# **CHAPTER 6**

## **SUMMARY**

A total of 110 ASHA workers and 205 postnatal mothers who were registered with them were enrolled in the present study. During FGD, they reported that the HBNC program benefitted them in many terms as a source of earning, people recognition, and acceptance, gained knowledge of HBNC, benefitting newborns and health of the people, and gained self-confidence. Some hindering factors of delivery of HBNC program also mentioned as less incentive, overloading works, lack of cooperation from the community, difficulty to recollect the appropriate skill while practicing and lack of instruments & medicines of delivery of HBNC program.

All the ASHA workers were female and their ages ranged between 28-56 years. Most ASHAs were married (92.16%) and educated up to high school (45.10%). About 58.82% of ASHAs had been working for more than 10 years. In the present study, significant improvement of their knowledge, practice, and attitude scores was observed in the subsequent reinforcements (p<0.05).

### 6.1 KNOWLEDGE OF ASHA

Even though more than half of the ASHA workers had been working for years, about 90.19% of them were observed to possess average knowledge regarding HBNC during the initial assessment. Initially the knowledge level of ASHAs regarding GIHRN

was 70.92%. Less than 50% of them knew mandatory vaccines for newborns such as BCG, Hepatitis B Birth dose, and OPV Birth dose and the purposes of vaccination. Merely 28-40% of ASHAs knew the right way of management of eye infections in babies. Surprisingly only 14.71% of ASHA workers knew the correct way of cleaning the umbilical cord. About 70% of ASHAs were not aware of the correct frog-leg position used for newborns in Kangaroo Mother Care (KMC). About 50-70% of ASHAs did not know that maximum heat loss in newborns takes place through their head that occupies a large proportion of the body and also the possible complications of hypothermia in the babies. Besides, only 18.63% of ASHAs were informative regarding the positions of breastfeeding including sitting position, lying position, underarm and alternate underarm positions. About 30-35% of ASHAs lacked knowledge regarding problems associated with inappropriate breastfeeding such as sore nipples, engorged and painful breasts. Moreover, 36.27% of ASHAs initially did not consider it important to refer babies with neonatal sepsis immediately to a hospital. However, a persistent increase in the knowledge of ASHAs in all domains of newborn care was observed with subsequent reinforcements and assessments. Overall knowledge of ASHAs regarding HBNC was significantly increased from 65.69% to 90.60% at the end of reinforcements and posttest assessments (p<0.001).

#### **6.2 PRACTICES OF ASHA**

Similarly, analysis of practices of ASHAs revealed only 38.56% awareness regarding avoidance of gripe water, ghutti or herbal extracts from feeding to the newborn

babies. At the end of the training, awareness about possible negative consequences of feeding gripe water, ghutti or herbal extracts to newborns was increased to 54.25%.

Besides, ASHAs were initially observed with 53.92% awareness about maintaining the warm body temperature of neonates as in mother's womb. The babies may need to be wrapped with multiple layers of clothes to maintain a warm body temperature. Further, normally born neonates are recommended to give bath after 48 hours of delivery. However, some sections of the population used to give baths to the newborns immediately or within 24 hours of delivery according to their religious or cultural principle. Such activities may lead to neonatal mortality due to hypothermia and sepsis. The awareness of ASHAs regarding the prevention of hypothermia in newborns was increased to 88.89% at the end of reinforcements. Surprisingly, only 27.78% of ASHAs were aware of the basic principle of cleaning of the umbilical stump first followed by its base during the pretest. Even though the practice is crucial to avoid infections in the umbilicus, no significant development on it was observed even after subsequent reinforcement.

Most of the people in rural India used to apply "kajal" (a black color paste) to the eyes of newborn babies as a part of their tradition with a belief to enhance the health condition of eyes as well as to protect from black magic. The practices score of ASHAs regarding the prohibition of the application of kajal to the eyes of newborns was subsequently increased from 63.73% to 77.45% at the end of reinforcements. Newborns have an underdeveloped or very poor immune system as they come from a very sterile environment; thus all possible hygienic measures need to be provided to the babies and their surroundings. Crowding near newborn babies or kissing them must be avoided to

prevent possible infections. Initial practices score of ASHAs regarding restriction of visitors to newborn babies and kissing them was about 59-65% and the score was increased to about 80% after the training.

### **6.3 ATTITUDE OF ASHA**

Initially, 46.08% of ASHAs thought that the first examination of newborns could be conducted anytime. After training, 78.43% of ASHAs could realize the need of doing the first examination of newborns within 24 hours of delivery. About 85.29% of ASHAs supported delayed bathing of newborns to maintain warm body temperature; however, 42.16% of them still believed that wrapping the babies with multiple layers of clothes may cause fever. Initially, 48-56% of ASHAs thought that KMC is only for preterm babies and should only be provided by mothers. After providing training, 70-87% of ASHAs could realize that KMC can be provided to all neonates by anybody who is caring for the baby (p<0.01). Interestingly, more than 95% of the ASHA workers were aware of feeding first breast milk to protect babies from diseases. More than 90% of ASHAs knew that frequent feeding doesn't reduce milk production of the mothers, moreover it improves the bonding between mothers and their babies. During the initial assessment, 51.96% of ASHAs were found to be unaware of the possible harmful effects of giving prelacteal feeds to newborns. Significant improvement in their attitude was observed after the training (p<0.01). 62.75% of ASHAs initially believed that newborns can be given mixed feeding and the number was significantly reduced to 45.10% after the training (p<0.05). About 55% of ASHAs could realize that newborns should be breastfed exclusively as mother's milk is highly nutritious for newborns. Initially, 77.45% of ASHAs believed that low birth weight babies have a higher tendency to lose heat faster than babies born with normal weight. The number increased to 92.16% after the training. 34.31% of ASHAs were with an attitude that babies can be given baths using tap water.

Further improvement of ASHAs attitude was observed in an essence of using the sterilized razor for cutting umbilical cords of the babies, important of regular weighing of newborns, breast milk is not related to any kind of allergy to the babies, breast milk is sufficient for newborns to fulfill their needs in all conditions, the importance of immunization, the need of a frequent visit to newborns' house for monitoring the babies, dirty umbilical cord may cause infection to babies, inexperienced mothers can breastfeeding their babies without difficulties, risk of infection of newborns from the surrounding infected people, the importance of proper hand washing before touching the babies. Surprisingly, 68.63% of ASHAs were found to be quite convinced by their preoccupied logic that cord stumps fall automatically without any care. Their attitude regarding the need for cord stump care remained unchanged even after the training.

### **6.4** Maternal newborn care practices

About half of the postnatal mothers (52.68%) were 25 - 30 years of age. Most of them (46.83%) were single-kid mothers and had a high school education (42.44%). Interestingly, about 94.14% of the mothers never sought the help of obstetricians during their pregnancy. Rather, their respective ASHA took care of them. About 55% of mothers maintained 2-3 years of birth spacing while 37.20% maintained 4-6 years of spacing.

Most of the mothers (78.05%) started breastfeeding within the first hour of delivery. Cesarean section delivery is one of the main reasons for delayed breastfeeding of newborns. The majority of the mothers (93.66%) knew the need of properly washing or cleaning their breasts prior to breastfeeding. About 88.29% of mothers confirmed exclusive breastfeeding while the other 11.71% of mothers fed their babies with prelacteal feed, mostly to relieve stomach pains. Approximately 94.15% of mothers fed their neonates colostrum, while the rest did not feed their babies colostrum owing to either LSCS delivery or the babies on the machine. The majority of mothers (97.56%) felt it obligatory to change the clothes of babies after every bath to maintain hygiene. Further, 72.68% of mothers followed the instruction of delayed bathing for at least 48h with the idea to prevent hypothermia. While, 42.86% of the remaining mothers still followed their traditional and cultural method of early bathing. Though 74.63% of mothers were convinced of the benefits of regular practice of KMC, the rest were not practicing KMC because of the lack of knowledge and understanding. The vast majority of mothers (93.66%) recognized the importance of keeping the umbilical cord clean and dry and 94.15% of mothers knew the right way of cleaning the eyes of newborns using a clean cloth and warm water. However, about 6.34% of mothers still practiced their traditional method of applying turmeric powder and ghee to the cord. Assessment of the opinions of mothers on HBNC as educated by ASHAs revealed that regular home visits of ASHA and their advised on HBNC were beneficial to them. The mothers (96.59%) felt the advice of ASHAs was appropriate and also covers major aspects of newborn care including maintenance of hygiene, eye care, breastfeeding, KMC, immunization etc.