CHAPTER VIII
SUMMARY AND CONCLUSIONS

The Integrated Child Development Services scheme in India is one of the largest national nutrition programmes that provides a package of nutrition and health services to the vulnerable sections of the population in the lower socio-economic groups. Nutrition health education in the scheme is envisaged as the main plank to enhance the mother's capability to look after the nutrition health needs of her children. However, available evidence indicated that the nutrition health education component of the ICDS scheme was very poorly implemented primarily because of lack of suitable NHE materials and lack of appropriate training of the functionaries in NHE. Therefore, the present study was planned to develop, test, implement and evaluate a relevant nutrition health education component for the fields functionaries of the ICDS scheme. In view of the fact that current concern of NHE is behaviour modification, evaluation included cognitive and practice changes.

The sample for the study consisted of five supervisors, 55 AWWs and 100 mothers from the tribal ICDS block of Chhotaudepur and six supervisors, 82 AWWs and 150 mothers from the urban ICDS block of Baroda, both in the State of Gujarat. Only subjects on whom both pre- and post-data were available were included in the impact analyses. The study was carried out over a period of two years from March 1984 to June 1986 and consisted of five phases:

Phase I: Situational analysis of the households in the selected anganwadi centres to determine their educational (information) needs and to formulate educational and behavioural objectives.

Phase II: Situational analysis of the AWWs and supervisors to determine if they possessed the necessary knowledge, skills and instructional materials to impart NHE.

Phase III: Development of messages, materials and selection of media strategy and pre-testing of communication materials.
Phase IV: Training of the field functionaries and implementation at the community level.

Phase V: Comprehensive evaluation at the functionary and household level.

The salient findings of the study were:

1) The situational analysis of the nutritional status of the mothers and children indicated that undernutrition and anaemia were the major problems in pregnant and lactating mothers that were amenable to intervention through nutrition education.

2) Moderate degrees of PEM, anaemia and vitamin A deficiency were the major problems in children 1-3 years.

3) There was a large gap between the mean energy intake of pregnant and lactating mothers and children 1-3 years and the recommended dietary allowance (RDA) which stressed the need to tell the community how within their existing economic conditions the dietary intake of the vulnerable groups can be improved, so that the gap between the actual intake and the RDA can be narrowed.

4) The responses of the mothers to the interview schedule to elicit their perceptions and knowledge concerning various nutrition and health problems revealed the following:

   a. They were unaware of the significance of the growth card even though their children were weighed in the anganwadi every month.

   b. Most of them perceived that pregnant mothers must eat less; however, more than 60% perceived the need for higher intake of food for lactating mothers.

   c. Colostrum was considered good by the tribal mothers but not by the urban mothers. Hence feeding colostrum was common among the tribal mothers but not among the urban mothers.
Breast feeding was practiced by all mothers and there was no need for any intervention or corrective measures.

Introduction of semisolids was delayed beyond eight months in both tribal villages and urban slums by more than 50% of the mothers.

The mothers were generally well aware of illness as a cause of malnutrition, although the role of inadequate diet was not well appreciated. Therefore, for prevention they tended to seek medical care rather than take any steps on their own.

Anaemia and vitamin A deficiency were virtually unknown to them although both conditions were prevalent in young children.

Knowledge concerning diarrhoea management was poor. Less than 10% of the mothers were aware of ORS. None knew the correct proportion of ingredients, or the amount to be fed. While most of them (90%) continued breast feeding during diarrhoea, 75% reported they reduced the amount of other foods during diarrhoea.

Causes and prevention of worm infestations were practically unknown.

Knowledge about immunization was good among the urban mothers but the tribal mothers were unaware of the names of the immunization or the doses to be given.

5) The situational analysis of the functionaries revealed the following:

Instructional materials available with the AWWs were unsuitable and inadequate to carry out NHE effectively.

Pattern of time allocation and home visits indicated that home visits under the current situation (one contact/month in the tribal area and one contact in three months in the urban slums) were not feasible for NHE.
Group teaching appeared to hold greater potential for NHE, without imposing a much greater workload on the already overburdened functionaries.

The functionaries had received no training in NHE.

They were well aware of the objectives of the ICDS and their own role in providing NHE to the mothers.

They were also well aware of the range of services provided by the ICDS.

Many NHE messages were claimed as being given but the number giving them was small.

Their perceptions about community participation in the anganwadi activities was restricted to recipe competitions and healthy baby competitions.

The knowledge level was high for only one-third of the total number of items in the schedule, it was moderate for one quarter of the items and low for the others.

6) Based on the situational analysis, 16 training modules were prepared and tested. The supervisors and AWWs were trained in the use of these modules in a week long session, after which they implemented them in the community.

7) The training material prepared was successful in increasing the nutrition health knowledge as well as the communicative competence of the AWWs. The supervisors could handle the training material well which was indicated by the significant improvement in the performance of the AWWs trained by the supervisors.

8) The efficiency of delivery of the educational package by the AWWs to the community was high but the receipt by mothers was low (less than 50%).

9) The education produced a significant improvement in the nutrition health knowledge of the tribal and urban mothers,
the improvement being much higher in the urban mothers than in the tribal mothers.

10) In both tribal and urban mothers knowledge gains were significantly associated with the frequency of attendance.

11) Although knowledge gains tended to be higher for the literate mothers, no significant difference was observed in the knowledge gain between the literate and illiterate mothers. Thus, the illiterate mothers also benefited by the programme greatly.

12) The urban mothers showed an improvement in practically all key content areas while tribal mothers showed an improvement only in four key content areas.

13) It was thus seen that the integrated package approach worked well with the urban mothers. For the tribal mothers it may be necessary to expose them initially only to a few selected messages.

14) Although awareness concerning ICDS services increased significantly among both the groups of mothers, this was not reflected in the utilization of services due to the intermittent nature of service flow during the study.

15) Of the other practices studied, the only changes observed were in the feeding of solids to infants 6 months-1 year old and a trend towards using ORS during diarrhoea. Thus practice changes were minimal.

16) For greater outreach and for behavioural changes a combination of mass media and interpersonal channels will have to be explored.

17) The use of the present modules may, however, be used in order to make correct information accessible to mothers, which in turn can result in improved knowledge and awareness.
In conclusion it may be stated that the modular approach developed in the present study for training the field level functionaries of the ICDS scheme in NHE was successful in improving the knowledge concerning nutrition and health among the functionaries, in improving their communicative competence and in providing a sound knowledge base in some of the key content areas among the tribal mothers and in most of the key content areas among the urban mothers. Only a trend towards behaviour change was observed in two content areas, namely infant feeding and the use of oral rehydration solution for diarrhoea. It is recommended that these modules be used in the ICDS centres in other States, making local adaptations if need be, for improving the mothers' knowledge concerning nutrition and health. At the same time, more research needs to be carried out using a combination of mass media and the interpersonal approach to promote only a few selected messages and to study if behaviour changes can be obtained with this approach within a specified period of time.