

## **CHAPTER -V**

### **DISCUSSION**

This chapter deals with the discussion on findings of the present study. The discussion is based on data which has been gathered from the mothers who live in the Mavaiya Slum Area of Lucknow City. In present study socio-demographic factors, antenatal care, delivery care and knowledge, attitude and practices regarding newborn care have been studied.

#### **6.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS**

The present study shows that the maximum respondents 57.5 per cent belong to 26-30 years and 28 per cent of respondents from 21-25 years age group. 6.5 per cent respondents were from 15-20 year's age group and 7.5 per cent respondents were above 30 years. So it's evident that majority of mothers are from 26-30 year age group. Majority of the respondents that is 86 per cent belong to Hindu religion, 13.5 per cent belong to the Muslim religion, and only 0.5 per cent belongs to the Christian religion.

#### **SOCIO-ECONOMIC FACTORS**

In this study, availability of house facilities, water facility, education, income, and occupation was used as proxy socio-economic indicators of the respondents. Majority of respondent 53 per cent monthly income is more than Rs. 5000, whereas 39.5 per cent have Rs. 2501 to 5000, 7 per cent have Rs. 1001 to 2500 and only 0.5 per cent have less than Rs. 1000 monthly income. Majority of respondent 71.5 per cent were live in "Pakka" house that means their house facility is good. More than half of the respondents 87 per cent are Housewife, 4 per cent are involved in Daily wages job, 2.5 per cent have the government job, and 6.5 per cent have a private job. This shows that women who live in slum areas are house maker. Maximum women have primary education status, 19 per cent have the high school, 12 per cent are higher secondary, 18 per cent are graduates, 6 per cent are post-graduates, and 20 per cent are illiterate in our data set. Maximum respondent 65 per cent have the public water supply at home as the source of drinking

water, 29 per cent public water taps being used as a source of drinking water and 6 per cent have their hand pumps as a source of drinking water.

Relating **Deogaonkar's** assertion on Socio-Economic Factors, it was realized that the respondents' ability to adopt healthy newborn care practices at the household level was influenced by their lack of regular or major source of income, with regards to the 37 per cent respondents who are engaged in petty trading and the 22 percent of respondents who are unemployed. This is confirmed by **McCarthy and Maine, 1992**, that the aggregate family income, occupation, and education of family members could affect and assess the health care for the woman and her newborn baby.

## **6.2 ANTENATAL CARE**

Good care during pregnancy is important for the health of the mother and the development of the unborn baby. Pregnancy is a crucial time to promote healthy behaviors and parenting skills. Good ANC links the woman and her family with the formal health system, increases the chance of using a skilled attendant at birth and contributes to good health through the life cycle of the newborn. Inadequate care during this time breaks a critical link in the continuum of care and affects both women and her newborn baby.

This study revealed that 72 per cent pregnant women antenatal care were done at home, 0.5 per cent at parent's house, 4 per cent at other's house, 12.5 per cent at Government hospital and 11 per cent at a Private hospital. 86.5 per cent pregnant women received one antenatal check-up, 8.5 per cent received two checkups, 1.5 per cent received 3 antenatal checkups, 1.5 per cent received four antenatal checkups, .5 per cent received .5 per cent received antenatal care 5 times, and 1.5 per cent could not exactly specify the number times antenatal care was received.

A pregnant woman enjoys many benefits when she attends ANC and delivers in an appropriate health facility. Also, pregnancy must be supervised by a trained health personnel and labor attended to by a skilled birth attendant. Furthermore, the woman on her part is expected to book early and attend the adequate number of ANC before

delivery. ANC attendance has been measured based on the proportion of women who have attended ANC at least once during pregnancy. World Health Organization (WHO) in 2002 recommended that pregnant women should attend ANC at least 4 times starting from the first trimester. The current ANC schedule recommends that pregnant women should book for ANC during the first trimester after that attend ANC clinic as follows; 4 weekly until 28 weeks gestation, 2 weekly until 36 weeks gestation and weekly until delivery. Evidence available suggests that most women who attend ANC in the country do not receive adequate attention and care providers are overwhelmed by the number of pregnant women seeking antenatal care. Consequently, some advocates have argued for the adoption of focused ANC care, in which case a woman attends ANC 4 times during pregnancy at specific intervals as recommended by WHO. This allows for adequate attention to be given to each pregnant woman while high-risk pregnancies are better monitored.

This study reveals that 5 per cent women increased their food intake during the pregnancy, 21 per cent increased food intake most of the time, 3 per cent increased their food intake after half of the pregnancy time, 69 per cent increased food intake only sometimes and 2 per cent did not increase their food intake. The financial arrangement for the delivery was done by saving money in all the cases. The social, family and community context and beliefs affected the health decisions during pregnancy either positively or negatively. Some cultures promote special foods and rest for pregnant women, but in others, pregnancy is not acknowledged. In these cases, women continue to work hard, and nutritional taboos may deprive them of essential nutrients, adding to nutritional deficiencies, particularly iron, protein, and certain vitamins. In one tribe in Nigeria, pregnant women cannot say they are pregnant, and if they feel unwell, they have to say that they have “swallowed a cockroach.

32 per cent pregnant women were administered TT vaccine within the first month of pregnancy. 68 per cent pregnant women were administered TT vaccine within the Second Month of Pregnancy. The Tetanus Toxoid (TT) vaccine is given during pregnancy to prevent the risk of tetanus to a mother as well as their unborn baby.

Demands for the folic increase during pregnancy because it is also required for growth and development of the foetus. Folic acid deficiency has been associated with abnormalities in both mothers (anaemia, peripheral neuropathy) and foetuses (congenital abnormalities). Dietary supplementation with folic acid around the time of conception has long been known to reduce the risk of neural tube defects (NTDs) in the offspring. The study finding shows that 89.5 per cent received Iron Folic Acid tablets or syrup, but 10.5 per cent did not receive Iron Folic Acid tablets or syrup.

Malnutrition is the major cause of death among children in India. According to Dr. B.M. Chauhan (1981), the magnitude of the problem is that one lakh children die either directly or indirectly due to malnutrition. The ICDS programme acknowledged that young child is most vulnerable to malnutrition, which leads to morbidity and mortality of children under six years. This program helps to promote holistic development of children under 6 years through Anganwadis at the community level. From the study, it has been observed that 27.5 per cent pregnant women received Supplementary nutrition from Anganwadi centers during their pregnancy whereas 72.5 per cent did not receive supplementary nutrition from the Anganwadi centers.

### **6.3 IMMEDIATE NEWBORN CARE**

The study revealed that approximately 96.5 percent of respondents said that their babies cried spontaneously after delivery. Breastfeeding the infant was started by the mother just after birth by 57 per cent, after a few hours after birth by 32 per cent, one day after birth by 4 per cent and 7 per cent started after a few days. Similarly, A study on **Household Practices that Influence Neonatal Survival in the Asante- Akim North District of the Ashanti Region** conducted by **Marah Awunyo**, (2011) found that 88 percent of respondents recalled that their babies cried spontaneously after delivery, 11 percent said their babies did not cry, and that they were either bathed or slapped at the buttocks etc. before they cried, and 2 percent of respondents couldn't tell whether their babies cried spontaneously after birth or not. This shows that the WHO(1996) recommendation on observing that the newborn baby for crying and breathing was being

adhered to; however, there is the need for a more extensive education on observing babies to cry spontaneously after birth by health care providers.

The finding shows the time of immunization of baby, i.e., 76 per cent infants were given BCG vaccine at the time of birth, 7.5 per cent were given within one week, 12 per cent within a month and 4 per cent others (after schedule). 0.5 per cent mothers did not remember when their child was given BCG vaccine. WHO (1996) stipulates that in all populations at a risk of tuberculosis, BCG should be given as soon as possible after birth. A single dose of OVP should be given at birth or two weeks after birth to help in protection from an early stage. The Hepatitis B vaccine should be integrated into national health programs and in areas more prone to the infection. The doses should be administered soon after birth.

A study conducted in an urban slum of Mumbai shows that the most cost-effective public health intervention to save more children is immunization. Immunization among children is necessary to annihilate preventable diseases of childhood (Kulkarni *et al.*, 2013).

#### **6.4 DRYING AND WARMING TO NEWBORN**

The methods used to keep the infant warm at home was done by clothing the baby appropriate to the climate by 95.5 per cent, keeping warm in the cradle by 2 per cent and by keeping the baby along with the mother by 2.5 per cent mothers. Similarly, A study on **Household Practices that Influence Neonatal Survival in the Asante- Akim North District of the Ashanti Region** conducted by **MarahAwunyo**, (2011) found that 62 percent of respondents had their babies bathed immediately after birth, 20percent had their babies bathed between 1-2 hours, while 2 percent had their babies bathed days after birth (probably due to the fact that their babies were sick or from the fear that the child might catch a cold). Similarly, a study in Nepal reports that newborn babies are considered dirty since they came out of their mother's womb, so almost all newborn babies are bathed within the first hour after delivery. Meanwhile, **Khadduri et al.**, (2007) also report in their study that *Dais* leave newborns unattended to, sometimes on the floor

until the placenta is delivered, then the babies are washed with warm water and soap 1-2 hours after delivery, and that the *Dais* hardly wipe babies with a damp cloth. This suggests that the WHO's (2006) recommendation, supported by **Parlato et al.**, (2005) that there should be delayed bathing for 4-6 hours is not being practiced.

## **6.5 CORD CARE AFTER DELIVERY**

The study reveals that out of 200 respondents 86.5 per cent were delivered the baby at the hospital and 13.5 per cent were at home. The total home deliveries were 13.5 per cent. All 27 respondents used the new blade for cutting the umbilical cord. Similarly, a study on **Household Practices that Influence Neonatal Survival in the Asante-Akim North District of the Ashanti Region** conducted by **Marah Awunyo**, (2011) found that 34 percent respondents recalled that sterilized pairs of scissors were used by their attendants to cut the cord, (only practiced in institutional deliveries), 20 percent said new shaving blade was used, 46 percent could not tell what was used, this suggests that 45 materials such as grass and reeds mentioned by Woodruff et al, (1984) may have been used.

The surfaces on which the Umbilical Cord was cut on were plastic disc, wood or a coin. The results generated were that 22 per cent Umbilical cords were cut on a Plastic disk, 63 per cent on a wooden surface and 15 per cent were cut on a coin in the 27 per cent deliveries done at home. The methods used to clear the mucous and amniotic fluid from the lungs of the new infant are by hanging upside down, slapping the back or any other methods. 1 per cent new-born's airway was cleared by hanging upside down, 1.5 per cent by slapping the back and 0.5 per cent by bulb syringes or by hypodermic syringe without the needle. 0.5 per cent didn't remember how the airway of their child was cleared.

Approximately 89 per cent of respondents said that new thread was used to tie the cord 7 per cent said used thread and 4 per cent mothers did not remember what was used. **Marah Awunyo**, (2011) found that 70 percent of respondents said that the cord of their newborn babies were clamped using cord clamp, (in institutional deliveries), 20 percent

respondents said the cord was tied with thread, while 11 percent of respondents could not tell what was used to tie the cord. This presumes that the infection prevention/control may not be considered in some of the deliveries as stipulated by the WHO (1996) since one cannot tell whether the thread used to tie the cord was sterilized or not. With majority 93 percent of respondents, confirming that the instrument or material used to tie the cord was clean or sterilized, only 3 percent said the material used was not clean, this presumes that infection control is largely ensured. With the question of what is applied to the cord, The Unguent applied on the cord after it was cut oil or ghee, antiseptic tube or others like Dettol or Savlon. 78 per cent mothers used oil or ghee on the Umbilical cord after it was cut, 7 per cent used antiseptic ointment, 8 per cent used Dettol or Salvon or others and 7 per cent out of the 27 home deliveries did not remember was used. This defies the WHO (2006) recommendation that nothing is applied on the cord stump; rather it should be washed with clean water and dried with clean cotton wool when soiled. Other substances applied on the cord stump include; ash, salt, mashed uncooked cocoyam, amoxicillin, tomato juice, fume from lantern/fire. This may suggest a high incidence of infection among newborns in the district. In agreement with the World Health Organization, local practices of putting various substances on the cord stump should be carefully examined and discouraged if they are found to be harmful, and they should be replaced with those that are acceptable (WHO, 2006). This finding is similar to that of a study conducted in Bangladesh where unhygienic cord care practices were prevalent, and turmeric was the most common substance that was applied on the cord stump, mainly done by mothers (Awasthi et al., 2008).

## **6.6 IMMUNIZATION**

Majority of 94 per cent neonate were immunized polio vaccine at birth, and only 6 per cent were not immunized. 76 per cent infants were given BCG vaccine at the time of birth, 7.5 per cent were given within one week, 12 per cent within a month and 4 per cent after one month. 0.5 per cent mothers did not remember when their child was given BCG vaccine. **Marah Awunyo**, (2011) found that majority (95 percent) of respondents had their babies immunized with OPV and BCG, only 5 percent respondents did not

immunize their babies. In a study by **Gupta, P.** (2015) a study conducted in an urban slum of Lucknow found that 74.7 per cent of children were fully immunized, 11.1 per cent partially immunized and 14.1 per cent were not immunized at all. In a study by **Nath** in Lucknow, only 44.1 per cent of children were completely immunized, which is way less than observed in our study. In a study by **Joshi**, in Bareilly district, only 50 per cent were fully immunized, and 22.5 per cent were non-immunized. In contrast to our findings, as per NFHS-III only 23 per cent, children were fully immunized in Uttar Pradesh, and 33.6 per cent were not immunized at all. *Kar et al.*, in their study in a slum of Delhi and Yadav, in the state of Madhya Pradesh, reported a higher percentage (above 60 per cent) of fully immunized children, which is similar to our study. NFHS –IV data shows that 56.4 per cent of the urban area and 58.8 per cent. In rural areas Children, age 12-23 months were fully immunized (BCG, measles, and 3 doses each of polio and DPT) in Lucknow.

## **6.7 EARLY BREASTFEEDING PRACTICES**

Breastfeeding of the newborns was started by the mother just after birth by 57 per cent, after a few hours after birth by 32 per cent. This shows that there was adherence to the WHO (1996) recommendation of early and exclusive breastfeeding which should be initiated within 1 hour after childbirth. The reasons given by mothers for giving Colostrum to the baby was to increase immunity as per 8.5 per cent mothers, good child health as per 82.5 per cent mothers, strengthen mother-child relationship as per 1 per cent mothers, decreases indigestion as per 0.5 per cent mothers and the child becomes brainy as per 7.5 per cent mothers. Majority of 83 per cent mother's know that baby should be the only breastfeed up to 6 months. Majority of 82 per cent mother did not give other than breast milk. The nutrients given by the mothers to the newborn in the first month other than breast milk included sugar water by 1 per cent, honey by 5.5 per cent, Ghutti/Gripe water by 4.5 per cent, Dal water by 2.5 per cent, and powdered milk by 4.5 per cent. **Marah Awunyo**, (2011) stated that a greater proportion (86 percent) of respondents gave breast milk as the first feed to their newborns, 10 percent of respondents gave nothing because breast milk was not established immediately after delivery and 4 percent gave

formula feed. Reasons for giving formula feed included; insufficient or no breast milk, although most mothers claimed they were educated to give only breast milk during the antenatal clinic. 85 per cent of mothers interviewed did not give any fluid after birth, while 15percent of mothers gave fluids such as water, glucose, and in mixed with water after birth. 73 percent of mothers initiated breastfeeding within the first hour after birth, 11 percent of mothers initiated breastfeeding 2-4 hours after birth, while 16 percent of mothers initiated breastfeeding days after delivery. This suggests that most mothers know the benefits of feeding colostrum to their newborns, unlike the study in Nepal where mothers in some communities believe that colostrum is dirty milk and should be discarded, and where newborn babies were fed with cow or goat milk immediately after birth with the belief that the babies will become more intelligent (**Yadav**, 2007). Another study by **Khadduri et al.** (2007) showed that initiation of breastfeeding within 1hour of birth and colostrum feeding was not common. Majority of mothers interviewed 64 percent, said they cleaned their breasts before breastfeeding, and a considerable number 36 percent of mothers said they don't clean their breasts. Out of the 64 percent mothers who cleaned their breasts before feeding it to their babies, 22 percent use their towels or a piece of cloth, 21 percent use their babies towels, dresses, nappies, and cot sheet, 14 percent used only water, 3 percent use their hands or fingers, 2 percent use cotton wool and water, 2 percent of mothers lick their nipples with the tongue. The remaining 2 percent take their bath before breastfeeding. This implies that hygiene is not adequately ensured during breastfeeding. With regards to breastfeeding practice, majority 61percent of mothers interviewed said they breastfed specific/regular intervals, 38 percent breastfeed on demand. This suggests the need for extensive education on daily breastfeeding practices.

## **5.8 RECOGNITION AND MANAGEMENT OF NEWBORN DANGER SIGNS**

Mother's knowledge of the danger signs of newborn and complications is an essential step in the recognition of complications and a way towards reducing neonatal mortality. From this study, it has been observed that 97 per cent mother's had knowledge regarding neonatal danger signs and only 3 per cent had not. **MarahAwunyo**, (2011)

Most mothers mentioned high body temperature, diarrhoea, refusal to suckle, excessive crying and "Asram" as perceived danger signs in newborns. They don't believe their newborns can be treated at the health facilities for the condition they call "Asram," they would rather treat their newborns with traditional medicine made from the locally found herbs. 91 percent of mothers interviewed said they visit the hospital upon recognition of the danger signs they mentioned above. **Zaman SB**, et al. (2017) had also demonstrated that when the new mothers recognized neonatal danger signs, they were able to reach early to health care services, and as a result, it could act in reducing the neonatal mortality. According to this study, only 50 per cent of the respondents were able to identify at least one danger sign, the likelihood of seeking medical care and reaching hospital early also was low which allow us to conclude to be a contributing factor in the neonatal death. **Nigatu et al** (2015) observed that reduction of neonatal and infant mortality to acceptable level is impossible without good maternal knowledge regarding neonatal danger signs. This is because of the fact that, these danger signs are the entry point to provide comprehensive neonatal health care. This study presented the level and identified the contributing factors for good maternal knowledge about neonatal danger signs among mothers who gave birth in the last 6 months in Gondar town. In this study, prevalence of mothers' good knowledge (mothers who mentioned at least three-danger sign) was found to be 18.2 per cent. The level of knowledge in these mothers is lower than the level reported in Afghanistan and four regions of Ethiopia but the level is higher than the level reported in India and it is in line with neonatal danger signs knowledge level reported in Ghana. The discrepancy might be because of unprompted question used for assessing the danger signs, a large sample size in the current study, and could be because of cultural differences. This study showed that mothers' education is an important determinant factor for mentioning of at least three neonatal danger signs.

## **6.9 TRADITIONAL PRACTICES AMONG MOTHERS**

Definitions of health and disease vary with culture and demography. Diseases are determined by cultural elements and diseases are treated with practices which may change from culture to culture. Therefore, culture is considered as a dynamic determinant

of health and diseases. Birth and child care related beliefs and practices are also regarded as cultural elements which affect health (Aksayan&Hayran, 1992). There are various traditional child care practices in different cultures in India.

In India, breastfeeding is believed to be good, and God's gift and cultural practices surround its initiation. According to **Sushruta** (ancient Indian scriptures), breastfeeding should begin on the 5th day, and sometimes breastfeeding is initiated on the 6th day after a celebration called **chhatti**. Honey is the most common first food, followed by sugar water. According to **Sushruta**, honey and ghee should be given to evacuate the meconium (Choudry, 1997). However, feeding babies with those culture-specific foods immediately after birth is harmful to babies and should be discouraged.

From this study, it has been observed that 91.5 per cent mother's followed religious practices after childbirth. Only 8.5 per cent mother does not follow. There were many reasons for the mothers to take late initiation for breastfeeding their child. As per the findings of study 30.5 per cent mother's breastfeed late because of discomfort, 10 per cent because they had no milk secretion, 56.5 per cent followed family customs and beliefs and 3 per cent not applicable.

Home remedies used to treat stomach ache of the neonate. 54 per cent mothers applied hing (*Asafetida*) in the umbilicus, 1 per cent massaged the stomach of the baby with Harad (*Terminaliachebula*) Solution 45 per cent used other methods like Luke warm lemon water, Honey, Ajwain (carom seed, a digestive herb).

Similarly, Traditional Practices of Women From India: Pregnancy, Childbirth, and Newborn Care by Choudhary(1997) stated in their article that India has a high infant mortality rate, and newborns are considered vulnerable. There also is a fear of harm to newborns from the evil eye (nujur). Admiring the newborn is discouraged because it may bring envy and cast nujur. Walia (1982) found that physical examination of the newborn is considered casting the evil eye. Families are reluctant to have their newborns weighed for the same reason. To ward off the evil eye, a black dot of kujul (black soot mixed in butter) is placed on the newborn's forehead. Also, articles made of iron are kept under the

newborn's bed to thwart the evil eye. The infant is kept indoors with the mother for up to 40 days and usually sleeps with her. Female relatives continue to provide infant care that includes a daily oil massage and a bath (Singh, 1991). An overt expression of affection for the infant by the mother in the presence of older relatives is not common. Marah Awunyo, (2011) found that approximately 84 percent of mothers mentioned that they use soap, sponge and warm water with or without disinfectant (Dettol) to bath their newborn babies in order to protect them from falling sick, 7 percent bath their babies with herbal preparations (without knowing the content of the preparation) in order to protect their babies from falling sick.

**WHO (2006)** socio-cultural beliefs leads to the practice of applying substances to the umbilical stump to heal it instead of letting it fall off naturally. This a major health risk due to the propensity of infections to start through here. Religious or cultural beliefs played a major role in the reasons behind such practices. Since each community has its unique traditions and culture, traditional practices differ from community to community.

Not all traditional practices are harmful just like not all modern practices are beneficial. Feeding through rubber nipples and plastic bottles, the use of pacifiers is unsafe. It is important to identify traditional and cultural practices and evaluate their impact. They can have classified by beneficial practices that should be promoted, harmful practices that should be stopped, harmless practices that can be ignored for the time being or practices that need to be researched before being applied. The World Health Organization maintains that bottle feeding, use of pacifiers and separation of mother from her newborn infant should be discouraged and special efforts are made to study home remedies for simple problems and to promote those which are effective.