not allow to touching a child. A weapon knife or *kachiya* is kept under the bed of the child to prevent from evil spirits and bad eyes.

According to *Rajbanshi* culture, a woman called *pithiya* whose baby died or stillbirth and a mother called *chhatka* who had ever an abortion. People believe that tantra/mantra practicing women can harm. These women cause of diseases in mother and child. That is unfair and unscientific and that threatens the health of the mother and her child. Son preferring cultural value has tempted discrimination in caring mother and newborn about delivery. The family would not become happy when a mother gives birth of girl child. It affects the care of mother and child. Poor care of mother and baby makes them vulnerable. Son preferring

culture and practice even leads more births and more number of births has a negative impact on maternal and child mortality.

*Rajbanshi* still has a tradition of shaving head of the newborn baby and cutting umbilical cord by *hazam*. A case of neonatal tetanus after shaving head by unclean blade reported in Jhapa. *Hazam* shaves off the head of neonates. Sometimes in searching the *hazam* to cut umbilical cord right after delivery can cause delay to find. Delay in cutting umbilical cord cause vaginal bleeding which is one of the major causes of death of mother and baby. However people mostly are aware of using new blades to shave on the day of nwaran or chhatiyar and when cutting the umbilical cord.

On the basis of social construction perspective, the study has identified findings on dualism and modification of practices. There was 93.87% population practicing both traditional and modern practice concurrently. There was traditional practice being used as the first option for caring pregnancy was 16%, caring child 11.50%, caring mother 11.30% and caring general population 11.47%. Similarly, modern care being practiced as the first option for caring pregnancy was 84%, caring child 88.5%, caring mother 88.70% and general population 88.53%. There is an increased trend of taking modern care system that is socially constructed due to quick relief during emergency and illnesses, treatment success rate from modern care, access to modern health services up to periphery level and provision of modern care based government health policy. Traditional healers do not take more risk and refer serious cases. Despite limitations traditional health care system is more accessible and affordable for treatment. However, people were adopting both traditional and modern care according to case and severity at a different level among different strata of social, economical and geographical setting.

In modern care, the trend of hospital delivery increased from 30.67% to 69.33% whereas trend of home delivery decreased from 69.33% to 29.23% between first and last births. There was also remarkably increased in the use of trained HW/Nurse/Doctor at hospitals by 66.4% at last delivery which used by only 6.13% at first baby delivery. That was statistically highly significant ( $p < 0.0001$ ). The trend of home delivery decreased in rural from 70.73% to 34.28% between first and last delivery and trend of hospital delivery increased from 29.27% to 65.72% between first and last delivery. In urban trend of home delivery decreased from 70.21% to 10.53% between first and last baby delivery and trend of hospital delivery increased from 29.79% to 89.47% between first and last delivery. Government of Nepal has managed incentives for both mothers and health workers. Because of the government's policy and program being conducted under safe motherhood program and increased awareness among mothers there was also change in use of service providers among deliveries. People like to use service of doctors or skill birth attendants and they demand good hospital setting with skilled health workers; the change came gradually through socially constructed. Among 375 mothers, use of Doctors/Nurse/HW at hospitals, was 6.13% during the first delivery and increased by 66.4% during last delivery. The change in use of skilled service providers between first and last baby births was statistically highly significant ( $p < 0.0001$ ). Mothers' behavior has been socially constructed to prefer hospital delivery for safer child births. Delivery among under twenty is 12.27% in *Rajbanshi* which is better than the national level of Nepal (41.2% in 2011).

On the basis of the public health perspective, the study has identified the practice and impact of traditional and modern care system on maternal and child health in *Rajbanshi*. It has found out the health situation of *Rajbanshi* community at the nation and within the community by major public health indicators. The indicators like the prevalence of anaemia between mother and child, Contraceptive Prevalence Rate (CPR), the prevalence of Acute Respiratory Infection (ARI), the prevalence of diarrhoeal diseases, and coverage of vaccination are better than the national level. But, the indicators on maternal mortality rate, child mortality rate, maternal mental health PPD, and nutritional state of body weight in children are poor among *Rajbanshi* in comparison to the national level. These impacts were more prevalent between traditional care practiced, very poor, illiterate, family with more than 2 children, labour class, and rural people. Traditional care was found associated with poor people, illiterate, labour, rural people, high child mortality, postpartum depression and maternal mortality where modern care was found associated with rich, literate, less than 2 children, urban people, low prevalence of anaemia, low prevalence of PPD, low child mortality and low maternal mortality.

There are variables such as economic condition, education, occupation, and geographical situation found associated with practices. And practices associated with the impacts: maternal and child mortality, morbidity, mental health, and malnutrition. Husband's smoking/tobacco use and alcohol taking habit associated with maternal stress and sleeplessness in mothers. Maternal stress and sleeplessness in mothers associated postpartum depression (PPD) in mothers. Husband's smoking habit associated with PPD among mothers.

*Pithiya* is mothers who have ever lost the baby or stillbirth. *Chhatka* is mothers who have had ever abortion. Women who practice the tantra/mantra are causes of disease or illness in the culture. The community looks above mentioned women as unholy and danger person. They are social discrimination. So, *pithiya*, *chhatka* mothers and so-called tantra/mantra using women between very poor, illiterate, rural and traditional practiced families are at risk with their child and family. Practices of cutting umbilical cord and shaving of newborn's head only by hazam are risky health practices.

Pregnant and lactating mothers need mental health program and counseling to improve maternal health. Nutritional program and awareness are also required to improve child health. They also need awareness of reproductive health and reproductive right.

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# APPENDIX

## Tools for data collection

### Semi-structured questionnaire for household (Tool-1)

Tribhuvan University

Institute of Humanities and Social Science

Dean's Office, Kirtipur, Kathmandu

*Traditional and Modern Maternal and Child Care Practices and Impacts on Health of Rajnansi in Nepal*

(For the purpose of fulfillment of the requirement of Ph.D)

Date: 2066/ / Dist: .... VDC ... Ward No. .. House No.

#### 1. Demographic Information

S N	Name	Age	Relation	Occupation	Education	Economic Status a, b, c & Land

(Note: a = able to feed for >1 yr, b = able to feed for 6 m, c = able to feed for <6 m)

#### 2. Maternal Mortality detail

S N	Name	Age	Date of death	Cause
1				
2				
3				

### 3. Mother

#### 3.1 Physical Health Status

Name of Mother:

Number of born babies

Number of <1 yr child

Number of <5 yrs child

Number of died babies

<1 yr child died in this year

<5 yr child died in this year

Birth place of youngest baby	Home	Hospital		
Help taken from	TBA, FH	HWs	Nurse	Doctor
TT vaccine taken	Yes	No	Times	
ANC Check Up	Yes	No	Times	Doctor
PNC Check Up	Yes	No	Times	
Iron Tablets taken	Yes	No	Months	
Family Planning Contraceptive	Used	Not used	C	
STI any infection	Yes	No	T/t place	
Uterine Prolapse	Yes	No	T/t place	
HIV/AIDS	Heard	Not Heard		
Prevention of HIV/AIDS	Not told	Told 1	Told 2 or >	
Anaemia (by Physical Exam)	Yes	No		

### 3.2 Mother's Mental Health Status

#### Baby Blues

- Have mood swings
- Feel sad, anxious, or overwhelmed
- Have crying spells
- Lose your appetite
- Have trouble sleeping
- Thoughts of hurting the baby
- Thoughts of hurting yourself

#### Postpartum depression

- Tired after delivery
- Tired from a lack of sleep or broken sleep
- Overwhelmed with a new baby
- Doubts about your ability to be a good mother
- Stress from changes in work and home routines
- An unrealistic need to be a perfect mom
- Loss of who you were before having the baby
- Less attractive
- A lack of free time

#### Post partum Psychosis

- Seeing things that are not there
- Feeling confused
- Having rapid mood swings
- Trying to hurt yourself or your baby

### 3.3 During last delivery how was your sleep?

(a) Inadequate sleep, (b) adequate sleep, (c) oversleep

### 3.4 What do you think about your stress and how much workload do you have? ...

### 3.5 Habit of mother: Smoking Yes/No, Drinking Yes/No

### 3.6 Husband's habit: Smoking Yes/No, Drinking Yes/No

### 3.7 Does your husband have another wife *sauta*? Yes/No

### 3.8 Any woman did suicide in the house or you heard in this community? Yes/No



#### 4. Under 5 year child

SN	Name	Age	Vaccine N/Y	Vita A Y/N	ARI (inf./yr)	Diarrhoea (inf./yr)	Other inf./yr	Anaemia	Height/ weight
----	------	-----	----------------	---------------	------------------	------------------------	------------------	---------	-------------------

1

2

3

4

5

4.2 Where do you go to treat when mother and child get sick? (Mention 1,2,3,4 as said by the respondent serially)

( ) dhami/jhakri, ( ) Hospital/health post, ( ) local private clinics

4.3 Where do you go to treat when a child gets sick? (Mention 1,2,3,4 as said by the respondent serially)

( ) dhami/jhakri, ( ) local private clinics, ( ) Hospital/health post ( ) Quack, ( ) India, ( ) other

4.4 Where do you go to treat when mother gets sick? (Mention 1,2,3,4 as said by the respondent serially)

( ) dhami/jhakri, ( ) local private clinics, ( ) Hospital/health post ( ) Quack, ( ) India, ( ) other

## **Guidelines for case study and indepth interview with mothers (Tool-2)**

1. How did the preparation for last delivery?
2. What did role play during your last pregnancy and delivery?

By husband...

By mother in law..

By sister in law...

By brother in law...

By neighbour...

Other...

3. Who decided in taking care and support during your last delivery and pregnancy?

a. Husband      b. Mother in law      c. Mother self      f. other ....

4. What problems you faced during pregnancy and delivery?

5. Expenditure on following topics?

- a. For health worker Rs....
- b. For hospital Rs...
- c. For transportation Rs...
- d. For food and lodge Rs...
- e. Other ..... Rs...

6. After child birth

- a. Cutting of cord with ...
- b. Cutting of cord by whom...
- c. Cutting of cord after ... hrs of birth
- d. First time breast feeding by mother after ... mins/hrs of the birth
- e. Colustrum milk feed or not?
- f. Bathing of the new born baby .... After hrs of the birth

g. Did you shaved head of the neonate? Y / N

h. If shaving yes,

- a. Shaving after ... days of birth
- b. By whom ...
- c. With what ...

7. Other traditional rituals conducted in the house?

On 1<sup>st</sup> day...

a. On 2<sup>nd</sup> day

b. On 3<sup>rd</sup> day

c. On 4<sup>th</sup> day

d. On 5<sup>th</sup> day

e. On 6<sup>th</sup> day

f. On 7<sup>th</sup> day

g. On ... day...

**8. New born Care**

8.1 How you conduct the ritual of the naming of the baby?

8.2 How long you had exclusive breastfeeding? (In months) ...

8.3 From when you feed supplementary feeding to your youngest baby? (In months) ...

8.4 What food you feed as supplementary feeding? ...

8.5 What you did after 45 days of delivery? ...

8.6 Did you go for taking PNC care? Y / N

8.7 If PNC yes, where you went for?

a. Health Post, b. Hospital, c. A private clinic, d. Nursing clinic, e. Other ...

8.8 How did you took care your neonate?

8.9 Your age at marriage?

8.10 Your age at your first baby born?

8.11 What kind of problems you faced during pregnancy and delivery?

Pregnancy...

Delivery...

8.12 What kind of support and care you got from your family during the puerperium?

8.13 Did you think that you have enough care and love during the puerperium as per expectation?

8.14 How much attention and love you got during delivery?

8.15 What kind of response you got for a child's sex?

**Guidelines for interview or indepth interview with Health workers, TBA, Local resident and for FGD (Tool-3)**

Name:                                      Age:                                      Address:                                      Occupation:

- 1 What is the traditional procedure of delivery?
- 2 What roles of family members are there when a woman gets pregnant or when she gets delivery?
- 3 What traditional ways during pregnancy?
- 4 What precautions taken during pregnancy?
- 5 How caring of delivered mother and newborn done?
- 6 What mental changes or problems seen in delivered mothers?
- 7 Who is the decision maker in taking health care in the family?
- 8 We we do after delivery for mother and child?
- 9 How we family members feel about the sex of the baby?
- 10 What are differences in practices between past and present situation?

**Guidelines for interview with Traditional healer (Tool-4)**

Name:                                      Age:                                      Address:                                      Occupation:

- 1 What disease and illness are found in Rajbanshi community?
- 2 How we treat these disease and illness by traditional care?
- 3 What are reasons for disease and sickness in mother and child in the community?
- 4 What deity or faults are responsible for disease or illness?
- 5 What should we do to treat the disease or illness?
- 6 What traditional practice is there to care for the health of mother and baby?
- 7 What type of diseases or illnesses you are treating and how much is affect your treatment?
- 8 What do you do if a patient dies during the treatment?
- 9 What kind of herbal medicine do you use during *jharphuk*?

10 What is the reason for prolonged labour? What do you do for that?

11 What do you do for malnutrition?

12 What is the traditional procedure of abortion?

13 In what situation do you refer patients to doctor or hospital?

14 How did you learn this traditional knowledge? From whom and where did you learn? How long course was?

### **Physical Examination of mother and child (Tool-5)**

1 Mother: Examination of eye, tongue, nail, tongue and palm to see anaemia.

2 Under 5 Children: Examination of eye, tongue, nail, tongue and palm to see anaemia and measure weight by weighing machine and measure height by measuring tape.

## Tool- 6

# Edinburgh Postnatal Depression Scale<sup>1</sup> (EPDS)

Name: \_\_\_\_\_ Address: \_\_\_\_\_

Your Date of Birth: \_\_\_\_\_

Baby's Date of Birth: \_\_\_\_\_ Phone: \_\_\_\_\_

As you are pregnant or have recently had a baby, we would like to know how you are feeling. Please check the answer that comes closest to how you have felt **IN THE PAST 7 DAYS**, not just how you feel today.

Here is an example, already completed.

I have felt happy:

- ☐ Yes, all the time
- ☒ Yes, most of the time      This would mean: "I have felt happy most of the time" during the past week.
- ☐ No, not very often      Please complete the other questions in the same way.
- ☐ No, not at all

In the past 7 days:

- |   |   |
|---|---|
| 1. I have been able to laugh and see the funny side of things | *6. Things have been getting on top of me   |
| <input type="checkbox"/> As much as I always could            | <input type="checkbox"/> Yes, most of the time I haven't been able to cope at all |
| <input type="checkbox"/> Not quite so much now                | <input type="checkbox"/> Yes, sometimes I haven't been coping as well as usual    |
| <input type="checkbox"/> Definitely not so much now           | <input type="checkbox"/> No, most of the time I have coped quite well             |
| <input type="checkbox"/> Not at all                           | <input type="checkbox"/> No, I have been coping as well as ever                   |
| 2. I have looked forward with enjoyment to things             | *7. I have been so unhappy that I have had difficulty sleeping                    |
| <input type="checkbox"/> As much as I ever did                | <input type="checkbox"/> Yes, most of the time                                    |
| <input type="checkbox"/> Rather less than I used to           | <input type="checkbox"/> Yes, sometimes   |
| <input type="checkbox"/> Definitely less than I used to       | <input type="checkbox"/> Not very often   |
| <input type="checkbox"/> Hardly at all                        | <input type="checkbox"/> No, not at all   |
| *3. I have blamed myself unnecessarily when things went wrong | *8. I have felt sad or miserable  |
| <input type="checkbox"/> Yes, most of the time                | <input type="checkbox"/> Yes, most of the time                                    |
| <input type="checkbox"/> Yes, some of the time                | <input type="checkbox"/> Yes, quite often   |
| <input type="checkbox"/> Not very often                       | <input type="checkbox"/> Not very often   |
| <input type="checkbox"/> No, never                            | <input type="checkbox"/> No, not at all   |
| 4. I have been anxious or worried for no good reason          | *9. I have been so unhappy that I have been crying                                |
| <input type="checkbox"/> No, not at all                       | <input type="checkbox"/> Yes, most of the time                                    |
| <input type="checkbox"/> Hardly ever                          | <input type="checkbox"/> Yes, quite often   |
| <input type="checkbox"/> Yes, sometimes                       | <input type="checkbox"/> Only occasionally  |
| <input type="checkbox"/> Yes, very often                      | <input type="checkbox"/> No, never  |
| *5. I have felt scared or panicky for no very good reason     | *10. The thought of harming myself has occurred to me                             |
| <input type="checkbox"/> Yes, quite a lot                     | <input type="checkbox"/> Yes, quite often   |
| <input type="checkbox"/> Yes, sometimes                       | <input type="checkbox"/> Sometimes  |
| <input type="checkbox"/> No, not much                         | <input type="checkbox"/> Hardly ever  |
| <input type="checkbox"/> No, not at all                       | <input type="checkbox"/> Never  |

Administered/Reviewed by \_\_\_\_\_ Date \_\_\_\_\_

<sup>1</sup>Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 150:782-786.

<sup>2</sup>Source: K. L. Wisner, B. L. Parry, C. M. Piontek, Postpartum Depression N Engl J Med vol. 347, No 3, July 18, 2002, 194-199

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