CHAPTER –V

SUMMARY & CONCLUSIONS
CHAPTER V

SUMMARY AND CONCLUSIONS

The present study was undertaken with the following objectives

1. To study the variables that influence infant feeding practices.

2. To understand the role of these variables in influencing the breastfeeding and complementary feeding practices of mothers of infants (one to twelve months of age).

4. To assess the nutritional status of infants through anthropometry and analyze the influence of the feeding practices on the anthropometric status of infants.

Maternal and infant variables were identified. The maternal biological variables consisted of age, parity, spacing and nutritional status. The social variables consisted of literacy, knowledge about diarrhoeal management, age at complementary feeding and immunization, family composition, multiple work roles and support to the mother. Support consisted of help rendered by family members in domestic chores, nutritious supplement provided by ICDS for lactating mothers and cash supplement provided by the Government. Infant variables consisted of age, sex and birthweight.

A sample of three hundred sixty two mother infant dyads was drawn from thirteen slums. Data was collected by means of a pretested and standardized questionnaire by interviewing mothers individually and through a focus group discussion. Maternal body weight as well as anthropometric details of infants consisting of height, weight, mid arm circumference and skinfold thickness were taken.
The mean age of mothers was 23 years. Seventy nine percent had either one or two children. Thirtysix percent of mothers had undergone sterilisation. Fifty percent had a spacing of less than three years. Eighty one percent of the primis were unprotected. Fourteen mothers were pregnant. Male participation in adoption of family welfare measures was practically non existent. The mean body weight of mothers was 45 kgs. While 20% had a body weight of less than 38 kgs, seventy seven percent were undernourished.

Literates and illiterates formed 51% and 49% respectively. Seventy five percent knew about ORS, though only 25% applied it in the event of diarrhoea. Seventy five percent of mothers believed in initiating complementary foods at six months. Eight mothers were separated from their spouses. Of the 350 who lived with their spouses forty seven percent belonged to extended families. Fourteen percent lived as truly nuclear families with no one nearby.

The average family size was 5. Fifty six percent had a single breadwinner and the number of earning members increased significantly with an increase in family size, pointing to the livelihood opportunity in urban area.

With regard to work roles 81% had resumed some domestic chore or other. Managing domestic chores was hardest for those lived in nuclear homes with no relative nearby. Of the 350 mothers who lived with their spouses 41% did not receive any help in discharging domestic duties. Fifty eight percent had older children to care for. Only 7% (27 mothers) were engaged in paid work. Of these seventeen belonged to nuclear families and ten to extended families. The childcare strategies of the former group involved using older children as caregivers, leaving the infants in the care of natal relatives or taking the infants to the work spot.
Only 26% of the eligible lactating mothers were availing the nutritious supplement provided by the ICDS center. Fifty four percent of the users were not eligible for the same and seventy percent shared it with a family member. With regard to cash supplement, while 48% had applied for it, only 48% among them had received it.

The infant variables considered were age, sex and birthweight. The near equal distribution of males and females suggested a favourable environment for the girl child’s survival. The mean birthweight was 2.74 kg. The prevalence of low birth weight was 19%. This is commendable achievement considering that 77% of mothers were under nourished. Mothers with two children stood at a clear advantage by way of age, body weight and birth weight of children. Mothers with the highest para had the advantage of age but did not enjoy the higher nutritional status but nevertheless gave birth to infants with highest birth weight.

Eighty six percent of deliveries took place in Government hospitals, while 11% in private nursing homes. Three percent were home deliveries. Eighty three percent had initiated breastfeeding on the first day, eleven percent within three days and 5% after that. For treatment of minor ailments, 41% patronized private physicians, 30% went to Government Hospital and 28% used both alternatively.

Ninety two percent of the samples were breastfeeding while 8% had ceased to breastfeed. Seventy percent of mothers with infants upto four months of age were fully breastfeeding. The percentage of fully breastfeeding mothers with infants upto six months of age at 51% masked the steady monthwise decline in the percentage of those fully breastfeeding in the first four months. At the beginning of the fifth month 64% had already begun complementary feeding.
Of those who gave complementary foods, sixty three percent gave biscuits. Fifty one percent each gave milk and rice respectively. Thirty one percent gave Infant Milk Substitutes or infant food and 25% offered coffee or tea. Eleven percent and 13% of mothers gave nutritive items like ragi kanji or idli respectively. The choice of food depended on the age of the infant, the economic situation of the family and foods consumed by the family and advice given by family members. Seventy one percent used devices such as tumbler and spoon and hand feeding. Twenty nine percent were using the feeding bottle either exclusively or in combination with other devices.

With regard to maternal variables, age and body weight per se did not show any relationship to breastfeeding in the first four months. When all the variables were considered to identify causal factors it was found that support from the family members by way of adequate rest and care with access to food enabled mothers to fully breastfeed.

Of the 246 mothers with infants from five to twelve months of age, 8% were fully breastfeeding, 81% practising complementary feeding and 11% had stopped breastfeeding. Of the fourteen pregnant mothers, nine continued to breastfeed by partaking the nutritious supplement provided by the ICDS centre. Of the 27 mothers doing paid work except for four the rest were practising complementary feeding.

Seventy-one percent of infants fed by the bottle have had an attack of diarrhoea when compared to 66% fed through other devices. However 74% of those fed by both bottle as well as other devices and hand feeding have had an attack of diarrhoea. This highlights the need to advocate hygienic feeding practices whatever be the mode of feeding.
With regard to anthropometric status the average heights of male infants for each month of age was consistently above –2 SD level indicating that there was no long term history of undernutrition. Female infants showed a better profile. As far as heights we concerned the means for all groups were above –2SD level. This shows that even in deprived conditions where discrimination does not occur the girl child can grow up without being malnourished.

With regard to LBW infants 81% of mothers as against 69% of those above 2.5 kilograms were fully breastfeeding. This enabled good catch up growth for 17 out of 20 LBW’s in the 1-4 months age group and for 50% in the 5-12 month age group.

Among normal infants in 1-4 month old age group only 6 were under weight. Of these 3 were given full breastfeeding and another 3 complementary feeding. Thus the feeding practices adopted by mothers based on cues received from the infant did not lead to under nutrition.

**Major Conclusions**

The study disproved myths generally held about the poor such as large families with more than two children, high degree of illiteracy, non utilization of formal healthcare institutions, large number of mothers involved in paid work, indiscriminate use of bottles and indiscriminate use of infant milk substitutes. The lack of empowerment of mothers is evident in their inability to adopt spacing techniques in spite of their knowledge and lack of information regarding management of minor illnesses. The discrete behaviour of mothers living in slums in deciding the time of complementary feeding with reference to their perception of the needs of their infants is laudable. Rather the choice of foods left very little to be desired. The progressive increase in the percentage of underweight infants even in the light of appropriate
feeding practices has implications for the quantity and quality of complementary foods and possibly to unhygienic feeding practices.

The care of mothers emerged as a major factor to successful breastfeeding in the first four months, since with adequate rest and food mothers overcame the barriers of undernutrition and work roles. The type of family, its composition and support received from family members while resuming work roles influenced the care and support to mothers. The vulnerability of the urban mother is evident in the context of nuclear families with lack of support from the spouse and the absence of any supportive community network.

The issue of infant feeding should not be confined to a discussion on bottle versus breastfeeding or seen only from the light of good and bad practices. It should be seen from the standpoint of interrelationship between the mother and the infant, (the infant demand and the maternal supply) and from a larger perspective of what the mothers actually practice, why, the support they receive, the options available to them and their knowledge while making choices and the impact on infant growth.