Mother’s milk is a gift of nature for the new born. Many scientific studies and researches it have proved that there is no substitute for breast milk. Babies who are breastfed have 30 percent less chances or are at less risk of illness than the bottle-fed babies.

The WHO recommends exclusive breastfeeding for the first six months of life, after which infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age. Breast milk provides the superlative nourishment for infants. It has a nearly perfect assortment of vitamins, protein, and fat, everything which a baby desires to nurture. Breast milk encompasses antibodies that aid the baby fight viruses and bacteria. Babies, who are breastfed exclusively for the first six months, have scarce ear infections, respiratory illnesses, and diarrhoea. Breastfeeding has been allied to advanced IQ scores in later childhood (Bharati et al, 2011). When maternal breast milk is unable to provide enough milk in sufficient quantity, donor breast milk is recommended as an alternate source of nutrition, particularly in pre-term and other high risk infants. India lags behind the rest of the developed world in establishing and promoting human milk banks.

The human milk bank gives parents the choice of donated breast milk when the mother’s own milk is not available. The facility is created to provide families with the option of donor mothers’ milk when needed and to see that babies exclusively receive breast milk from birth to six months of age.

Milk banking includes collecting, screening, processing, pasteurising, storing and dispensing donated human milk by lactating mother to the babies who are not able to breastfeed immediately after birth. It is highly beneficial for extremely pre-term and low birth weight babies, all babies separated from their mothers due to complications or illness in mothers, mothers who have adopted the newborn and abandoned neonate or neonate from orphanage admitted in neonatal care unit or paediatric ward can benefit from this facility. With breast milk, the incidence of infections is significantly lower in babies fed human milk and babies have shown improved neuro development outcome for premature infants is seemingly improved (Mondkar, 2006).

Referring to human milk Khadse S (2013) said: Every drop counts; the author recommends that there is an urgent need to create more awareness about milk banks and motivate people to support such venture. Nurse can spread awareness about bank by informing lactating mothers admitted to the hospital about the milk bank and also handle their queries related to milk donation.

A standardised education is needed for health care providers who will be responsible for educating and encouraging mothers to breast feeding or donated human milk as an alternative Arnold (2006). Mondkar J (2006) mentioned that the human milk centre fulfills the requirement of the abandoned babies, also there are at least 8,000 babies born every year. In 20 to 35 percent of these cases, direct breast feeding becomes impossible and thus human milk bank is a support system available. Thousands of babies then will be thanking the hospital milk bank for those first drops of life and health.

All efforts are made to convince lactating mothers to dispel doubts and misgivings about the process. The nurses always manage to convince mothers to donate milk during their stay at hospital. It is encouraging to see that milk banks have been running successfully now in many countries.

Objectives

The study was conducted with three objectives.

1. To assess the pre-test knowledge regarding human milk banking among the staff nurses.
2. To determine the effectiveness of planned teaching on human milk banking among staff nurses.
3. To associate knowledge score of staff nurses with selected demographic variables.

**Hypothesis**

H₁: The mean post-test knowledge score on human milk banking among the staff nurses will be significantly higher than their mean pre-test score at 0.05 level of significance.

H₂: There will be a statistically significant association between knowledge score regarding human milk banking and the demographic variables among the staff nurses.

**Variables:**

- **Independent variable:** Planned teaching on human milk banking.
- **Dependent variable:** Knowledge level of staff nurses regarding human milk banking.

**Review of Literature**

Davies Adetugbo et al (1997) conducted a Breast-feeding training which improves health worker performance in rural Nigeria to answer to two research questions: what components of breastfeeding training are easily achieved with extension health workers, and what health worker variables affect these outcomes. Multivariable analysis of the outcomes of a controlled breastfeeding training programme for community health workers (CHW) in rural communities of Osun State, Nigeria, was performed by logistic regression. The results showed that the training was the most powerful predictor of correct CHW recommendations on breastfeeding (OR=60.25, p=0.0000), and of ‘perfect’ breastfeeding knowledge (OR=192.49, p=0.0000). Younger CHWs (20-29 years) were significantly more likely to make correct recommendations on exclusive breastfeeding (OR = 3.02, p=0.0304). Other CHW variables such as sex, experience, job status, and marital status did not make consistently significant independent contributions to the outcomes. Results suggest that breastfeeding education can enhance CHW professional recommendations on breastfeeding and should be extended to all categories of health workers.

The World Health Organisation, American Academy of Pediatrics (AAP) and United Nations Children’s Fund recommend that the best alternative to a mothers’ own breast milk is milk from a healthy wet nurse or donor human milk (DHM) from a human milk bank (HMB). Many developed and developing countries around the world now have established HMBs and the number of HMBs are increasing worldwide. A study was conducted on effectiveness of self instructional module on knowledge and attitude regarding expression and storage of breast milk among employed antenatal mothers in selected hospitals, Mangalore. A closed-ended structured questionnaire was used to assess the knowledge and attitude among 50 antenatal mothers. The results revealed that 86.5 percent of mothers had adequate knowledge and 60 percent mothers had moderately favourable attitude. The study concluded that self instructional module was found to be an effective strategy in increasing the knowledge of antenatal mothers.

**Ethical Consideration:** Permission was taken from hospital authorities, milk bank authorities and participants; participants were assured confidentially of the participants details.

**Conceptual Framework:** Stuffle Beam’s evaluation model of planned teaching evaluation served as conceptual framework. It consisted of four types of evaluation- Context, input, process and product/output. The model was adopted in a modified form for the present study.

**Results & Discussion**

The data was analysed and interpreted to identify the pre-test and post-test knowledge of staff nurses regarding human milk banking and to determine the association of knowledge of staff nurses regarding human milk banking with the selected demographic variables.
Demographic features like the staff nurses’ age, department, qualification, awareness about human milk banking, sources of information, underwent any training programme on milk banking are given in Table 1. Table 2 outlines the knowledge score of frequency and percentage of study group.

Majority of the samples i.e. 27 (50.94%) were in age group of 21 – 30 and the minimum sample were above 50 years of age (3.77%). Majority of the samples were from PNC Ward (37.73%), less number of people were from NICU Ward (30.18%).

Majority of the samples were GNM qualified 52 (96.22%). There were no BSc and MSc nurses in labour room, PNC and NICU; 27 samples (50.94%) had information from their peer group regarding human milk banking; 25 (47.16%) had information from media and only 1 received information from magazine (1.88%).

Majority of the staff nurses were aware about human milk bank (n=42, 79.24 %), only 11 (20.75%) were unaware regarding the same. Majority of staff nurses i.e. 31 (58.49%) had not undergone any training on milk banking and 22 (41.50) staff nurses had undergone training on milk banking. Majority of staff nurses (n=7, (13.2%) in pre-test had poor knowledge, 41 (77.3%) had average knowledge and only 5 (9.4%) had good knowledge about milk banking; whereas in the post-test majority of the staff nurses (n=50, 94.3%) had good knowledge, which indicated that planned teaching was effective.

In area wise analysis of the knowledge regarding milk banking, majority of the staff nurses showed good knowledge score, average was almost 100 percent in post-test percentage.

Association of knowledge with selected demographics like age, source of information, undergone training showed significant association at 0.05 level of significance. The knowledge scores of the samples showed a marked increase as seen in the post-test score of the study group, which indicated that the planned teaching was effective in increasing the knowledge of the staff nurse regarding ‘Human Milk Banking’.

The findings show that post-test knowledge scores definitely increased as compared to pre-test scores in the staff nurses regarding human milk banking. The increase was from poor, average knowledge to good knowledge.

**Implications:** The findings of the study have implications for nursing practice, nursing education and nursing research.

**Recommendations:** Keeping in view the findings of the study, further studies can be used using larger samples, using a control group.

**Conclusion**

The main aim of the study was to assess the effect of planned teaching on knowledge regarding human Milk banking among the nurse working in neonatal department. The planned teaching was found to be significantly effective in improving knowledge of the staff nurses.

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