

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1. Comparison of parental socio-economic and education between breast fed and formula fed infant:

There were no differences in age of mothers, parity, and educational level, occupation and income of mothers and fathers among exclusive and non exclusive breast feeding groups but slightly higher in fathers' income among formula fed infants(Dewey KG et al). The mothers with higher school education were 79% and with low school education 29% among exclusive and non exclusive breast feeding groups respectively(Neuman CG et al).

2.2. Difference in weight gained between breast fed and formula fed infants:

There was no significant difference in the weight gain between formula fed and breast fed groups for either boys or girls during the first 3 months of life(Dewey KG et al). Neuman CG et al have conducted a study on birth weight doubling time in Los Angeles, California found that the birth weight of infants doubles in 3.8 months as well as formula fed infants have more weight gain for length and developed early obesity more than those breast fed infants.

2.3. Difference in episodes of diarrhoea and ARI between exclusive breast fed and formula fed infants:

The protection effects of breast feeding with the reduction of mortality and morbidity of specific diseases, diarrhoea, pneumonia and postnatal death. Furthermore, there was a significant difference of the incidence of diarrhoea, pneumonia and post natal death among breast feeding and bottle feeding (Pinchipat et al). The exclusive breast feeding protected infants from diarrhoea compared to partial breast feeding. Partial breast feeding, on the other hand, is more protective than no breast feeding at all (Feachem et al). The community based study conducted by Chandra RK showed that breast fed infants had significantly lower incidence of respiratory infections, otitis media, diarrhoea, dehydration and pneumonia. In addition, there was especially growing evidence that the risk of death and illness from malnutrition, diarrhoea and ARI increased sharply when supplements are given in addition to breast milk.

2.4. Nutritional value in breast milk:

The studies done in Asia and West India (Butto FN 1984) found that breast fed infants gained weight at rates similar to those of formula fed infants. However the ratios of weight gain (gm) per 100 calories were found to be approximately 10% to 30% higher among the breast fed infants than in

the formula fed infants. Therefore, breast milk has the more nutritional value than formula milk. Khananjanasthiti P and Dhanamitta S conducted a study and found that the prevalence of protein calorie malnutrition in early months of life in marginal area of bangkok is high and the degree of disease is severe which is related to the decline of breast feeding.

However, some of above mentioned studies were institutional based and not in community settings. The mothers included in the study may have proper selection, utilization and hygienic preparation of formula feeds due to higher level of education, higher income, adequate facilities of drinking water and favorable environmental sanitation which have done in institution based and developed country. Some of the studies have shown that breast milk has nutritional and anti-infective properties. Several community based studies have done to find out the difference in morbidity among exclusive and non exclusive breast fed infants of developing countries and found that there were higher in morbidity i.e diarrhoea and ARI and others infectious diseases in non exclusive breast fed infants than exclusive breast fed infants. Breast feeding is therefore, very important in both developed and developing countries. But It is much more essential though in developing countries because poverty and lack of sanitation leads to an increase in the morbidity of infectious diseases in community.