

CHAPTER V

HEALTH EDUCATION INTERVENTION

Formulating a 'situation-practical' health education programme; conducting it on field; and evaluating its impact were some of the major goals of the field-experiment. While the operational definition, objectives and procedures of health education interventions have already been presented in chapter one under sub-sections 1.6.6.2, 1.5.2 and 1.6.6.3 respectively; at this juncture we need to focus on two inter-related concerns, namely -

- i) How were the individual sessions conducted 'on field' and what were the exact inputs ?
- ii) To what extent were the programme objectives achieved ?

For an orderly presentation, discussions on (i) and (ii) above, have been consigned into two separate sections of this chapter as per below :

Section 5.1 : Covering Content and Methodology of Individual Sessions

Section 5.2 : Reporting Impact of the Programme on Target Mothers.

However, before we proceed any further, it is necessary first to give a brief account of the 'Basic Premises' on which the present HEP was founded as well as the theoretical definition and principles of Health Education used by us at the implementation level.

Basic Premises :

For a while, consider the following facts :

Indian women, generally speaking are frail persons having to undergo multiple pregnancies. They usually suffer from deficiencies of minerals and vitamins as well. Such women give birth to weak and 'at risk' off springs and high underfives' mortality ensues.

Women, is also the chief person who cooks for the family and looks after all - young or old. As such, needless to say that it would mean a significant social investment if the woman is taught about basic facts of health care; functions of different foods; concept of a balanced meal and the scientific methods of cooking so that the nutrients are conserved and not lost in the process.

Next, even if sound food and health habits are practiced one could fall sick due to a hoard of other reasons. The home-maker should therefore know how to care for and manage the sick. She needs to be liberated of her superstitious ways affecting health and well-being of all. Further, she must be made aware of various preventive and curative health services, especially those available in her neighbourhood and she also be made to feel inclined to utilise them.

And above all, she must learn to perceive health as a valuable asset and develop more positive attitudes towards herself and womanhood as a whole.

Thus, in view of the pivotal role of woman in Indian households, it is plain obvious that health education interventions for women possess a vast potential of raising health standards in the society. In recognition of this fact several state and voluntary agencies have incorporated HEPs for women as integral part of their health services. By the same token, the present interventive research would have

been incomplete and in-effectual to an extent in the absence of an HEP.

Definition of Health Education :

Health education has been perceived differently by different professionals depending on the specific intents and purposes of the latter. For the present study one of the early definitions by Wilson C.C. (1948) has been used. It describes the concept in explicit terms as the process of providing learning experiences for the purpose of influencing knowledge, attitudes and conduct relating to individual, community or world health. It helps individuals to understand how they function as living and dynamic human beings. It makes them alert to understand and appreciate the many factors, obvious as well as subtle which influence health. It acquaints them with community resources for protecting and improving health. It helps them to solve health problems. In short, health education is a modern means to securing widespread understanding and utilisation of present day knowledge concerning health maintenance, improvement and disease prevention. Defined in terms of end results:

Health education is sum of experiences
Which favourably influence practices,
attitudes and knowledge related to health.

Principles of Health Education :

Of the immense literature available on principles and techniques of health education what resembles closest to Social Work methods in general and the present research model in particular is presented here. Once again, we quote Wilson C.C. (1948) for the Six Commandments of Successful Health Teaching listed as per below. :

1. Consider individual differences.
2. Discourage self-diagnosis and self-medication.
3. Avoid embarrassing pupils.
4. Adapt teaching to pupils' interests, needs and capacities.
5. Base teaching on real life problems and real people.
6. Use a variety of teaching methods and finally-

Actions speak Louder Than Words.

SECTION : 5.1

A chronological account of the fifteen health education sessions conducted by us comprises this section. The style of reporting is necessarily of a 'summary type' highlighting only the most relevant features from our field notes. But we wish to place on record our strong belief that each and every moment spent by us with the target group contributed towards informal education of either. There were several inadvertant gains accruing from 'the fall-out process' of the programme. The most significant one being that the target mothers underwent a dramatic change in their personalities. From the stereotype of illiterate, under-privileged and shy women they emerged as bolder, relatively well aware and intellectually curious individuals in their own right. Most of our guest speakers were highly impressed by their keen interest in the programme and the quality of questions raised by them. To add further, a local, voluntary, womens' welfare agency after conducting community awareness programmes on 'Legal rights of women' in several slum locations of Baroda including Pensionpura informally acknowledged the superiority of our target group in terms of their 'participativeness and general smartness'.

With this short preamble, contents and methodology pertaining to each individual session of the health education programme now follow.

SESSION : I

DATE : 24-7-87

TIME : 3.00 TO 4.30 P.M.

- OBJECTIVES :
- i) To orient the participants to the goals, subject matter content, duration, and methodology of implementing the health education programme.
 - ii) To state the general rules of the programme; explain what benefits the women could derive as also the way in which they could contribute to make the programme successful.
 - iii) Through media of games make target women aware of the importance of health for the mother and child.

- MEDIA USED :
- i) Group Discussions
 - ii) Educative Games.

PROCESS AND OBSERVATION : It was the very first session. Kanuben, the CHV had informed the target women twice in advance about arriving at the Balwadi by 3.00 p.m. However, the researcher had to go door to door alongwith Kanuben to gather the women. Most of the women brought their small children along. Few older children came on their own as they were much curious to know why the women were called by us. Since the Balwadi area was rather small, probably less than 50 square feet, presence of children created lot of disturbance. Kanuben, aided by few volunteers was partially successful in making the children quiet.

At the outset, the women were told that approximately 15 such sessions would be held in which through different media of teaching like lectures, role play, story telling, film show etc. they would be educated about health and nutrition care of their underfive children. It was also emphasized that we would much prefer it to be a two - way process of exchange of ideas and clarification of doubts. The women should feel free to tell us if they felt that our theory was wrong. The smiles and noddings from the women were indicative of their approval.

The incentives to attend the programme were stated as below :

- i) Women attending 13 or more sessions would receive Ist prize.
- ii) Women attending 11 or 12 sessions would receive IInd Prize.
- iii) Women attending 9 or 10 sessions would receive IIIrd prize.
- iv) All women attending more than 9 sessions would receive a certificate in Child Health Education from Fatehgunj Samaj Kalyan Kendra (F.S.K.K.), an urban community development agency of Faculty of Social Work, M.S. University of Baroda.
- v) There would be few additional prizes awarded for their attentiveness and performance in health quiz games.

The women heard us attentively. Few asked about the utility of the said certificates. The example of Kanuben was given. The other women too could get similar jobs with relative ease if they earned their certificates.

In the latter half of the session a simple game was conducted which covered the following three aspects :

- i) Nutritious fruit for underfives.
 - ii) Importance of family planning and spacing
 - iii) Weaning age.
- i) Nutritious Fruit for under-fives :

Slips of papers depicting pictures of four fruit namely, Banana, Apple, Chikku and Grapes were distributed to the women and they were asked to tick mark the one fruit which according to them was the most suitable for their underfives. When the papers one were collected, we scored them. Most women had voted for apple. In the discussion that followed they said apple was the best firstly because children liked it the most and secondly because it was an expensive fruit and therefore more health-giving. When we told them that the correct answer in this case was Banana, few of them protested that banana caused coughs and colds. Researcher was aware of this lay belief and she clarified the matter to them in the same lay language that banana would cause cold if the child drank water immediately after having it.

- ii) Importance of Family Planning and Spacing :

Two charts were made for the purpose. The first one pictorially presented that proper spacing between the children led to a happy mother and healthy children. The second chart showed that less difference between children resulted in unhealthy children and an unhappy mother. The women began to identify their ownselves with the first or the second case. The researcher told them that their own situations could not be altered now but this knowledge gain would empower them to help their friends and relatives.

iii) Weaning Age :

Slips of papers containing four to five numbers were distributed to the women and they were asked to encircle one of them at which (month) weaning should start. Actually, many of them knew the correct answers that it should be done at four or five months of the child's age. On being asked whether they had practiced what they knew, most replied in negative and laughed. Few said by way of explanation, that they did not know all this when they were young mothers and few others said that their mothers-in-law did not allow them to do so.

EVALUATION : 14 women participated today.
The general response to the games was good. During discussion, only three women spoke freely. Others were shy and special efforts were needed to enhance their participation.

SESSION : II

DATE : 31-7-87

TIME : 2.30 To 4.30 p.m.

OBJECTIVES : i) Recapitulation of the previous session.

ii) To give a talk on 'Balanced Meal' emphasizing importance of Iron, Calcium, Vitamin A and water.

MEDIA USED : i) Group discussion.
ii) Lecture with the aid of posters and chart.

NOTE : Originally we had planned for a pre-intervention 'health quiz' but since the women were not willing, the exercise was dropped.

PROCESS AND OBSERVATIONS : We began with the feed back of the previous session. Initially, the women were surprised that we asked them what they had learnt in the previous session. Gradually they warmed up and most of them were able to give correct answers, possibly because the coverage was not heavy and they were familiar with the subject. Their ability in answering correctly boosted their self confidence and as a result they became more vocal.

In the latter part of the session talk on concept of a balanced meal was first taken up. They were told about the functions of nutrients like iron, calcium, vitamin A and water; sources of these; and deficiency diseases caused by inadequate consumption of the same.

EVALUATION : The women listened attentively. As the terms were given in English, initially, they found the subject matter a bit difficult to comprehend. However, repetition by us seemed to be helpful to them. Some women got up and left the session for a while to attend to important domestic duties. This caused much disturbance and it was decided to counsel the women (not to do so) individually in their homes and not in the group itself. Neeruben, the adult education teacher of the slum area, took down notes entirely on her own initiative. At the end of the session we asked her whether she would like to present her notes further enriched by her own knowledge and experience to the rest of the group. Neeruben gladly accepted the responsibility.

SESSION : III

DATE : 7-8-87

TIME : 2.30 To 4.30 p.m.

OBJECTIVES : i) Re-capitulation of the previous lesson by Neeruben.

ii) To continue the talk on 'balanced meal' by emphasizing importance of proteins, vitamins and facts.

MEDIA USED : i) Paper presentation by a volunteer from the group.

ii) Group discussion.

PROCESS AND OBSERVATIONS : The session started late by 45 minutes. This happened due to lashing rains in the area that day and the fact that women wanted to wash their large utensils (used on festive occasions) with the nature's bounty of rain water.

As decided, Neeruben presented her paper first. It was a brief paper but contained all the essential information; alongwith her own experience.

Later the researcher continued her talk on vitamins B, C, D, fats, proteins. In simple language they were told about the functions of these nutrients, their food sources and the diseases resulting from their deficiency.

EVALUATION : This time we had erred in not using pictorial material for the talk - the participants looked confused. It was decided to make more charts for use in the next session on the same topic and to end that session with a quiz game which would help towards reinforcement of the previous lessons.161

SESSION : IV

DATE : 14-8-87

TIME : 2.30 To 4.30 p.m.

OBJECTIVES : i) Consolidate teachings on the concept of 'balanced meal'.

ii) Conduct a quiz Game.

MEDIA USED : i) Display of charts.

ii) A Quiz Game.

PROCESS AND OBSERVATIONS : Today only 10 women came. This happened because it was the ration collection day and the other women had not finished their purchases. The lesson learnt by us was that it was necessary to inquire about the suitability of the date and time of the next session at the end of every session. We could not have a fixed time table as is possible in formal institutions of learning.

At the beginning, for about twenty minutes we displayed the charts containing illustrations of different foods, their sources and functions. We also told them that they should have a good look at the charts because after a while the charts would be removed and a quiz game on the same topic would be conducted. The women were excited about the game and studied the charts carefully.

Conduct of Quiz Game :

The women were made to sit according to their serial number in the attendance sheet. Then we told them that there were 13 questions in the quiz and the rules of the game were stated as follows :

i) Each lady would be asked one question. She would be awarded 10 marks for right answer and zero for an incorrect answer.

ii) In case the question was not answered or it was incorrectly answered it would be passed on to the lady immediately next and so on till the correct answer was given. Whosoever gave the correct answer for a 'passed' question would be awarded 5 marks.

The result of the quiz game was as follows :

S.No.	Name	Marks obtained
1.	Ranjanben	10 + 10 = 20
2.	Kapilaben	10 + 5 + 5 + 10=30
3.	Kantaben	10 + 10 = 20
4.	Shubhanginiben	10 + 10 = 20
5.	Jayalaxmiben	5 + 10 = 15
6.	Shaliniben	5 + 10 = 15
7.	Meenaben	10 + 10 = 20
8.	Shobhanaben	10
9.	Nirmalaben	10
10.	Shantaben	0

Quiz Question with Correct Answers :

1. What are the common sources of Proteins ?

Ans. Milk, curds, eggs, dried beans, peas, groundnut and other nuts, pulses, whole grains preferably sprouted.

2. What are the common sources of vitamin A ?

Ans. Butter, ghee, eggs, Carrots, Papaya, Mango, all leafy vegetables.

3. Which disease is caused due to deficiency of vitamin-A?

Ans. Night blindness

4. What are the sources of Vitamin B ?

Ans. Sporouted grains, whole grains, Milk, fermented foods like 'dhokala', 'idli' and 'dosa'.

5. What are sources of vitamin C ?

Ans. Lime, Amla, Guava, Tomatoes, Oranges and Grapes.

6. Which common disease is caused due to deficiency of vitamin C ?

Ans. Common cold.

7. What is the cheapest source of vitamin D ?

Ans. Sunlight.

8. What is the most important function of vitamin D ?

Ans. Aids in formation of healthy bones.

9. Which common and cheaply available fruit is a good source of calcium ?

Ans. Banana

10. What is the important function of calcium ?

Ans. Aids in formation of healthy teeth and bones.

11. What are the important sources of Iron ?

Ans. Jaggery, green vegetables, dates, channa.

12. What disease is caused by deficiency of Iron ?

Ans. Anaemia

13. How many grams of iron should there be in one deciliter of blood ?

Ans. 11 gms.

EVALUATION : The quiz game was very well received by the participants. As the result shows the learning by the group in this area was fairly satisfactory considering that this was an entirely new subject for them.164

SESSION : V

DATE : 19-8-87

TIME : 1.30 To 3.30 p.m.

OBJECTIVE : i) To impart knowledge of pre-natal and post-natal care.

MEDIA USED : i) Talk by an expert i.e. a Gynaecologist.

PROCESS AND OBSERVATION : Dr.(Miss) Trusha Zikare was invited. She was told in advance about the research project and background level of the participants and that she should deliver a talk on pre-natal and post-natal care.

The women came in time and in full strength. The contents of the expert's talk can be summarised as follows:

i) Pre-natal Care :

It was emphasized that as soon as a woman realises that she is pregnant she should immediately see a qualified doctor and not feel shy or hesitant. The pregnant mother should take a balanced diet and include cheap but nutritious items like banana, jaggery, chana (Bengal gram) and whole grains preferably sprouted, in her meals. The pregnant woman should continue her household work as before. During rest and sleep time she should lie on the left side so that the embryo inside is provided with more blood. Tetanus Toxoid injections should be taken in the seventh, eighth and ninth month of pregnancy. It provided protection against Tetanus to the mother and child. Iron and calcium supplement tablets should be taken as per medical advice.

ii) Post-natal Care :

It is very important to remain in touch with the doctor after delivery also so that un-necessary infections

can be avoided and correct advice received for subsequent immunization of the child as well as family planning.

iii) There should be no discrimination between boys and girls.

EVALUATION : After the talk, the doctor held a question answer session with the women on allied subjects of nutritive foods, weaning age, attitudes to family planning etc. She was much surprised to receive correct answers to all her questions. She was also impressed by their disciplined and yet active participation. The expert's comments were shared with the women to encourage them further. The women then took initiative in seeking advice on some of their problems regarding menstruation etc. We were fully satisfied today that our efforts were well directed.

SESSION : VI

DATE : 21-8-1987

TIME : 2.30 To 4.30 p.m.

OBJECTIVE : To emphasize upon the target women the importance of personal hygiene; in particular about cleanliness of nails, teeth and hands.

MEDIA USED : i) A skit by community children.
ii) Group discussion.

PREPARATORY WORK : i) Suitable modification of dialogues to Indianise the skit taken from (Teaching Health Education in the elementary School' by Wantz (1967)

ii) Translation of the skit into Gujarati language.

iii) Assigning the task of getting the skit ready to the field work students.

iv) Preparation of masks for the children so that it becomes easy to identify the characters played by them in the skit.

THE SKIT

TITLE : DANGEROUS GERMS.

SKIT OBJECTIVES :

i) The skit brings out that some diseases are caused by micro-organisms.

ii) Washing hands removes disease carrying micro-organisms.

MATERIALS REQUIRED :

i) Masks to specify germs; the skin cells; the portion of the body attacked by germs; water and paste; soap and water.

MODERATOR :

This is a story of three germs named Pinku, Rinku and Tinku which attack the body of Bharat, a small sweet boy and try to make him sick. What we now present is a meeting between the three germs, who are good friends, always in search of a host.

PINKU : I am the most dangerous germ and can affect teeth very badly. I like to cause tooth decay and can make Bharat cry with pain.

RINKU : Just this much ? You don't know how dangerous I am! I shall enter in Bharat's nails and through his food enter into the mouth and meet you there. Then we shall work together to make him sick.

TINKU : I shall join you in a slightly different way. When Bharat comes to the park to play I shall just stick to his hands and through food enter the mouth.

All the three laugh together -

Ha! Ha! Ha!

ALL THE THREE TOGETHER: This way we shall help our friend DISEASE to spread in Bharat's body and later attack his family members and neighbours.

(SCENE II : Bharat wakes up in the morning.)

MOTHER : Bharat, get up! Brush your teeth and come for breakfast.

BHARAT : I am very hungry. Nothing is wrong with my teeth. They are bright and white and do not need brushing!

MOTHER : No, no! Bharat, you must brush twice a day. I won't allow you to eat without brushing. When you eat, food particles get stuck on the teeth

and germs can grow there (Bharat begins to brush his teeth)

PINKU : Oh - my God ! What is this on me!
My whole body is hurt and I am
being thrown away.

WATER & PASTE : Cry for help. No one will help
you !

PINKU : Help ! Rinku, Tinku, Help !
(No response)

(SCENE III : After breakfast Bharat is getting
ready for school.)

MOTHER : Check whether your nails are properly
cut or not - otherwise your teacher
will scold you.

BHARAT : Why should she scold ? I won't
cut them now, I am getting late.

MOTHER : Do cut them and remove dust particles
settled underneath.

(Mother cuts the nails and cleans them).

RINKU : Hey ! Someone is pulling me out
of my place. Help me !
(No response)

SCENE : After school, Bharat played in the
park and is back home.

TINKU : Hello ! I am Tinku the germ and
I like to make people sick.

MODERATOR : Lakshmi, Bharat's sister enters the
room.

LAKSHMI : Bharat, see What I brought for you?

TINKU : (Jumps up and down) I am now on Laxshmi's hand and I would like to make her sick too.

SKIN CELLS : Go away ! You are very bad !

TINKU : I will make her sick. Ha! Ha! Ha!

MOTHER : Bharat, Laxmi ! Be sure that you wash your hands before you eat.

LAKSHMI & BHARAT : But our hands are not dirty !

MOTHER : But you might be having germs on your hands which are too small to be seen. But they are quite powerful to make you sick.

LAKSHMI & BHARAT : Alright mother.

TINKU : Help, help! There is water and soap on me.

SOAP & WATER : We will kill you here and now.
We won't let you make people sick.

(TINKU Cries.....)

EVALUATION : The skit was very much appreciated by all. After complimenting the artistes we had a follow up discussion with women to assess how far our objective was served. It was encouraging to know that women not only understood the direct message of the skit but that they also grasped the indirect message about the responsibility of mother in ensuring cleanliness of the child.

SESSION : VII.

DATE -: 26-8-1987.

TIME : 2.30 To 4.00 p.m.

OBJECTIVE : To impart knowledge of usual season of occurrence, common symptoms, complications and harmful effects, management and prevention of common childhood diseases, namely, Tetanus, Scabies and Diarrhoea.

MEDIA USED : i) Story-telling with the aid of flip charts.

 ii) Follow-up discussion

NOTE : 1. Illustrative flip charts with captions in Gujarati language were obtained from Sarabhai Science Centre, Ahmedabad.

 2. A copy of one such story on Diarrhoea is attached as appendix 'C'.

PROCESS AND OBSERVATION : The topic for coverage today was introduced and the women were told that we needed one volunteer from the group to conduct the session. The women looked somewhat baffled but when they were told that we had illustrative stories which the volunteer could read out they were satisfied. Neeruben was selected by the group to read out the stories.

Neeruben presented the stories in a humorous way and at the same time conveying the exact meaning. Some of the characters of the stories could be identified with few of the group members or their friends and that's how humour began. Few additional points which were not covered

in the story were covered by the person in charge.

EVALUATION : Story-telling medium was very much enjoyed by the women. Follow-up discussion revealed that the medium also provided much clarity of the subject. Participants were very happy on being told that a similar session would be held next week.

SESSION : VIII

DATE : 2-9-1987

TIME : 2.30 To 4.00 p.m.

OBJECTIVE : To impart knowledge of usual seasons of occurrence, common symptoms, complications and harmful effects, management and prevention of common childhood diseases, namely, Chicken pox, Measles and Anaemia.

MEDIA USED : i) Story-telling aided by flip charts.
ii) Follow-up discussion.

NOTE : Illustrative flip charts with captions in Gujarathi language were obtained from Sarabhai Science Centre, Ahmedabad.

PROCESS AND OBSERVATIONS : The group members had brought few of their friends along, perhaps due to the success of the previous session. We said that we should have a different volunteer today. The group assigned the responsibility to our CHV, Kanuben. For Kanuben it was the first occasion to read out to a group from a formal platform but she did a good job of it. As in the previous session, Follow-up

discussion revealed that learning by the group was also of a high standard.

EVALUATION : The interest generated by story-telling technique could be gauged by the fact that group members brought their friends along for the session and also when they requested to have more stories in addition to the ones planned for the day. To honour the participants' request stories of Malaria and Pneumonia were also presented.

SESSION : IX

DATE : 4-9-1987

TIME : 2.30 To 4.30 p.m.

OBJECTIVE : To emphasize significance and importance of spacing children and family planning.

MEDIA USED : i) Story-telling session by a worker from Kashiben Gordhandas Patel Children's Hospital, Karelibaug, Vadodara.

ii) Follow-up discussion.

NOTE : The guest speaker brought along her own illustrative material of flip charts.

PROCESS AND OBSERVATION : The session today was conducted by an experienced person and this was reflected in her ability to carry out ensuing discussion from the story-session. The story, in a nutshell was as follows :

Two ladies who were good friends were shown to visit a rural primary health centre together for advice on family planning. A public health nurse explains to them the advantages of using Copper-T and gives instructions about the same. One lady follows the advice and gets a Copper T inserted by the qualified doctor and is able to plan her family. This results in a healthy and happy family.

On the other hand her friend did not need the advice or rather was discouraged by the mother-in-law about it. The result was a poor and unhealthy family.

The guest speaker included in her presentation certain questions for women which were directed to help the latter in developing positive attitudes towards female children, the women themselves as well as family planning. The women participated actively and teased each other about related issues.

EVALUATION : As in the past two sessions, the story technique aided by flip charts was very well received and seemed to be impactful too.

SESSION : X

DATE : 9-9-1987.

TIME : 3.00 To 4.30 p.m.

OBJECTIVES : i) Discuss reasons for utilization and non-utilization of health services.

ii) Discussion on availability of health services in neighbourhood and at city level.

iii) Discuss major social problems in India.

MEDIUM USED : Free response of participants on any idea or theme presented by researcher.

PROCESS AND OBSERVATION: As the subject today was familiar to participants the emphasis was on getting maximum contribution from them during discussions. The women were told that one by one topics would be mentioned and they should speak on it whatever comes to their mind first i.e. it was intended to be a kind of a buzz session, which was subsequently supplemented by researcher. The responses of the women were as follows :

i) Health Services in Neighbourhood and Around :

Weekly immunization clinics run by Baroda Municipal Corporation, neighbourhood anganwadis under ICDS project, health services provided by S.S.G. Hospital, Community outreach services and hospital based services of Kashiben Childrens' Hospital, Health Services under U.C.D., Baroda Project, missionaries' health services at Lady Pillar Hospital, made up the consolidated list. What different services are available at each of the above centres were also discussed.

ii) Reasons for Non-utilization of Health Services.

The participants said that they prefer private clinics to S.S.G Hospital because the latter is relatively far and one whole morning is required to be spent at the hospital, which they can ill-afford.

Secondly, in some government or charitable hospitals nurses and ward boys exploit the helpless patients for providing the latter with bedsheets and other such articles.

Thirdly, ignorance of certain services led to their non-utilization.

iii) Major Social Problems in India :

The participants were less participative here as compared to the earlier two themes. Women mentioned poverty, illiteracy, low status of women and unemployment as the major social problems. Interestingly, they mentioned that poverty is not too grave a problem provided one knows how to spend the available income intelligently. They were also able to see that most problems are related and caused by one another.

Concerning low status of women, it was concluded that women themselves would have to fight for achieving higher status by becoming literate and independent. There is sound social legislation to support them.

EVALUATION : Today it was a little serious business contrasted against three previous story telling sessions. The women also appeared unsure how 'major social problems' discussion merited a place in our health education programme. We had included it with a view that some other topical issues also be discussed in addition to the main theme.

SESSION : XI

DATE : 11-9-1987.

TIME : 2.30 To 4.30 p.m.

OBJECTIVE : i) Demonstration of a nutritive snack-
'Poona Bhel'

ii) Discussion of modification of some cookery practices for conserving nutritive value of cooked food.

iii) Guidelines for fuel conservation.

MEDIA USED : i) Cookery demonstration.

ii) Group discussion.

PROCESS AND OBSERVATIONS : This idea was borrowed from a programme conducted in one anganwadi by an ICDS worker. In this session too we had a guest volunteer as person in charge of the session. The guest volunteer had brought sprouted whole grain cereals of four kinds and other ingredients which are used in preparation of ordinary 'bhel'. Nutritive value of ordinary 'bhel' is increased manifold by adding sprouted whole grain cereals and curds to it without losing its taste.

The guest volunteer engaged the women in informal conversation to explain to them the recipe under demonstration, scientific methods of daily cooking to conserve nutritive value of foodstuffs, ways to economise fuel consumption and how routine meals can be fortified by simple modifications.

Women actively helped in the preparation and the guest volunteer gave them importance by saying that the former were well experienced in cooking and could evolve new recipes themselves.

At the end of the demonstration all had a helping of the snack.

EVALUATION : The latent objective of having a 'lighter session' and some refreshment for the group were well served. How far the women would adopt scientific ways of cooking in their daily lives remains to be seen. But in this session they were equipped with the necessary knowledge.

SESSION : XII

DATE : 7-10-1987.

TIME : 2.30 To 4.00 p.m

OBJECTIVES : i) To impart knowledge about the term 'immunity', and immunization schedule.
ii) To inquire from women whether and what reservations they harboured against immunizing their children.

MEDIA USED : i) Immunization Chart
ii) Group discussion.

PROCESS AND OBSERVATION : To begin with purpose of the session and some background knowledge of immunization was given by lecture method. Group discussion method was used to clarify the term immunity, explain immunization schedule and know their reservations against immunization.

An immunization chart in Gujarati language was used for illustration. Most women knew about vaccines but they found it difficult to comprehend the time factor and the disease against which a particular vaccine provides protection.

Regarding their reservations against immunization, some women said that someone known to them had grave side effects or abcess at the site of the injection (perhaps the syringe was not properly sterilised). Few also said that it is 'not done' in their family.

EVALUATION : Though the women listened with interest, it was obvious that this one session on the subject would be inadequate. It was decided to organise a film show on 'immunization' for building their knowledge further.

SESSION : XIII

DATE : 8-10-1987

TIME : 4.30 To 5.30 p.m.

OBJECTIVE : To emphasize upon the importance of immunization in the minds of participants and other community members at an affective level.

MEDIA USED : A rally by community children carrying relevant posters in a child-to-child approach.

PROCESS AND OBSERVATIONS : This session was a surprise item for participant women in our health education programme. We were successful in training some community children to walk together in a rally, carry posters and shout slogans on immunization. It was planned as a logical sequel to the group discussion on immunization on the previous day. The main purpose was to dramatically present importance of immunization to the entire community as this was an extremely important issue.

Field work students were assigned the responsibility of preparing suitable posters which they had procured from the Paediatrics department of S.S.G Hospital, Vadodara and training the children for the rally. The theme of posters and slogans as translated from vernacular were -

i) Key to Child Health -
Give the Vaccine
Arrest the Disease

ii) Immunization is the Birthright of
your Children.

iii) We Want Immunization.

EVALUATION : The new technique seemed to have made the intended impact.

SESSION : XIV

DATE : 16-10-1987.

TIME : 3.00 To 4.30 p.m.

OBJECTIVE : To organise a film show on the theme of immunization.

MEDIA USED : i) Film show

ii) Group discussion

MATERIALS : i) Projector and other equipments were secured from Information Department, as also their technician.

ii) Film was obtained from Baroda Citizen' Council, a voluntary organisation in the field of Urban Community Work.

PROCESS AND OBSERVATIONS : This was one session in which we had made a massive blunder albeit un-knowingly and despite careful planning. We had intended to screen a film on immunisation and contacted B.C.C. for the purpose. We were told that such a film is available but we should make our own arrangements for the equipment.

Having done the latter, one of the field work students collected the film cassette which the B.C.C. worker gave. On the outer jacket of the cassette there was a slip saying that inside there was a film on immunization.

However, when the operator began to project the film it turned out to be one on the oft-repeated theme of family planning. The interventionists were simply shocked and the participants visibly disappointed. Anyway, it was too late to do anything about it then we continued screening the film out of respect for the personnel from Information Department and our field work students who had taken pains to organise it.

Obviously, we dispensed with the earlier planned follow-up discussion.

EVALUATION : We learnt a costly lesson. It showed how an ill-conceived theme is rejected by a clientele group. Indeed, in the episode today the theme was well chosen and good planning was also made. Yet due to circumstances beyond our control, the presentation failed.

SESSION : XV

DATE : 27-2-1987.

TIME : 3.30 To 5.00 p.m.

OBJECTIVE : Valedictory function and award of Certificates and Prizes to the participants.

PROCESS AND OBSERVATIONS : The participants evinced keen interest in the function from the very beginning. They demanded that some 'important person' must be invited and that they were ready to present a prayer song at the beginning and a 'garba dance' at the end. When we told them that the faculty agency - F.S.K.K. would provide light refreshments they were very happy. Immediately the women suggested that they would themselves prepare some 'nutritious snack' and tea. It was our turn to feel pleased.

Subsequently, Dr. Sagunbhai Desai, Assistant Professor in Pharmacology, Medical College, Vadodara was invited as the chief guest. Other preparations of arranging for a traditional lamp, garlands, decoration of balwadi, writing of certificates and purchase of prizes was done with the help of field work students.

Kanuben and Neeruben undertook the responsibility of prayer song, 'garba' dance and refreshments.

The participants garlanded the chief guest, student workers and the researcher at the beginning and a prayer followed. The chief guest lighted the traditional lamp as a symbolic gesture and later awarded the certificates and prizes as announced by a field work student. A special prize was awarded to Kanuban for her meritorial services. To our immense satisfaction there were no misunderstandings amongst the participants regarding our selection of awardees for various prizes. The chief guest at the end informally chatted with the participants praising them and also inquiring what they had learnt. Next the ladies presented a lively 'garba' dance which everyone enjoyed.

In the very end Neeruben proposed a formal vote of thanks and snacks were served.

EVALUATION : The women conducted themselves maturedly and discharged all the responsibilities volunteered for by them in a commendable way. This is worth mentioning because it reflects growth in their personalities as a side gain of the health education programme. The women felt a tremendous sense of achievement which was evident from their active involvement in planning of this session ab initio.

SECTION : 5.2

RESULTS BASED ON HYPOTHESES TESTING

It may be recalled here that in order to study the impact of HEP, the researcher had postulated six hypotheses numbered 8 to 13 as given in section 1.6.3. An assessment of the same, based on student's t-test and findings of correlation and multiple regression analysis to establish the nature of relationship between knowledge, attitudes and practices of health care of underfives amongst mothers and some relevant predictor variable would be presented serially in this section.

- 5.2.1 Hypothesis 8 : The mean scores of knowledge in each unit pertaining to health care of underfives amongst treatment group mothers would show increase after the HEP vis-a-vis the corresponding values before.

The knowledge content in the KAP scale contained thirteen component units as per below :

Knowledge of Diarrhoea

"	"	Measles
"	"	Chicken Pox
"	"	Anaemia
"	"	Tetanus
"	"	Scabies
"	"	Infant feeding
"	"	Nutritious diet
"	"	Ante-natal care
"	"	Post-natal care
"	"	Immunization
"	"	Family planning
"	"	Health Services in the neighbourhood and at city level.

Correspondingly, hypothesis 8 could be treated as a composite of thirteen sub-parts each of which represented one of the above stated units. Before-after paired samples'

t-test analysis of these sub-parts have been presented serially in tables and numbered as 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8.

5.2.1.1 Knowledge of Common Childhood Diseases.

TABLE : 5.1

t-test Analysis : Pre and Post Intervention Mean Scores of Knowledge Regarding Childhood Diseases in Treatment Group.

n of Cases : 13

Degrees of Freedom : 12

Information	Time of Measure- ment	Mean	S.D.	Corre- lation	t- Value	2-Tail Prob.
Diarrhoea	Pre	2.6154	1.121	.265	-5.58	
				.265	-5.58	.000 ^{*.1}
Measles	Post	5.9231	2.139			
	Pre	4.0000	1.472	.101	-4.85	.000 ^{*.2}
Chicken Pox	Post	6.8462	1.676			
	Pre	3.4615	1.613	.557	-2.91	.013 ^{*.3}
Anaemia	Post	5.1538	2.1538			
	Pre	.4615	1.198	.657	-1.47	1.68 ^{*.4}
Tetanus	Post	1.1538	2.230			
	Pre	.6923	.947	.043	-4.57	.001 ^{*.5}
Scabies	Post	4.6154	2.987			
	Pre	.3846	.768	.141	-4.38	.001 ^{*.6}
	Post	2.2308	1.423			

*.1	Extremely Significant at	0%
*.2	" "	0%
*.3	" "	1.3%
*.4	Not	5%
*.5	Extremely Significant at	.1%
*.6	" "	.1%

⁷ Table 5.1 presents results pertaining to the knowledge scores with respect to the common childhood diseases covered in HEP. Regarding each disease the women were taught about its usual seasons of occurrence, common symptoms, complications and harmful effects, disease management and disease prevention. The table displays that the mean score increase in case of knowledge of diarrhoea, measles, chicken pox, tetanus and Scabies were highly significant at p levels of 0%, 0%, 1.3%, .1% and .1% respectively. Only in the case of anaemia the mean increase was not significant as the 2-tail probability value was .168.

Story-telling sessions followed by group discussions were the media of instruction used here. The literature with illustrated pictorial presentation was obtained from Sarabhai Science Centre and three volunteers from the learners' group read aloud the stories in three different sessions. One such illustrated story on Diarrhoea has been given in appendix for reference purposes. The sessions were immensely enjoyed by the participants and as the results show, the medium of story-telling was found to be highly effective too, except indeed in case of Anaemia.

5.2.1.2 Knowledge of Infant feeding.

TABLE : 5.2

t-test Analysis : Pre and Post Intervention Mean Scores of Knowledge Regarding Infant Feeding in Treatment Group.

Variable Code :

V₂₄ : Pre-Intervention Mean Score Knowledge of Infant Feeding.

V₂₅ : Post-Intervention Mean Score Knowledge of Infant Feeding.

n of Cases : 13

Degree of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t-value	2 - Tail Prob.
V ₂₄	16.0000	5.538	.235	-7.27	.000*
V ₂₅	29.6923	5.437			

*Extremely Signification at 0%.

Table 5.2 depicts analysis of change in knowledge of infant feeding. The mean scores rose from 16.0000 to 29.6923 under the impact of HEP and the increase was highly significant at p = .000 level. In this area the women were expected to possess fair level of knowledge before intervention and sure enough it was so (in relative terms). Therefore, quiz type games were specially designed to help women learn more about colostrum and why it should be given to the newborn; breast-milk although a complete food in early infancy needs to be supplemented by solid foods soon later correct weaning age; nutritive and cheap weaning foods ; special nutritional requirements of infants and importance of maintaining cleanliness while feeding. The technique of games yielded positive results and much could be accomplished in a short time of one session.

5.2.1.3 Knowledge of Nutritious Diet.

TABLE : 5.3

t-test Analysis : Pre and Post Intervention Mean Scores of Knowledge Regarding Nutritious Diet in Treatment Group.

Variable Code :

V₄₂ - Pre-Intervention Mean Score Knowledge of Nutritious Diet.

V₄₃ - Post-Intervention Mean Score Knowledge of Nutritious Diet.

n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t-Value	2 - Tail Prob.
V ₄₂	3.4615	1.330	.904	-2.13	.054*
V ₄₃	3.8462	1.519			

*Significant at 5.4%

Table 5.3 presents analysis of change in knowledge of nutritious diet. This unit of information was found to be the most difficult one to comprehend by the learners' group. The particulars covered under this head were - rich sources of vitamins A, B, C and D Calcium, Iron and Proteins; their broad functions ; harmful effects caused by their deficiencies and finally the concept of a balanced meal. A reference was also made to role of fats, carbohydrates and other minerals but it was kept to a brief minimum lest the participants get confused. The communication techniques used were lectures aided by charts and posters, group discussion, note

presentation by a participant and finally a quiz game. Nearly three and a half sessions were required. As the statistics reveal mean score of knowledge of nutritious diet rose from 3.4615 to 3.8462 under the impact of the combined efforts at imparting this education. However, the mean increase narrowly missed the level of significance at $p < .05$ as the 2-tail probability value was .054.

5.2.1.4 Knowledge of Ante-natal Care.

TABLE : 5.4

t-test Analysis : Pre and Post Intervention Mean Scores of Knowledge Regarding Pre Natal Care in Treatment Group.

Variable Code :

V₃₀ - Pre Intervention Mean Score Knowledge of Pre Natal Care.

V₃₁ - Post Intervention Mean Score Knowledge of Pre Natal Care.

n of Case : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t-Value	2 - Tail Prob.
V ₃₀	13.0000	3.894	.388	-5.17	.000*
V ₃₁	19.6154	4.407			

*Extremely Significant at 0%

Table 5.4 depicts impact of HEP on knowledge of ante-natal care. The package of information included importance of regular medical examination ; correct diet of a pregnant mother, importance of light exercise as well as sleep and relaxation, correct postures,schedule and importance of tetanus

toxoid immunization. The communication technique used was a talk by a lady Gynaecologist from S.S.G. Hospital, Baroda. The pre-intervention mean score rose from 13.0000 to 19.6154 and the difference was highly significant at 0% level since the 2-tail probability value was .000. It needs to be mentioned here that the guest speaker was much impressed by the intellectual curiosity displayed by the participants and their awareness regarding weaning, nutritious food and family planning etc. the topics which the doctor discussed initially to 'warm up' the session.

5.2.1.5 Knowledge of Post-natal Care.

TABLE : 5.5

t-test Analysis : Pre and Post Intervention Mean Scores of Knowledge Regarding Post Natal Care in Treatment Group.

Variable Code :

V₃₂ - Pre Intervention Mean Score Knowledge of Post Natal Care.

V₃₃ - Post Intervention Mean Score Knowledge of Post Natal Care.

n of Case : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t-value	2 - Tail Prob.
V ₃₂	.6923	.480			
			.413	-8.80	.000*
V ₃₃	2.4615	.776			

*Extremely Significant at 0%.

Table 5.5 reveals analysis of change in knowledge of post-natal care. The information covered here was importance of medical examination of the mother and child after delivery and spacing of future births. The same lady Gynaecologist who gave a talk on ante-natal care spoke on this subject too. In fact both topics were covered by her in a single session.

It can be seen from the table that mean score knowledge of participants rose from .6923 to 2.4615, the difference being highly significant at 0% level as the 2-tail probability value was .000.

5.2.1.6 Knowledge of Immunization.

TABLE : 5.6

t-test Analysis : Pre and Post Intervention Mean Scores of Knowledge Regarding Immunization in Treatment Group.

Variable Code :

V₅₀ - Pre-Intervention Mean Score Knowledge of Immunization

V₅₁ - Post-Intervention Mean Score Knowledge of Immunization.

n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t-Value	2 - Tail Prob.
V ₅₀	3.9231	2.532			
			.264	-5.96	.000*
V ₅₁	18.6154	7.547			

*Extremely Significant at 0%.

Table 5.6 depicts change in knowledge of immunization. Information imparted under this head included importance of immunization, its schedule and which vaccine provides protection against what illness. Three techniques, namely, lecture aided by charts, group discussion and a childrens' rally at the end of the session in child-to-child approach were used. While the former two methods helped women learn more about immunization at a cognitive level and also clarify some of their misgivings about the same ; the rally achieved its intended aim of an appeal to the community as a whole at an affective level of learning about the importance of immunization. About 25 community children were quietly (without the knowledge of elders) trained to carry posters and shout slogans like -

'We Want Immunization'

'Immunization Is the Birthright of Children'

'Give The Vaccine - Arrest The Disease'

The overall impact of the teaching methods was spectacular as shown in the table. The mean score rose from 3.9231 to 18.6154. The mean difference was highly significant at $p = 0\%$ level since the two-tail probability value was .000.

5.2.1.7 Knowledge of Family Planning.

TABLE : 5.7

t-test Analysis : Pre and Post Intervention Mean Scores of Knowledge Regarding Family Planning in Treatment Group.

Variable Code :

V₃₄ - Pre-Intervention Mean Score Knowledge of Family Planning.

V₃₅ - Post-Intervention Mean Score Knowledge of Family Planning.

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n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t-Value	2 - Tail Prob.
V ₃₄	14.8462	5.226			
			.549	-5.78	.000*
V ₃₅	24.4615	6.972			

*Extremely Significant at 0%.

Table 5.7 depicts change in knowledge of family planning. Two sessions were devoted to communicate about the advantages of limiting family size, proper spacing of births, temporary and permanent methods of contraception, difficulties and side-effects of different methods. Two techniques, namely, story-telling with flip charts and a film show were used. The illustrated story material was obtained from K.G. Childrens' Hospital, Baroda and a student social worker presented it. Film show was arranged with the help of the State Information Department and Baroda, Citizens' Council. The film show was not much appreciated by the participants as they expressed that a recreational film would have been more welcome. However, the mean score knowledge rose from 14.8462 to 24.4615 which was highly significant a difference at 0% level since the 2-tail probability value was .000.

5.2.1.8 Knowledge of Health Services.

TABLE : 5.8

t-test Analysis : Pre and Post Intervention Mean Scores of Knowledge Regarding Health Services.

Variable Code :

V₄₈ - Pre Intervention Mean Score Knowledge of Health Services.

V₄₉ - Post Intervention Mean Score Knowledge of Health Services.

n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t-Value	2Tail Prob.
V ₄₈	2.6154	.650	.447	-2.95	.018 *
V ₄₉	4.3846	1.044			

* Extremely Significant at 1.8%

Table 5.8 depicts the change in knowledge of health services. During one session, a lecture followed by group discussion sought to upgrade women's awareness of immunization, ante-natal, post natal, family planning and general curative services available both in the neighbourhood and at city level. The Mean scores rose from 2.6154 to 4.3846 and the difference was significant at 1.8% level since the two-tailed probability value was .018.

5.2.1.9 Status of Hypothesis 8 After HBP.

As brought out by the on-going discussion, hypothesis 8 was found to be highly acceptable on eleven of its component thirteen sub items. Of the remaining two, the level of significance for mean change in knowledge of nutritious diet was narrowly missed at $p < .05$ level as the 2-tail probability value was .054. Only in case of change in knowledge of Anaemia the 2-tail probability value of .168 was much away from the

acceptable level of significance. In overall terms therefore, it is justified that hypothesis 8 be accepted and retained.

5.2.2 Hypothesis 9 : The mean Scores of Knowledge in each unit pertaining to health care of underfives amongst treatment group mothers would be higher than scores obtained by the control group after HEP.

As explained earlier in the case of hypothesis 8, hypothesis 9 could also be treated as a composite of the same thirteen sub-units as presented in section 5.2.1 (For details please refer section 5.2.1). Results of change in knowledge in all the component units as shown in table No. 5.9 and their presentation now would follow the same pattern as in the previous sections. Also since the contents covered and the communication techniques are the same as in case of H8, the information would not be repeated here.

TABLE : 5.9

t-test Analysis : Pre and Post Intervention Mean Scores of Knowledge Regarding Health Care of Underfives in Treatment and Control Groups.

Information	Time of Measurement	Group	Mean	S.D.	F Value	t Value	Degrees of Freedom	2-Tail Prob.
Diarrhoea	Pre	Trt. n=13	2.6154	1.121	1.68	.35	26	.728
		Cont. n=15	3.567	1.033				
	Post	Trt.	5.9231	2.139	3.15	1.49	17.93	.048
		Cont. n=15	4.0614	1.163				

Information	Time of Measurement	Group	Mean	S.D.	F Value	t Value	Degree of Freedom	2 - Tail Prob.
Measles	Pre	Trt.	4.0000	1.472				
		n=13			1.10	-1.10	26	.280
	Post	Cont.	4.6000	1.404				
		Trt.	6.8462	1.676				
		n=13			1.17	2.37	26	.025
		Cont.	5.4000	1.549				
	n=15							
Chicken Pox	Pre	Trt.	3.4615	1.613				
		n=13			1.15	-.11	26	.911
	Post	Cont.	3.5333	1.727				
		n=15						
		Trt.	5.1538	2.512				
		n=13			1.64	1.52	26	.140
	Cont.	3.8667	1.959					
	n=15							
Anaemia	Pre	Trt.	.4615	1.198				
		n=15			COMPUTER WARNING : NO VARIANCE FOR INDEPENDENT SAMPLES t-test.			
	Post	Cont.	.0000	.000				
		n=15						
		Trt.	1.1538	2.230				
		n=13			74.62	1.75	12.28	.106
	Cont.	.0667	.258					
	n=15							

Information	Time of Measurement	Group	Mean	S.D.	F Value	t Value	Degree of Freedom	2 - Tail Prob.
Tetanus	Pre	Trt. n=13	.6923	.947	3.42	-1.10	22.11	.284
		Cont. n=15	1.2667	1.751				
	Post	Trt. n=13	4.6154	1.987	3.05	3.57	18.50	.002
		Cont. n=15	1.2667	1.710				
Scabies	Pre	Trt. n=13	.3846	.768	3.88	-1.38	21.37	.181
		Cont. n=15	1.0000	1.512				
	Post	Trt. n=13	2.2308	1.423	1.61	1.34	26	.193
		Cont. n=15	1.4000	1.805				
Infant Feeding	Pre	Trt. N=13	16.0000	5.538	1.31	2.24	26	.034
		Cont. n=15	11.6000	4.837				
	Post	Trt. n=13	29.6923	5.437	1.32	7.33	26	.000
		Cont. n=15	15.6000	4.733				

Information	Time of Measurement	Group	Mean	S.D.	F Value	t Value	Degree of Freedom	2 - Tail Prob.
Nutritious Diet	Pre	Trt. n=13	3.4615	1.330	1.41	-.30	26	.767
		Cont. n=15	3.6000	1.121				
	Post	Trt. N=13	3.8462	1.519	1.67	.35	26	.728
		Cont. n=15	3.6667	1.175				
Antenatal Care	Pre	Trt. n=13	9.6154	4.407	1.98	1.84	26	.123
		Cont. n=15	8.2667	4.992				
	Post	Trt. n=13	13.0000	3.894	1.08	3.98	26	.000
		Cont. n=15	9.0672	4.053				
Postnatal Care	Pre	Trt. n=13	.6923	.480	1.10	-.23	26	.819
		Cont. n=15	.7333	.480				
	Post	Trt. n=13	2.4615	.776	2.88	7.04	18.85	.000
		Cont. n=15	.7333	.458				

Infor- mation	Time of Measu- rement	Group	Mean	S.D.	F Value	t Value	Degree of Freedom	2 - Tail Prob.
Immuni- zation	Pre	Trt. n=13	3.9231	2.532				
					1.06	.60	26	.551
	Post	Cont. n=15	3.3333	2.610				
		Trt. n=13	18.6154	7.547				
					2.21	5.62	20.55	.000
		Cont. n=15	4.7333	5.077				
Family Planning	Pre	Trt. n=13	8.8974	5.226				
					1.94	1.81	26	.120
	Post	Cont. n=15	7.6000	6.685				
		Trt. n=13	24.4615	6.972				
					1.16	5.64	26	.000
		Cont. n=15	8.9333	7.507				
Health Services	Pre	Trt. n=13	2.6154	.650				
					1.03	.34	26	.740
	Post	Cont. n=15	2.5333	1.040				
		Trt. n=13	4.3846	1.044				
					2.01	5.15	21.21	.000
		Cont. n=15	2.6000	.737				

5.2.2.1 Knowledge of Common Childhood Diseases.

Information of six childhood diseases, namely, diarrhoea, measles, chicken pox, anaemia, tetanus and scabies in table No.5.9 appears under two sub-heads with respect to the time of measurement. It can be seen from table 5.9 that the pre intervention mean scores in treatment and control group with regard to all the six diseases when subjected to independent samples t-test were found to be not at all significant at $p < .05$ level since the 2-tail probability values were much higher. In other words, the two groups before intervention were well matched and highly comparable as required (In fact, in case of anaemia, the pre intervention means had hardly any variance as per the computer warning) However, post intervention t-test results show that in case of diarrhoea, measles and tetanus the information gained by treatment group under impact of HEP was highly significant at 4.8%, 2.5%, .2% and 0% respectively. The mean difference (post intervention) was not significant enough in case of chicken pox, anaemia and scabies as the two-tail probability values were high.

5.2.2.2 Knowledge of Infant Feeding.

Information on infant feeding in table 5.9 appears under two sub-heads with respect to the time of measurement. Pre intervention data shows that mean scores in the treatment and control groups were significantly different at 3.4% level. Therefore, this was the odd case in which the two groups were not well matched and comparable as required by an experimental study, and it is regrettable indeed. However, the post intervention data reveals that although the means of both the groups increased during the intervention, perhaps due to 'the trickle around' effect, the mean of treatment group rose spectacularly and the t-test result this time was highly significant as the 2-tail probability value was .000. To that extent, it can be said with confidence that our HEP produced positive change in knowledge of infant feeding.

5.2.2.3 Knowledge of Nutritious Diet.

Information on knowledge of nutritious diet in table No 5.9 clearly depicts that the two groups were initially well matched and highly comparable as required. However, the knowledge gain by treatment group under HEP was not significantly different from control group mothers as the 2-tail probability value under independent samples was .728 well beyond the $p < .05$ level of significance. Earlier, in the case of hypothesis 8, the results of the before-after t-test had brought out a significant change in knowledge in treatment group itself. The failure of t-test under hypothesis 9, is perhaps a pointer 'to trickle around' effect of knowledge passed on by treatment group mothers towards their friends in the control group. It is not at all a surprising matter in a small and compact geographical area.

5.2.2.4 Knowledge of Ante-natal Care.

Information of ante-natal care as shown in table No.5.9 conforms to the research expectation that the treatment and control groups be well matched and comparable before intervention since pre intervention 2 tail probability value was .123. At the post-intervention stage the mean scores of the two groups were significantly different, since the 2-tail probability value was .000. To that extent, hypothesis 9 is acceptable.

5.2.2.5 Knowledge of Post-natal Care.

Table 5.9 clearly depicts that the pre intervention mean scores in treatment and control groups with respect to knowledge of post-natal care were highly comparable and the two groups were well matched as the 2-tail probability value under independent samples t-test was .123 which is not significant at $p < .05$ level. Hence, the required condition for experimental research was satisfactorily met with. t-test analysis of post intervention mean scores was found to be highly significant at 0% level since the two-tail probability value was .000. Hence, the HEP was impactful in this respect too.

5.2.2.6 Knowledge of Immunization.

Table 5.9 reveals that t-test analysis of mean scores of knowledge of immunization in treatment and control groups was not significant at $p < .05$ level since the 2 tail probability value was .551. In other words, the groups were well matched and highly comparable as required. The post intervention independent samples t-test was found to be highly significant at 0% level since the 2-tail probability value was .000. To that extent, the hypothesis is acceptable.

5.2.2.7 Knowledge of Family Planning.

Pre intervention data on family planning as shown in table No. 5.9 depicts that the treatment and control groups were well matched and highly comparable at that time as required since the 2-tail probability value was .120, well beyond the desired level of significance. However, the post intervention data conforms to the hypothesis 9 since the 2-tail probability value here was .000 the level of significance being extremely high at 0%. Hence, the HEP was impactful in this unit, too.

5.2.2.8 Knowledge of Health Services.

Information on health services in table No.5.9 reveals that the pre intervention and post intervention mean scores in treatment and control groups conform to hypothesis 9. The two groups were highly well matched before intervention as the 2-tail probability value was .740 well beyond $p < .05$ level of significance. On the other hand, the post intervention 2-tail probability value was highly significant at 0%. The HEP induced the desired positive changes in this unit as well.

5.2.2.9 Status of Hypothesis 9 after HEP.

The ongoing presentation in section 5.2.2.1 to 5.2.2.8 brings out that the knowledge gain by participants of HEP was well beyond $p < .05$ level of significance with respect to nine out of thirteen

component units. The four units in which the hypothesis stands rejected were knowledge of chicken pox, anaemia, scabies and nutritious diet. How do we account for this ?

The foremost logical deduction would be that our teaching efforts were inadequate and inefficient. Perhaps more concentrated inputs were required. But when we compare these results with the results of hypothesis 8 which also represented the very same thirteen knowledge units for which the teaching contents and techniques were also the same, we find that hypothesis 8 was untenable only in case of knowledge of anaemia and in fact it narrowly missed 5% level of significance by .4%. This implies that in the present case if the t-test results are found to be non-significant it was more because of simultaneous knowledge gain by the control group members rather than due to insufficient knowledge gain by treatment group. This is most likely to have happened because the two groups did not exist in isolation. In fact they were both drawn from the same compact geographical area. The treatment group women had probably shared their learnings from the HEP sessions with their neighbours and friends from control group and knowledge trickled across. Although it upset hypothesis 9, spread of correct knowledge is certainly a desirable trend.

Taking all aspects into consideration, therefore, it seems reasonable to retain hypothesis 9, making allowances for side effects of working in an open community setting.

- 5.2.3 Hypothesis 10 : The mean scores of attitudes (in each unit) pertaining to health care of underfives amongst treatment group mothers would show increase after the HEP vis-a-vis the corresponding values before.

The attitude content in the KAP scale contained three component units as per below :

Attitude to Infant feeding
Attitude to Women and Female child
Attitude to Health Professionals.

Correspondingly, hypothesis 10, could be treated as a composite of three sub-units, each of which represents one of the above stated content. Before-after paired samples t-test analysis of these sub-parts have been presented serially in tables numbered as 5.10, 5.11, 5.12.

5.2.3.1 Attitude to Infant Feeding.

TABLE : 5.10

t-test Analysis : Pre and Post Intervention Mean Scores of Attitudes Towards Infant Feeding in Treatment Group.

Variable Code :

V₂₆ - Pre Intervention Mean Score Attitudes Towards Infant Feeding.

V₂₇ - Post Intervention Mean Score Attitudes Towards Infant Feeding.

n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Correlation	t value	2 - Tail Prob.
V ₂₆	2.4615	1.198	.221	-2.28	.042*
V ₂₇	3.4619	1.330			

*Significant at 4.2%

In this sub-section, our strategy was to help women develop positive attitudes by first correcting their false beliefs or add to their knowledge on issues like whether colostrum should be given to the new-born infant or discarded ; whether an infant should be fed as and when he/she cries or periodically as per a schedule ; whether timely weaning is necessary for child health or not and whether feeding water is important or not.

It can be seen from table No. 5.10 that the mean scores of attitudes in the treatment group rose from 2.4615 to 3.4619 and the change was significant at 4.2% level.

Hence hypothesis 10 is acceptable in this case.

5.2.3.2 Attitude to Women and Female Child.

TABLE : 5.11

t-test Analysis : Pre and Post Intervention Mean Score Attitudes Towards Women and Female Children in Treatment Group.

Variable Code :

V₄₄ - Pre Intervention Mean Score Attitudes Towards Women and Female Child.

V₄₅ - Post Intervention Mean Score Attitudes Towards Women and Female Child.

n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t Value	2 - Tail Prob.
V ₄₄	1.0769	.641			
			.186	-3.86	.008*
V ₄₅	2.8462	.689			

*Extremely Significant at .8%

In this sub-section, issues like whether daughters are a burden; whether two sons in each family are preferable; whether there should be at least one son in each family; why life expectancy amongst women is lower than men; why greater number of male patients seek medical care as compared to female patients were dealt with. Before-after analysis of mean scores of attitudes

as shown in table No. 5.11 reflects that the change was highly significant at .8% level since the 2-tail probability value was .008.

Hence, the hypothesis is tenable with respect to attitudes towards women and female child.

5.2.3.3 Attitudes to Health Professionals.

TABLE : 5.12

t-test Analysis : Pre and Post Intervention Mean Scores of Attitudes Towards Health Professionals in Treatment Group.

Variable Code :

V₄₆ - Pre Intervention Mean Score Attitudes Towards Health Professionals.

V₄₇ - Post Intervention Mean Score Attitudes Towards Health Professionals.

n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t Value	2 - Tail Prob.
V ₄₆	2.3077	1.377	.488	-2.65	.025*
V ₄₇	3.3846	.768			

*Significant at 2.5%

In this sub-section, attitudes of women towards health professionals like doctors, nurses, vaccinators, family planning workers and social workers were probed into both before and after intervention. Table No. 5.12 illustrates that the mean score rise with respect to attitudes to health professionals was significant at 2.5% level of significance since the 2-tail probability value was .025.

Hence the hypothesis is tenable in this case, too.

5.2.3.4 Status of Hypothesis 10 after HEP.

The on-going presentation in sections 5.2.3.1, 5.2.3.2 and 5.2.3.3 brings out that the hypothesis 10 was tenable with respect to all the three component units of the attitudes content in the KAP scale.

Hence, hypothesis 10 is found to be un-ambiguously acceptable and stands retained.

5.2.4 Hypothesis 11 : The mean scores of attitudes (in each unit) pertaining to health care of underfives amongst treatment group mothers would be higher than control group mothers' socres after the HEP.

As explained earlier in the case of hypothesis 10, hypothesis 11 can also be treated as a composite of the same three sub-units as presented in section 5.2.3 (For details please refer section 5.2.3). Results of change in attitudes in all the component units as shown in table No. 5.13 and their presentation here would follow the same pattern as in the previous sections. Also since the contents covered are the same as in the case of hypothesis 10, the information would not be repeated here.

TABLE : 5.13

t-test Analysis : Pre and Post Intervention Mean Scores of Attitudes Towards Health Care of underfives Amongst Treatment and Control Groups.

Information	Time of Measurement	Group	Mean	S.D.	F Value	t Value	Degree of Freedom	2-Tail Prob.
Infant Feeding	Pre	Trt. n=13	2.4615	1.198				
					1.35	.46	26	.648
	Post	Cont. n=15	2.2667	1.033				
		Trt. n=13	3.5678	1.330				
					1.04	2.04	26	.047
		Cont. n=15	2.5333	1.302				
Women and Female Child.	Pre	Trt. n=13	1.0769	.641				
					1.21	.04	26	.968
	Post	Cont. n=15	1.0667	.704				
		Trt. n=13	2.8462	.689				
					1.04	6.74	26	.000
		Cont. n=15	1.0667	.704				
Health Professionals	Pre	Trt. n=13	2.3077	1.377				
					1.36	-.19	26	.850
	Post	Cont. n=15	2.4000	1.183				
		Trt. n=13	3.3846	.768				
					2.34	2.84	24.31	.009
		Cont. n=15	2.3333	1.175				

5.2.4.1 Attitude to Infant Feeding.

Information on infant feeding in table No. 5.13 reveals that the treatment and control groups were well matched and highly comparable before intervention as the 2-tail probability value was .648. In other words, the required research condition that the two groups be near equals before intervention was satisfactorily met with. However, the post intervention t-test analysis of the mean scores of the two groups show that the treatment group mothers had undergone an attitudinal change which was significant at 4.7% level since the 2-tail probability value was .047. Hence, the HEP was impactful in this case.

5.2.4.2 Attitude to Women and Female Child.

Table No. 5.13 depicts that pre intervention mean scores in treatment and control groups with respect to attitudes towards women and female child were highly comparable and the two groups were well matched as the 2-tail probability value under independent samples t-test was .968. Hence, the required condition for experimental research was satisfactorily met with. The t-test analysis of post intervention mean scores was found to be highly significant at 0% level since the 2-tail probability value was .000. Hence, the HEP was impactful in this respect too.

5.2.4.3 Attitudes to Health Professionals.

Information on health professionals in table No. 5.13 reveals that the pre intervention and post intervention t-test analysis of mean scores in treatment group conform to the experimental research requirement that the two groups should have insignificant variance before and significant variance after intervention was satisfactorily met with. The 2-tail probability value before was .850 and found to be not significant at 5% level while the subsequent value was .009 which was significant at .9% level. Hence, the hypothesis 11 was found to be tenable in this case.

5.2.4.4 Status of Hypothesis 11 after HEP.

The presentation in sections 5.3.4.1, 5.3.4.2 and 5.3.4.3 brings out that the hypothesis 11 was tenable with respect to all the components units of attitudes content in the KAP scale.

Hence, hypothesis 11 is found to be un-ambiguously acceptable and retained.

5.2.5 Hypothesis 12 : The mean scores of practice (in each unit) pertaining to health care of underfives amongst treatment group mothers would show increase after the HEP vis-a-vis the corresponding values before.

The practice content in the KAP scale contained three component units as per below :

Practice of Care and Management of sick child
Practice of Infant feeding
Practice of Personal Hygiene.

Correspondingly, hypothesis 12 could be treated as a composite of three sub units each of which represents one of the above stated contents. Before-after paired samples' t-test analysis of these units have been presented serially in tables numbered 5.14, 5.15 and 5.16 respectively.

5.2.5.1 Practice of Care and Management of Sick Child.

TABLE : 5.14

t-test Analysis : Pre and Post Intervention Mean Scores of Practice Regarding Care and Management of Sick Child in Treatment Group.

Variable Code :

V₂₂ - Pre Intervention Mean Score Practice
of Care and Management of Sick Child.

V₂₃ - Post Intervention Mean Score Practice
of Care and Management of Sick Child.

n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Corre- lation	t Value	2 - Tail Prob.
V ₂₂	8.5385	2.259	.594	-2.88	.014*
V ₂₃	10.1538	2.230			

*Extremely Significant at 1.4%

In this section, we dealt with practices like giving fluids to a sick child, ORS mix in case of diarrhoea; cleanliness and hygiene of the patient; giving medicines as per physician's instruction even if the sick child protests, completing the full course of treatment even if symptoms subside and isolating the child in case of such requirement. Pre intervention scores were explored and after imparting information of correct practices through group discussion method, post intervention scores were recorded. It was found that mean score difference in treatment group was significant at 1.4% level since the 2-tail probability as determined by t-test analysis was .014 as shown in table. Hence, the hypothesis was tenable in this instance.

5.2.5.2 Practice of Infant Feeding.

TABLE : 5.15

t-test Analysis : Pre and Post Intervention Mean Scores of Practice of Infant Feeding in Treatment Group.

Variable Code :

V₂₈ - Pre Intervention Mean Score Practice of Infant Feeding.

V₂₉ - Post Intervention Mean Score Practice of Infant Feeding.

n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	S.D.	Correlation	t Value	2 - Tail Prob.
V ₂₈	4.4615	1.941			
			.946	-1.76	.104*
V ₂₉	4.7692	1.787			

*Not Significant below 5% level.

In this section, we focussed on the actual change in practice in terms of giving recommended solid foods to infants; following a schedule for feeding and not leaving it to demand of the infant or convenience of the mother and feeding of water. Before-after t-test analysis of mean scores of practice in treatment group revealed that the difference was not significant at 5% level of significance since the 2-tail probability was .104. In other words, the HEP was not impactful in this instance.

5.2.5.3 Practice of Personal Hygiene.

TABLE : 5.16

t-test Analysis : Pre and Post Intervention Mean Scores of Practice of Personal Hygiene in Treatment Group.

Variable Code :

V₄₀ - Pre Intervention Mean Score Practice of Personal Hygiene.

V₄₁ - Post Intervention Mean Score Practice of Personal Hygiene.

n of Cases : 13

Degrees of Freedom : 12

Variable	Mean	SD.	Correlation	t Value	2 - Tail Prob.
V ₄₀	10.3846	1.981	.562	-4.13	.001*
V ₄₁	12.6923	2.287			

* Extremely Significant at .1%

In this section, we focussed on oral and dental hygiene; cleanliness of hair, nails and clothes; regular bathing; washing of hands before taking food and also washing of hands before cooking. Since nothing of the aforesaid personal hygiene items were new and it was expected that all women knew about it at cognitive level, it was decided to approach them at an affective level by organising a stylised skit by community children, again in a child-to-child approach. The text of the skit is given in section 5.1. The strategy used yielded highly significant results as shown in table 5.16 that the 2-tail probability under paired samples t-test was .001. Hence, the HEP was highly impactful in this instance, as well.

5.2.5.4 Status of Hypothesis 12 after HEP.

The presentation in section 5.2.5.1, 5.2.5.2 and 5.2.5.3 brings out that the hypothesis 12 was tenable with respect to two out of three component units of practice content in the KAP scale.

Hence, it would be judicious to retain hypothesis 12 partially.

5.2.6 Hypothesis 13 : The mean scores of practice (in each unit) pertaining to health care of underfives amongst treatment group mothers would be higher than the scores obtained by control group mothers after the HEP.

As explained earlier in the case of hypothesis 12, hypothesis 13 can also be treated as a composite of the same three sub units as presented in section 5.2.5 (For details please refer section 5.2.4). Results of change in practice in all the component units as shown in table No. 5.17 and their presentation here would follow the same pattern as in the previous sections. Also since the contents covered and the communication technique used remain the same, the information would not be repeated here.

TABLE : 5.17

t-test Analysis : Pre and Post Intervention Mean Scores of Practice Regarding Health Care of Underfives in Treatment and Control Groups.

Infor- mation	Time of Measu- rement	Group	Mean	S.D.	F Value	t Value	Degrees of Freedom	2-Tail Prob.
Care and Manage- ment of Sick Child	Pre	Trt. n=13	8.5385	2.259				
		Cont. n=15	7.3333	1.175	3.69	1.73	17.47	.101
	Post	Trt. n=13	10.1538	2.230				
		Cont. n=15	7.5333	1.767	1.59	3.47	26	.002
Infant Feeding	Pre	Trt. n=13	4.4615	1.941				
		Cont. n=15	3.6667	1.113	3.04	1.30	18.52	.209
	Post	Trt. n=13	4.7692	1.787				
		Cont. n=15	3.8667	1.187	2.26	1.55	20.38	.137
Per- sonal Hygiene	Pre	Trt. n=13	10.3846	1.981				
		Cont. n=15	11.733	3.081	2.42	-1.39	24.13	.176
	Post	Trt. n=13	12.6923	2.287				
		Cont. n=15	12.3333	3.244	2.34	.34	25.05	.735

5.2.6.1 Practice of Care and Management of Sick Child.

Table No. 5.17 clearly depicts that the pre intervention mean scores in treatment and control groups with respect to practice of care and management of the sick child were highly comparable and the two groups were well matched as the 2-tail probability value under independent samples t-test analysis was .101 which is not significant at 5% level. Hence, the required condition for experimental research was satisfactorily met with. However, t-test analysis of post intervention mean scores was found to be highly significant at .2% level since the 2-tail probability value was .002. The HEP was therefore, impactful in this respect.

5.2.6.2 Practice of Infant Feeding.

Table No. 5.17 depicts that the pre intervention mean scores in treatment and control groups with respect to practice of infant feeding were highly comparable and well matched, as the 2-tail probability value under independent samples t-test was .209 which is not significant at 5% level. Hence, the required condition for experimental research was satisfactorily met with. Despite HEP however, t-test analysis of post intervention mean scores was also found to be not significant at 5% level since the probability value was .137. It may be recalled here that practice of infant feeding had not improved significantly in the treatment group itself since hypothesis 12 was clearly rejected in this regard. The post intervention result in case of hypothesis 13 therefore is not surprising at all.

Therefore hypothesis 13 clearly stands rejected in this case.

5.2.6.3 Practice of Personal Hygiene.

Table No. 5.17 clearly depicts that the pre intervention mean scores in treatment and control groups with res-

pect to practice of personal hygiene were highly comparable and the two groups were well matched as the 2-tail probability value under independent samples t-test was .176 which is not significant at 5% level. Hence, the required condition for experimental research was satisfactorily met with. Despite HEP however, t-test analysis of post intervention mean scores was found to be not significant at 5% level. Hence the required condition for experimental research was satisfactorily met with. Despite HEP however, t-test analysis of post intervention mean scores was found to be not significant at 5% level since the 2-tail probability value was .735.

It may be recalled here that in case of hypothesis 12, the post intervention means of treatment and control group were found to be statistically highly different from each other. Then how do we explain the present result. It can be seen from table 5.17 that the post intervention mean score in both the groups rose although there were no inputs in the control group. Once again, we attribute this trend to 'trickle around' effect wherein the treatment group mothers shared their learning from the HEP with their neighbours and friends in the community belonging to the control group.

The hypothesis 13 is rejected in this instance without any reservations.

5.2.6.4 Status of Hypothesis 13 after HEP.

The presentation in sections 5.2.6.1, 5.2.6.2 and 5.2.6.3 bring out that hypothesis 13 was found to be untenable with respect to two out of three component units of practice content in the KAP scale.

Hence, hypothesis 13 stands clearly rejected.

5.2.7 Results Based on Correlation and Multiple Regression Analysis

In addition to measuring the impact of the HEP, we were interested in studying the nature of relationship between the dependent variables of aggregate scores of knowledge, Attitude and Practice and some relevant independent variables like household size, mother's age, mother's education and per capita monthly income. Multiple Regression Analysis was carried out to serve the stated purpose and the discussion of the results obtained follows.

Correlation and Multiple Regression between Criterion Variable V₇₂ i.e. Aggregate Knowledge Score and Predictor Variables as listed below :

Household Size, Mother's Age, Mother's Education and Per Capita Monthly Income.

TABLE : 5.18

5.2.7.1 Correlation and Multiple Regression between Criterion Variable V₇₂ i.e. Aggregate Knowledge Score and Predictor Variables as listed below :

<u>Variable</u>	<u>Lable</u>	<u>Mean</u>	<u>Standard Deviation</u>
V ₄	Mother's Age	26.000	3.517
V ₅	Mother's Edu.*	1.821	1.090
V ₈	Household Size	5.179	1.249
V ₉	Per Capita Monthly Income	113.821	54.619

N of cases = 28

Correlation :

	V ₄	V ₅	V ₈	V ₉	V ₇₂
V ₄	1.000	-.135	.506	.406	.064
V ₅	-.135	1.000	.079	.223	.536
V ₈	.506	.079	1.000	-.197	.110
V ₉	.046	.223	-.197	1.000	.148
V ₇₂	.064	.536	.110	.148	1.000

Multiple Regression :

Method : Step-wise EQ 1 : V₇₂(Aggregate Knowledge Score)

Variables in Equation

Variable	B	SE B	T	Sig T.
V ₅	10.25918	316889	3.237	.0033
(Constant)	925.99221	669550	138.301	-.0000

Variables Not in Equation

Variable	Beta In	Min Toler	T	Sig T.
V ₄	.13908	.98172	.827	.4159
V ₈	.06853	.99381	.406	.6882
V ₉	.02972	.95041	.172	.8650

Multiple R .53601
R Square .28730 or 28.73%
Adjusted R Square .25989
Standard Error 17.95594

Variable Code

- 1 = Illiterate
- 2 = One to 5 years of formal education
- 3 = 6 to 9 years of formal education
- 4 = 10 to 12 years of formal education

As shown in table 5.18 all the predictor variables bore a positive correlation with aggregate knowledge score. However only in the case of mother's education the correlation matrix value was high i.e. .536 and therefore, stepwise method was employed for regression analysis. It was confirmed that mother's education made a statistically significant and positive impact on knowledge of participants. In other words, higher the educational level of the mother, greater would be the knowledge gained by her. Since the value of R square, was .28730, variance produced by mother's education level was 28.73% which was quite good.

5.2.7.2 Correlation and Multiple Regression between Criterion Variable V₇₃ i.e. Aggregate Attitude Score and Predictor Variables as listed below :

Household Size, Mother's Age, Mother's Education and Per Capita Monthly Income.

TABLE : 5.19

Correlation and Multiple Regression between Criterion Variable V₇₃ i.e. Aggregate Attitude Score and Predictor Variable as listed below :

<u>Variable</u>	<u>Label</u>	<u>Mean</u>	<u>Standard Deviation</u>
V ₄	Mother's Age	26.000	3.517
V ₅	Mother's Edu.*	1.821	1.090
V ₈	Household Size	5.179	1.249
V ₉	Per Capita M. Income	113.821	54.619

Correlation :

	V ₄	V ₅	V ₈	V ₉	V ₇₃
V ₄	1.000	-.135	.506	.046	-.031
V ₅	-.135	1.000	.079	.223	.224
V ₈	.506	.079	1.000	-.197	.073
V ₉	.046	.223	-.197	1.000	.085
V ₇₃	-.031	.224	.073	.085	1.000

Multiple Regression :

Method : Enter EQ 1 : V₇₃ i.e. Aggregate Attitude Score.

Variable in Equation

Variable	B	SE B	T	Sig T
V ₉	3.918110E-03	.01486	.264	.7944
V ₄	-.05460	.25992	-.210	.8355
V ₅	.74278	.73680	1.008	.3239
V ₈	.27845	.74361	.374	.7115
(Constant)	1.14306	6.02294	.190	.8511

Multiple R	.25775
R Square	.06644 or 6.64%
Adjusted R Square	-.09592
Standar Error	3.90124

Variable Code

*
1 = Illiterate

2 = 1 to 5 years of formal education

3 = 6 to 9 years of formal education

4 = 10 to 12 years of formal education

Table 5.19 reveals that only mothers's age was negatively correlated with attitude score implying that younger the mother-more positive her attitude towards health concerns of her underfives. Since the matrix value was rather low i.e. -.031, the above stated trend was not confirmed under multiple regression analysis. All the other independent variables bore a positive relationship with attitude score but none exerted any statistically significant influence. Since the study sample was rather small, probably some of the subtle changes could not be guaged in the present intervention model.

5.2.7.3 Correlation and Multiple Regression between Criterion Variable V₇₄ i.e. Aggregate Practice Score and Predictor Variables as listed below :

Household size, Mother's Age, Mother's Education and Per Capita Monthly Income.

TABLE : 5.20

Correlation and Multiple Regression between Criterion Variable V₇₄ i.e. Aggregate Practice Score and Predictor Variables as listed below :

Variable	Label	Mean	Standard Deviation
V ₄	Mother's Age	26.000	3.517
V ₅	Mother's Edu *	1.821	1.090
V ₈	Household Size	5.179	1.249
V ₉	Per Capita M. Income	113.821	54.619

N of Cases = 28

	V ₄	V ₅	V ₈	V ₉	V ₇₄
V ₄	1.000	-.135	.506	.046	-.208
V ₅	-.135	1.000	.079	.223	.545
V ₈	.506	.079	1.000	-.197	-.360
V ₉	.046	.223	-.197	1.000	.441
V ₇₄	-.208	.545	.360	.441	1.000

Multiple Regression :

Method : Enter EQ 1 : V₇₄ i.e. Aggregate Practice Score.

Variable in Equation

Variable	B	SE B	T	Sig T
V ₉	.01409	8.80791E-03	1.599	.1234
V ₄	.03502	.15402	.227	.8222
V ₅	1.48288	.43659	3.396	.0025
V ₈	-.92122	.44063	-2.091	.0478
(Constant)	2.05598	3.56891	.576	.5702

Multiple R	.72232
R Square	.52175 or 52.17%
Adjusted R Square	.43858
Standard Error	2.31169

Variable Code

- *1 = Illiterate
- 2 = 1 to 5 years of formal education
- 3 = 6 to 9 years of formal education
- 4 = 10 to 12 years of formal education

Table 5.20 reveals that all the four predictor variables had either positive or negative, although low or medium level correlation with aggregate practice score. More-specifically, correlation matrix values for mother's age, mother's education, household size and per capita monthly income were respectively -.208, .545, -.360 and .441. In other words, younger mothers, better educated ones, smaller households and higher per capita incomes contributed more significantly (than others) towards improvement in practice of health care of underfive children. Multiple Regression analysis further brought out that the relationships of mother's education and household size with aggregate practice score (as stated above) was statistically significant too.

Value of R square was considerably high i.e. 52.17%. Therefore, it can be categorically stated that higher educational level of mother and smaller households are strong predictors of practice of health care of underfives.