CHAPTER V

SUMMARY AND CONCLUSION
The present study of breast feeding practices was conducted in urban and rural area with different socio-cultural and educational background. Attitude and knowledge regarding psychological aspect of breast feeding was also assessed. Total sample was 1000 mothers, 500 urban and 500 rural. The urban sample was selected at random from Paediatric Out-patient and in-patient department and well baby clinic of J.N. Medical College, Aligarh Muslim University, Aligarh. The information from the rural mothers was obtained from the rural health centre of social and preventive Medicine in Jawan Village, which is situated at a distance of 20 km from Aligarh Medical College.

The period of study was one year (September 1989 to August 1990). The methodology adopted was personal interview with the mothers of the children upto 36 months of age. Detailed information regarding age, parity, religion, type of family, total number of family members and total family income were collected.

In addition, the educational status of the parents and their occupation were enquired into. On the basis of this background information, the mothers were grouped into five social classes as described by B.G. Prasad (1970).
Information about first feeding after birth, time of initiation of breast feeding, practice of colostrum intake, time of weaning and time of supplementation in the family, schedule of breast feeding, duration of breast feeding, nature of supplementary food given, method of feeding milk, knowledge of Psychological advantages of breast feeding and contraceptive effects of breast feeding were collected and recorded on a proforma.

Of the 500 urban mothers 180 (36%) were Hindus, 305 (61%) were muslims and 15 (3%) others. But in rural area 435 (87%) were Hindus and 6 (13%) muslims. 317 (63.4%) urban mothers belonged to nuclear family and 297 (59.4%) rural mothers were still having joint family system.

The family size of urban mothers was less than 3 members in 121 (24.2%), between 4-6 in 278 (55.6%) and over 7 in the remaining 101 (20.2%). As against this 65 (13%) rural families were small, 310 (62%) were medium (4-6 members) and 125 (25%) were large (7 members). 138 (27.6%) urban mothers had one child, 145 (29%) had two children. Another 164 (33.4%) had three children. Of 50 (10%) who had four or more children. While 50 (10%), 150 (30%), 225 (45%) and 75 (15%) rural mothers had I, II, III and IV children, respectively. Over 50% of mothers were below 25 years of age in both areas. Forty six
percent of rural mothers belonged to social class III, while 6.8%, 26%, 15% and 6% women belonged to social class I, II, IV and V respectively. As against this 79 (15.8%), 171 (34.2%), 145 (29%), 92 (19.8%) and 13 (2.6%) urban mothers came from social class I, II, III, IV and V respectively.

In urban area 124 (24.8%) fathers and 200 (40%) mothers were illiterate as compared to 150 (30%) fathers and 294 (58.8%) mothers in rural area. Out of urban parents 120 (24%) fathers and 95 (19%) mothers were highly educated, while 73 (14.8%) fathers and 45 (9.0%) mothers had college education in rural area.

390 (73%) of urban mothers were housewives while 69 (13.8%) of them were domestic servants and 41 (8.2%) were engaged in teaching and research activities. As against this 405 (81%) of rural mothers were housewives, 25 (5%) were domestic servants and remaining 70 (14%) were manual workers in agricultural work. 82 (16.4%) of urban fathers belonged to professional class as compared to 16 (3.2%) of rural. One hundred and ninety three (38.6%) rural fathers were busy in agricultural work and business.

346 (69.2%) of urban and 175 (35%) of rural mothers received antenatal care. Hundred percent of urban mothers with college education (Graduate and above) availed antenatal care.
The minimal figure 70 (23.8%) for antenatal care was also observed among rural illiterate mothers. 319 (63.8%) of urban and 98 (19.6%) of rural deliveries were conducted in hospital. Out of 79 urban mothers of class I, 72 (91.3%) mothers went to the hospital for delivery. As against this out of 34 rural mothers of class I, 22 (64.7%) mothers has been taken to the hospital for delivery. None of the deliveries of class IV and V in rural area was done in hospital. The number of unassisted deliveries 224 (55.7%) were maximum in rural area while the deliveries by unskilled attendant 160 (58.5%) was common in urban mothers.

Two hundred and three (40.6%) urban mothers discarded colostrum as compared to 347 (69.7%) of rural mothers. The practice of discarding colostrum was markedly reduced (6 -13.3% out of 45 rural mothers) with college education. While 100% of urban educated mothers have accepted colostrum. The frequency of colostrum rejection was more in joint family set up. The figure of discarding colostrum in home and hospital deliveries, in rural area show no significant difference, but there was higher prevalence of discarding colostrum in home deliveries (86.7%) in urban area.

The first thick milk is harmful to the new born and causes diarrhoea was one of the main seasons given by 32.4% of urban and 44.3% of rural mothers, those who discarded
colostrum. Colostrum rejection is tradition was another main reason, given by (40.3%) of urban and (34.7%) of rural mothers. Out of 203 urban mothers (9.8%) and out of 347 rural mothers (15.5%) did not know any specific reason for discarding colostrum. They were just following the community practice.

Out of those mothers who were not throwing colostrum, 51.8% of urban and 54.9% of rural mothers, utilized it on the advice of medical personnels. Colostrum was given by only 41% of urban mothers by knowing its qualities as compared to 20.3% of rural mothers.

Prelacteal feed was given by 91.4% of urban and 97.6% of rural mothers. This practice was almost universal in both areas. Ghutti was used most commonly by 310 (62%) of rural mothers for first feed. Further, whereas, educated, urban mothers were using honey and boiled water for this purpose, Ghutti was also quite popular among little educated and illiterate urban mothers.

As a substitute of breast milk, was one of the main reasons to the use of prelacteal feed, was given by the mothers who were following this practice. Moreover, (22.4%) urban and (47.6%) rural mothers were using cotton swab for administration of prelacteal feed. The maximum prevalence for the use of proper feeding bottle was in urban area (42.6%). The frequency
of using bowl and spoon for first feed was also more in urban mothers. The other methods like using finger tips and any empty bottle were observed among 21.4% of rural mothers. The use of proper feeding bottle was mainly confined to upper socioeconomic group.

In the present study 24.6% urban mothers started giving breast milk within 24 hours of birth of child whereas in rural area this percentage was only 10.4%. Breast milk was started by 69.4% of rural mothers on third day as compared to 40.6% of urban mothers. Breast feeding was done by 97.4% of rural mothers on demand as manifested by crying of the child. Fixed feeding schedule was followed by only 20.2% of urban mothers. This practice specially was found to be more in urban educated mothers, while 100% rural mothers with little or no education fed their babies on demand. The posture of the mothers during breast feeding did not seem to be influenced by area. However 62.5% urban and 73% rural mothers were feeding their babies in lying as well as sitting position. The practice of breast cleaning before feed was found to be better in educated mother and hospital deliveries. Breast clining appeared to be most prevalent amongst urban mothers.

Breast milk was seen as more nutritious and hygienic by 61.4% of urban mothers as compared to 27.9% of rural mothers.
Whereas 83.9% of rural mothers stated availability of breast milk free of cost as the main advantage, but cost was considered as factor by 38.7% of urban mothers.

It is evident that fair number of urban mothers introduced supplementary milk feed within first three months. Only 8.3% rural mothers belonging to educational level above matric and below graduate had introduced milk supplement to their infants by the age of three months, this percentage had risen to 56.8% in urban mothers. By the age of 6 months 34.4% urban mothers had started milk supplement irrespective of their educational status. The corresponding figures for rural area was 20.8%. Majority of rural mothers (62.2%) started top feeding after 12 months as compared to 2.3% of urban mothers.

By and large upper socio-economic group women were starting top milk more frequently as compared to those in lower socio-economic group. In rural area 29.4% of class I, 43% of class II, 80% of class III, 90.6% of class IV and 100 of class V mothers were offering milk supplement after 12 months.

Hundred percent urban mothers with below matric to college educated ones were found to be using proper feeding bottle for top feed. Educated rural mothers were also using feeding bottle. Old discarded empty bottles lying about in the house were employed for infant feeding by 43.5% of illiterate and primary educated rural mothers.
Powder milk and cow milk were commonest type of milk for artificial feeding in urban area, were given to 34.2% and 43.6% babies, respectively. As against this buffalo milk was more common in rural mothers. It was given by 234 (46.8%) of rural mothers.

One hundred and ninety six (39.2%) of the urban mothers were using undiluted milk. The remaining 60.8% on the other hand were using diluted milk for infant feeding. Further evident from this data only 15.8% rural mothers were giving undiluted milk and 84.2% diluted. The ratio of milk and water 1:2 was more common among rural mothers. Majority of mothers from both area were giving 2-3 feeds per day. Only 14% of urban children were received 4-6 feeds per day along with breast milk.

Lack of breast milk and child remain hungry, were given as the main reason for introduction of supplementary milk by 82.6% of urban and 76.8% of rural mothers. 7.2% of urban mothers had to introduced supplementary breast feed as they were working. Next pregnancy was observed as one of the factors to introduce top feed in 3.2% of urban and 6.2% of rural mothers.

Breast feeding was universal and was continued by all 1000 mothers for at least 3 months after delivery. Breast milk was continued upto 4-6 months by 48 (53.5%) of the 95 urban
women with college education. One hundred and fifty seven (78.5%) of 200 illiterate mothers and (78.4%) of the 51 primary educated urban women on the other hand were persisting with breast feeding beyond one year. Whereas 255 (86.7%) of the 295 illiterate, 65 (80.3%) of the 81 primary educated and 56 (92.5%) of 68 rural mothers with matric and below matric educated were continuing breast feeding after one year, but (64.5%) of educated rural mothers had stopped breast milk by 12 months of age. Rural mothers were breast feeding their infants relatively longer. The commonest reason of cessation of breast feeding in illiterate and poorly educated mothers were found to be failure to lactate. Influence of mothers occupation on duration of breast feeding was not seen in rural area, but 100% teachers and research scholars had stopped breast milk by 6 months of age in urban area. Duration of breast feeding was not also influenced by birth order of the child.

None of the mothers from both areas introduced semi-solids and solids in the diet of infants before three months of age. 421 (84.2%) of urban mothers started weaning by the 9 months. In contrast 45% of rural mothers introduced semi-solids and solids by 9 months of age. Mothers educational status was significantly related with early introduction of semi-solid and solid. 92.7% infants of urban educated mothers received semi-solid by 6 months as compared to 45.5% of
illiterate mothers. The corresponding figures for rural area was 64.7% and 16.3%.

In relation with socio-economic status 100% urban and 76.4% rural mothers of class I introduced weaning food within six months of age. In contrast 52.5% of class III, 82.6% of class IV and 83.3% of class V rural mothers introduced semi-solids and solids after one year. Introduction of semi-solids was postponed by lower socio-economic mothers till the infants was almost a year old. Moreover, whereas religion did not seem to influence weaning. Introduction of semi-solids and solids in the diet of infants born to primigravida women and to those with rural background, was found to be both infrequent and delayed. Furthermore, cooked rice, pulse, bread, khichri, dalia boiled vegetable, meat, egg yolk, biscuits and commercial preparation like Farex and Nestum etc. were the articles of food commonly used for weaning by the population studied. 61.1% of urban educated mothers were using commercial preparation, while the illiterate women (88.5%) used home diet i.e. cereals and pulses. The use of boiled vegetable, meat, egg and fruits was also more among educated urban mothers. In rural area 100% of illiterate to matric level women used home preparation. As against this 31.1% of rural educated mothers were using commercial preparation.

The lactating mothers even in the poorest of households were fed with special foods to increase milk flow, lahsun
(Garlic), imli (Tamarind), Zeera (Cuminum cyminum), Harira (a mixture of various articles of dry fruits), ajwain (trachyspermumammi) and Dalia (coarse ground wheat cooked in water or milk) and juicy things were considered to be galactogogues i.e. the food that helps to produce milk. 66.2% of rural and 43.2% of urban mothers were using these things. Whereas 50.4% of urban mothers were taking milk and fruits for this purpose. Rest of the mothers were taking normal food which is cooked for the family.

The knowledge of contraceptive effect of breast feeding and effect of breast feeding on time of initiation of menstruation after child birth have also been studied. 209 (41.8%) of urban mothers knew the contraceptive effect of breast feeding as compared to 282 (56.4%) of rural mothers. The education did not influence this knowledge, but it was quite known among the mothers who belonged to joint family system. In the present study 401 (80.2%) urban and 323 (64.6%) rural mothers could give the details concerning the time of which they restarted their menstruation after delivery. In 87.6% of the urban mothers who breast fed their babies for 3 months, the menstruation restarted within 4 months. Among the mothers who breast fed their infants for 4-6 months, 46.2% reported that their menstruation returned between 5-7 months. Out of 381 mothers who's duration of breast feeding was 7-12 months and above than that,
majority of mothers restarted their menstruation late. The same pattern was observed in rural area also. The return of menstruation indicate a close relationship between the duration of post-partum amenorrhoea.

The nutritional value of breast feeding was quite clearly the major benefit identified by majority of mothers. Other advantages appeared to be far less known eg., only 25.8% of urban and 6.8% of rural mothers knew the psychological importance of breast feeding. The awareness of this aspect was significantly more in the higher social class and educated group. When, however, the mothers were specifically asked as to which type of feeding was associated with better attachment more mothers answered in favour of breast feeding, while 35.6% of urban and 48.2% of rural mothers felt that type of feeding had no influence on bonding, but majority of mothers also expressed that they felt lots of affection during breast feeding.

The following conclusion can be drawn from the results of this study.

1. Breast feeding still remains the most popular mode of infant feeding amongst mothers, as it is evident from the study. All infants were breast fed at birth.

2. Mothers place of dwelling appeared to have a definite bearing on breast feeding practices. Breast feeding practice in rural area is more traditionally structured.
3. It has been observed that a large proportion of urban women are aware that breast milk is more nutritious, hygienic, protects the child against infection and develops better mother and child relationship as compared to the women interviewed in rural area.

4. Significant difference was observed in the attitudes of respondents belonging to different socio-economic and educational status towards all the aspects of infant feeding.

5. The difference in the feeding patterns among muslims and hindus were minimal, if any.

6. It is also observed that educated and little or no educated rural mothers were less aware about different aspects of breast feedings than their urban counterparts.

7. There was no sex difference in breast feeding practices but male child was more valued than the female child.

8. Breast feeding practices are also largely influenced by the family structure. It was traditionally practiced by the mothers who belonged to joint families.

9. The awareness of psychological advantages of breast feeding was significantly more in the higher social class and educated mothers.

10. Although 100% of the mothers were breast feeding their babies at birth, but the majority of mothers were ignorant
about virtues of colostrum, initiation of breast feeding, dilution of top-milk, bottle hygiene, introduction of semi-solid and solid to infant diet.

11. Some educated mothers did not have sound knowledge regarding merits of breast milk, schedule and duration of breast feeding, posture of infant and mother, dilution of supplementary milk and weaning practices.

The results of the present study clearly demonstrated that it is the illiterate and under privileged mother who is ever in need of nutritional education. Improvement in the maternal literacy level therefore will go a long way in promoting healthy infant feeding practices. Meanwhile adult literacy centres could also play an important role in this regard. Doctors, health workers and social workers, therefore, will themselves have to assume the role of nutritional educator of mothers.