

CHAPTER IV

Data Exercise

4.1. INTRODUCTION:

The proposed study is supposed to go through a long and sequential process of design, implementation, control (monitor and supervision) and evaluation of a multidisciplinary health education approach (mass media, face-to-face education and practical demonstration) in Laharepauwa Village, Rasuwa District, Nepal. The whole study is divided into three main phases: development of health education strategies, implementation of the program and evaluation of the program.

The first concern of the study is to design the health education message, based on the characteristics of target audiences, their needs and wants and the feasible media in the study area as well as pre-test the message and media among the target population. Thus, data collection will be done to identify the above components. Similarly, another concern of this study will be to introduce the health education program through the usage of mass media, face-to-face education and practical demonstration. The health education services will be monitored and supervised routinely under a closely controlled system. The program implementation will be carried out for six continuous month.

Third concern of this study is evaluation. The evaluation part deals with two basic components: first, to identify the acceptability of the health education services offered (process evaluation) and to identify whether the proposed intervention program was successful to improve the expected behavioral change of the target population (impact evaluation). The study is a qualitative approach action research, which will go through an iterative cycle of message drafting, pre-testing and revision until a clear and concise message is developed.

4.2 OBJECTIVES:

The main objective of data exercise is to refine the tools and techniques that were developed for the original study. Thus, the data exercise is mainly focused towards academic purpose rather than identifying the real components that are associated with the original study. The objectives of data exercise are:

- a) To pretest guidelines (focus group discussion and key informant interview) among the real respondents of the original study.
- b) To test out data collection techniques whether they can collect the expected information that is required for the original study.

4.3 TECHNIQUES:

Focus group discussion will be the main data collection technique in the original study. This technique will be utilized many times for the collection of different information relating to the design of the health education approach, to pretest health education messages, as well as to identify the preferences of the target

audiences towards the offered media and messages. In addition, key informant interviews and the review of service statistics will be other data collection techniques (along with focus group discussion) for the impact evaluation of the proposed study.

4.4 INSTRUMENTS USED:

Focus group discussion and key informant interviews are the data collection techniques intended for the data exercise. Different focus group discussion guidelines were developed for different purposes (see appendices), but Appendix 10 was tested as the data exercise instrument. It was because, this (Appendix 10) guideline contained all the necessary questions relating to the program development, such as: identification of potential target-audiences, their needs (in terms of problem perception and health related behavior) and possible communication channels etc.

Similarly, key informant interview guidelines were also developed (Appendix 23) as another data exercise instrument. In the original study, key informant interviews were intended for impact evaluation only. Thus, this instrument (key informant interview guidelines) have been utilized as a complementary instrument to increase the accuracy of research results that emerged through the focus group discussion guidelines.

4.5 PRE-FIELD ACTIVITIES:

The interview guidelines for both data collection techniques (focus group discussion and key informant interview) were already developed (please refer to Appendix 10 and 23) and discussed with the proposed moderator and notetaker of focus group discussion. Both of them (moderator and notetaker) were students from Tribhuvan University, Kathmandu, Nepal studying the Masters (MA) course in sociology. Both of them had already been exposed to focus group discussion and key informant interview techniques. This team visited NCDDP and NHEICC for further review of interview guidelines. After some discussion, the guidelines were approved. Then, this team started rehearsals among each other for conducting focus group discussion and key informant interview in a better way. After 3-4 rehearsals, the team (will be referred to as the research team hereafter) members decided to proceed towards the study area.

The research team reached ward number 1 of Laharepauwa Village on 17th May 1998. On the first day of arrival, the team visited the local formal and informal leaders of the community including ward chief, primary school teachers, female community health volunteers, female ward members, and some of the members of the mother's group and collected brief information about this ward. At the same time, the research team explained the purpose of the research and requested all of them to cooperate in this connection. Furthermore, ward chief, female community health volunteers, female ward members and ward members were requested to arrange some community women (mothers of children under 5 years old) for conducting two

sittings of focus group discussion. In addition, ward chief, female community health volunteers, female ward members and one primary school teacher were requested to be the respondents for key informant interview. Focus group discussions were conducted on 18th May 1998 and key informant interviews on 19th and 20th May; which will be described in brief in the field activities part of this chapter.

4.6 SAMPLING:

4.6.1 Focus group discussion:

All of the respondents were selected purposively from the mothers of children under five years of age children of ward-number 1, Laharepauwa Village. The respondents were divided between two groups: high privileged group (HPG) and less privileged group (LPG) based on the variables of education, income, occupation including their caste. Brahmin, Chhetri, Newar, Gurung people of the ward were considered as high privileged group (HPG), where Damai, Kami, Sarki people were considered as less privileged groups (LPG). HPG people were expected to be relatively high in knowledge, education and income, where LPG people were expected to be relatively low in knowledge, education and income in the comparison of HPG people. There were total 16 respondents (8 from HPG and 8 from LPG).

4.6.2 Key informant interview:

Similar to focus group discussion, all key informants were selected purposively. Ward chief, female community health volunteer, female ward member and one primary school teacher (total four respondents) of ward number 1 were asked

to be the respondents for key informant interview. Each informant was interviewed separately with a total of 4 sittings.

4.7 General Characteristics of the Respondents:

4.7.1 Focus Group Discussion:

All respondents were the mothers of children under five years old having at least one child and five children at the most. They were between 19 years to 32 years age group. The education level of HPG respondents was between grade 6 to 10, where most of the LPG were low educated and even uneducated (only 2 of them were literate). All respondents were house-wives, and their occupation was farming. In addition, LPG respondent would assist their husband in leisure for their professional work (such as: tailoring, shoe making). Every respondent was Hindu by religion (Gurung people introduced themselves as Buddhist cum Hindu in religion). All HPG respondents were medium class people by income, where every LPG respondent were relatively low in income in the comparison of HPG.

4.7.2 Key Informant Interview:

Ward chief, female community health volunteers, female ward member and one primary school teacher of ward number 1 were selected as the key informants. The ward chief and female ward member were the political people elected by the community people. Both of them were farmers by occupation and middle class people

by income. Ward chief had passed SLC examination (10 class), where female ward member had passed 9 class.

FCHV was selected from the mother's group of the community. Her occupation was also farming and she was a middle class person by income. She had passed 9 class. Primary school teacher was also a local people. He had passed SLC examination (10 class). In addition, he was provided special training in district education office related to his profession i.e. teaching. He was a middle class person by income and an influencing personality by occupation. He used to teach many subjects, such as: science, health, mathematics and english.

4.8 FIELD ACTIVITIES:

4.8.1 Focus Group Discussion:.

The first discussion was conducted with high privileged group people. Before the discussion, low privileged group people were requested to go to their houses and visit the research team at the same place in the afternoon (3pm). To avoid the external influences the discussion was held inside the house of the ward manager.

All respondents were asked to sit in a row. The moderator and notetaker sat in front of them at face-to-face position at about a 7 feet distance. The researcher sat in the corner of the room (near the moderator) with the permission of the respondents. At the same time, the consent was taken with the respondents to use the tape recorder and take photographs during the discussion. Some of the respondents were

accompanied by their small children. The moderator once again introduced everybody and also explained the purpose of the discussion. He also enlightened on how the findings would be utilized by the research team. He relaxed every respondent by telling that this is all an informal discussion, thus, none of the answers will be right or wrong. He encouraged everybody to take part in discussion equally without any hesitation. Furthermore, he assured the respondents by telling that whatever discussed will be confidential and will not be disclosed to other people at any cost.

Then he started the discussion according to the discussion guidelines. During the earlier part of the discussion (during questions number 1 to 5) the majority of the respondents were a little confused and worried, where some of them were more excited. Some of the respondents would answer something and laugh in shy ness, where as some of the excited respondents would try to influence those nervous respondents by correcting their answers. In such a condition, the moderator would encourage every respondent to express their own view.

After question number 6 the discussion continued at a smooth speed. Every respondent answered all questions cheerfully and independently. Most of the respondents could understand the original question (prepared for discussion guidelines), but, some questions needed probing (see the tabulation part) and some revisions. The discussion was started at 10:30 am, and took nearly 2 hours. After the discussion the research team gave them small gifts brought from Kathmandu and promised to send each a copy of the photos taken during the discussion. In addition,

the tape-recorder was once played so that the respondents could heard their own tape recorded voice, which made them very happy.

Another discussion was conducted with low privileged group respondents at 3 pm in the same place. The process of discussion was similar as with high privileged group people. But, most of the low privileged group respondents were less confident in the comparison to the high privileged group respondents. However, they discussed well and replied to each question asked during the discussion.

4.8.2 Key Informant Interview:

Two key informants were interviewed on 19th May and another two on 20th. On the first day the ward chief and female ward member were interviewed separately in the house of the ward chief, where the female community health volunteer and school teacher were interviewed in the house of the female community health volunteer on the following day. These were more informal discussions in comparison with the focus group discussion. Since the informants were interviewed separately, it was conducted in more non-threatening environment. Interview guidelines were already developed which contained open-ended questions. The discussion was started with broad view questions and focused towards specific. Every discussion was tape recorded. The findings of the discussions will be presented in the following part.

4.9 Tabulation:

During the focus group discussion, the note taker had tabulated the findings of both discussions. But, the researcher could not tabulate the findings as in the Focus group discussion. Thus, only the focus group discussion findings have been tabulated, which have been shown in Appendix 24.

4.10 FINDINGS

4.10.1 Focus Group Discussion:

A. THE ROLES OF DIFFERENT MEMBERS IN FAMILY DURING DIARRHOEAL DISEASES TO THEIR CHILDREN.

1. Who in the family takes care of the child during Diarrhoeal Diseases?

As expected, every respondent (including both groups) said in a voice that the mother of the family is mainly responsible for taking care of the child during Diarrhoeal Diseases. However, they accepted that father and grandmother also take care, if the child is too sick. Usually, they (father and grandmother) assist the mother to take care of their child rather than by serving independently as the mother does.

2. Who makes the decisions about how episodes are managed at home?

The Majority of respondents (8 from HPG and 5 from LPG) answered that both mother and father (even grandmother) in the family make joint decisions for the

management of diarrhoeal episodes at home. However, 3 respondents from LPG answered that only them (mother) decide while managing diarrhoeal episodes at home.

3. Who takes the child to other places, if not managed at home?

Every respondent answered that they (mother of children) are mainly responsible to take the child to other places during Diarrhoeal Diseases, if not managed at home. The Majority of them added that the children, father or grandmother accompany her in that moment.

B. PROBLEM PERCEPTION AND HEALTH RELATED BEHAVIORS OF THE RESPONDENTS TOWARDS DIARRHOEAL DISEASES:

1. What are the common illnesses in your community among the children of under 5 years age? What illness in which season?

Based on the answer of the respondents, the common illness of the community among the children of under 5 years age were divided into three groups: the illness during summer season, the illness during winter season and the illness that prevails all the year round. Skin diseases (such as: scabies, skin infections etc.), Diarrhea and vomiting were identified as the diseases related to summer seasons, where the illness related to winter seasons were cough cold and pneumonia. Similarly, fever (of unknown origin), measles and chicken pox were identified as the diseases that were prevailing in the community all the year round.

2. Which of the illness do you think are the most important among the children? And why?

Every respondents answered that fever, pneumonia and diarrhea are the most important diseases among the children of under 5 years of age, because, they can kill the children.

3. What is diarrhea (by definition or by signs and symptoms)?

Every respondent answered that each watery motion is diarrhea. 11 respondents (8HPG, 3 LPG) added that loose motion more than 4-5 times a day is diarrhea, which was supported by the rest 5 LPG respondents. In this connection, further probing were also done to identify other signs/symptoms of diarrhea but no answers were provided.

4. What are the causes of Diarrhoeal Diseases among children?

Every respondent answered that stale-foods and dirty water are the main causes of diarrhea. On further probing "Why does stale foods/dirty water cause diarrhea?", they answered that these things consist of the organisms that causes diarrhea. Similarly, 6 respondents (2 HPG, 4 LPG) added that evil sprits/evil eyes and excessive exposure of cold in the body (such as: sitting on the cold floor, unclothing consumption of cold nature foods i.e. cold water, ice etc.) and eruption of milk teeth can also cause the diarrhea.

5. Is diarrhea a health problem or a normal part of daily life among the children? Why?

12 respondents (7 HPG, 5 LPG) answered that diarrhea is health problem, while 4 respondents (1 HPG, 3 LPG) added that all diarrhea may not be health problem. For example: diarrhea associated with milk teething or diarrhea associated with excessive cold may not be so much problematic. Diarrhea associated with milk teething is self-limiting and diarrhea associated with excessive cold can be treated by usage of hot drinks/foods/cloths/fermentation etc.

6. Is diarrhea dangerous? Why?

Every respondent answered in a voice that diarrhea can kill the children, thus it is dangerous. On further asking (probing) the reasons for death in diarrhea, all of them answered that loss of body fluids is the cause of death in diarrhea.

7. How many types of diarrhea are there? And how are the cases treated among children?

Most of the respondents could not tell any type of diarrhea. 10 respondents (6HPG, 4 LPG) out of 16, answered that they do not know the types of diarrhea. Where the rest 6 respondents (2 HPG, 4 LPG) answered that there are four types of diarrhea. Diarrhea associated with stale food and dirty water, diarrhea associated with evil eyes/spirits and diarrhea associated with excessive cold exposure and diarrhea associated with milk teething.

All respondents answered that all diarrhea should be treated by ORS at home and by some syrups (name not known) and saline waters (IV fluids) at health facilities. Similarly, the above 6 respondents (who associated diarrhea with evil eyes/evil spirits, milk teething etc.) added that evil spirit/evil eyes associated diarrhea should be treated by traditional healers, where cold associated diarrhea should be treated with warm things, such as: hot foods, hot drinks, proper clothing and hot fermentation over the belly and buttock of the children. In such a condition ORS or other medicines can worsen diarrhea, therefore, should not be provided. Diarrhea associated with teeth eruption is self-limiting and does not need any medicine.

8. What are the practices related to giving fluids (increased, decreased) during diarrhea? What foods are given?

Different answers were provided on giving fluids during diarrhea. 6 respondents (4 HPG, 2 LPG) answered that ORS should be provided during diarrhea as much as the child wants. 4 respondents from HPG answered that fluids should be increased than usual followed by ORS. Similarly, 6 respondents from LPG replied that only glucose water and ORS solution should be given and other fluids (even plain water) should be stopped. Those 4 respondents added that even the patient feels thirsty, he/she should not be provided plain water, but only ORS solution or glucose water. On further probing "what about breast feeding among breast fed child?", every respondent answered that breast feeding should be continued as much as the child wants. While asking the types of fluids to be used 6 respondents (4 HPG, 2 LPG) answered that cereal and pulse soups as well as vegetable soups etc. can be used as

much as the child wants, where 6 respondents from low privileged group said that only ORS and glucose water should be provided.

9. What are the practices related to feeding (increased/decreased) during diarrhea? What foods are given?

Every respondents answered that thin arrowroot biscuits and well-cooked gravy rice mixed with turmeric and light salt (locally called 'Jaulo') can be given during diarrhoea. When asked about the quantity (increased/decreased/usual) of those foods, it was answered that these foods can be given as much as the child wants. To confirm the knowledge of the respondents about the importance of feeding during diarrhea, further probing was done ("Is feeding necessary during diarrhea or only fluid is sufficient?"), where every respondents answered that feeding may not be necessary, if the child takes sufficient fluids (particularly ORS). However, if the child is hungry and ask for the food "Jaulo", biscuits etc, can be provided on demand. Otherwise solid food should be discouraged.

On further probing ("what about giving meat, fish eggs, cereals and dairy products during and after Diarrhoeal Diseases?") 10 respondents (8 LPG, 2 HPG) answered that they should not be provided. Similarly, 6 respondents from high privileged group answered that light soups of these things can be given among old diarrhea cases, otherwise, these products in solid form should be avoided unless diarrhea stops completely.

10. What is ORS? What is its usage?

Every respondent answered that ORS is the medicine for diarrhea. While asking further questions on the function of ORS, 4 respondents from high privileged group answered that ORS replaces body fluids. Similarly, 9 respondents (4 HPG, 5 LPG) answered that ORS gives energy, while 4 respondents from low privileged group answered that ORS cures diarrhea.

11. Can you tell me the way, how to prepare ORS solution? (Ask every respondents to prepare ORS solution practically in front of the researcher).

10 respondents (7 HPG, 3 LPG) answered the following procedures for the preparation of ORS solution: Boil and cool the water, keep 6 glasses or 1 liter of that water in a pot and mix one packet of ORS powder. Rest 4 respondents (3 LPG, 1 HPG) answered the same process, but, 3 glasses of water for one packet of ORS. Other 2 LPG respondents could not answer this question. 10 respondents (6 HPG, 4 LPG) prepared ORS solution correctly.

12. How should the prepared ORS solution be stored and how long should the prepared solution be used?

Every respondent answered that the prepared ORS solution should be covered properly and used within 24 hours. Similarly, the other 4 respondents (3 LPG, 1 HPG) also answered the same process, but with 3 glasses of water for one packet of ORS. The other 2 LPG respondents could not answer this question.

13. What symptoms/signs indicate that the child should be taken to health personnel?

None of the respondents could answer this question confidently. They were more confused, and therefore, speaking slowly, while answering this question. 9 respondents (4 HPG, 5 LPG) answered that the child should be taken to health personnel, if getting drowsy. Similarly, 7 respondents (4 HPG, 3 LPG) answered that a child should be taken to a health person, if the diarrhea is not stopped even by taking ORS solution.

C. POSSIBLE CHANNELS OF COMMUNICATION.

1. How do you get information about Diarrhoeal Diseases and its management? What are the sources?

5 HPG respondents answered that elder people, TV and Radio are the main sources of information about CDD services in their houses and FCHVS, health personnel and posters are other sources in the community. 3 respondents from the high privileged group answered that they do not have TV, and therefore, Radio and elder people are the main sources of information in house and health personnel and posters in the community. Similarly, 4 respondents from low privileged group mentioned Radio and elder people as the main sources of information in the house and health personnel, FCHVs and posters in the community. The other 4 respondents from low privileged group also mentioned the same sources excluding FCHVs in the community level.

2. What media do you have in your house/community? (list)

Every respondent had one Radio in their house, where 5 respondents from HPG answered that they also have TV including Radio. Newspapers are not regularly available, the people rely on Radio rather than Newspapers/Books and Magazines.

3. Which media do you (your family) use most? What time?

Every respondent answered that Radio is used most by them including all family members. They listen Radio precisely in the evening (6-8 PM, while cooking the food) and at night (after dinner) up to 9 -10 PM. If the programs are more interesting (such as: women's programs, Radio drama etc), they listen to the Radio even during their regular work. Their husbands listen to the Radio in the morning too. Comparatively, father-in-law, mother-in-law and children listen to the Radio less. The five respondents also, who have TV in their house said that Radio is used more than TV. Because, TV should be watched only in the evening after dinner, (excluding Saturday) where Radio can be listened even during work. Besides, the electricity is not regular in the ward so that there is disturbance in regular TV watching.

4. What are the most popular programs for you/your family?

Daily News (evening), Mahabharat, Claps, Cine-lahar, TV serials and Saturday afternoon film were most popular programs to the respondents (including their family members) among the TV viewers. Similarly, among Radio listeners, Army program, Police program, Filmi song, Modern songs, Commercial program,

Women's program and Saturday Radio drama were popularly followed by their family members.

5. What is the most convenient time to use those media (if to offer you/your family any program)?

All of the respondents answered that evening period (7-9) is the most convenient time to them, if offering any Radio program. Similarly, Saturday afternoon (1-2 PM) is another convenient time, when they listen to the weekly Radio drama either in their house or even in the field (at work). The five respondents, who have a TV in the house also said that the evening period (7-9 PM), particularly 8-9 PM is the most convenient time for them to watch TV programs. In addition, Saturday afternoon (2-5pm) is another convenient time for them/their family, when they watch the Saturday Tele-film regularly.

6. Have you ever been to a drama show? How much do you like this media?

Every respondent answered that they have been to drama shows many times. The Village primary school arranges drama show every year (with the joint effort of teachers and students) on the anniversary day of the school including other cultural shows. Similarly, all of the respondents have been exposed to drama shows and cultural programs arranged by different political parties during election campaign. In addition, 7 respondents from HPG and 6 respondents from LPG have also been to

drama show in Kathmandu (capital-city). On asking, "why do they like drama show?" Most of the respondents laughed and answered that it is interesting.

7. Have you ever seen Wall Paintings or Billboards (in your ward or other places)? Do you know what are these things for?

None of the respondents have seen billboards and wall paintings in their ward and they do not remember, if they have seen these media even outside of their Village. Therefore, they do not know the use of this media.

8. Do you know the FCHV of your Ward, how often she visits to you?

11 respondents (8 HPG, 3 LPG) answered that they know FCHV of their ward, who visits them from time to time. 5 respondents from low privileged group answered that they do not know FCHV in their ward. They have not seen her in their house or even in the community.

9. How much do you trust and follow her (FCHV's) advice?

The above 11 respondents answered that they trust FCHV and also follow her advice. Because, she is selected from her own group (mother's group) as well as more trained and knowledgeable than them. Any advice provided by them is believed and accepted by them.

4.10.2 KEY INFORMANT INTERVIEW

A. The roles of different members in the family during Diarrhoeal Diseases to their children:

Key informants explained that mothers are mainly responsible for taking care of their child during Diarrhoeal Diseases. In their ward (and probably in other wards too), mothers are the first responder of the children during the childhood illness including Diarrhoeal Diseases. They added that father and grandmother also help the mother, particularly on bringing the medicines from outside and by delivering the child to other places (health personnel/traditional healers), if the child is not getting better at home.

Usually, mother and father make decisions jointly to manage diarrhoea episodes of their children at home. In most of the family, the grandmothers (mother-in-law of the mother) also help her in this connection. Similarly, Key informants said that the mothers (usually accompanied either by their husband or mother-in-law) takes the child to other places during Diarrhoeal Diseases, if not recovered at home.

B. PROBLEM PERCEPTION AND HEALTH RELATED BEHAVIOR OF THE MOTHERS OF CHILDREN UNDER 5 YEARS OF AGE TOWARDS DIARRHOEAL DISEASES:

The Key informants divided the prevailing illness of their ward into three main groups. Firstly, the illness that prevail in the summer season, which were: Diarrhoeal Diseases, diarrhea with vomiting, typhoid fever and skin infections. Secondly the illness related with the winter season, which were pneumonia, cough and cold. Thirdly the illnesses that prevail throughout the year, which were: tonsillitis, scabies, worm infestations etc. According to the key informants the ward people perceive diarrhea, pneumonia and fever cases as the most important health problem, because, these diseases have killed some children in this ward. They said that any watery motion more than 3-4 times are considered as diarrhea by the community people. If the feces is mixed with mucus, the community people consider it as dysentery and if the feces is mixed with blood, they define it as bloody-dysentery.

According to the key informants, most of the community people consider diarrhea as a health problem. Similarly, most of them have the knowledge that death is the main danger of diarrhea. Most of community people are aware that death in diarrhea is caused by loss of body fluids (dehydration), but, it seems that they are not aware of under nutrition or other complications related with diarrhea. Most of community people perceive contaminated foods and waters as the main sources of diarrhea. But, there are still a number of people who associate diarrhea with other physical conditions of the child, such as: milk-teeth eruption, excessive cold

consumption, evil eye and witch craft also. Each case is treated on the perceived cause of diarrhea. For example: if the diarrhea is perceived as infective (related with contaminated water and foods) they are treated by ORS. If the disease is associated with evil eye/witch craft etc., they are taken to the traditional healers first. Similarly, diarrhea related with physical conditions of the children are treated with adverse nature foods, clothing or hot fermentation.

Most of the community people (mainly mothers) have the knowledge of continuing fluids during diarrhea. But, still there are numbers of people, who think fluids should be decreased more than usual during diarrhea. Particularly, the older generation of people including mother-in-law and father-in-law in the family thinks that less fluids should be provided during diarrhea. Similarly, the mothers from less privileged groups also have very little knowledge on providing fluids during diarrhea. They think that excessive fluids may make diarrhea worse. About one third of mothers have knowledge that fluids should be increased during diarrhea.

Community people are aware that ORS solution should be provided during diarrhea. Similarly, breast feeding is also continued (even increased) during diarrhea. But the practices of other recommended home fluids are very limited. Very few people feed soup or gruel during diarrhea, otherwise, just continue ORS solution. Similarly, nutritious foods (during and after diarrhea) are not provided by most of the community people. They think solid and nutritious foods may make diarrhea worse, and therefore, should not be provided. Usually, they provide simple well-cooked rice products during diarrhea. Nutritious food such as: meat, fish, eggs, cereals etc. are

very rarely provided in the fear that it may be hard to the children to digest. According to the key informants, ORS is considered as the main medicine for diarrhea. Many people believe that ORS can cure diarrhea. Most of the community mothers think that ORS provides energy, and thus, child will be strong (if fed ORS solution) even during diarrhea.

About half of the community people have the proper knowledge about the preparation of ORS solution. Even among them, many of them can not prepare ORS solution correctly. Many mothers do not prepare ORS correctly, because available glasses in the Village have no uniformity. NCDDP has also recognized this problem, and therefore, are supplying a standard measuring device to the respective health facilities and FCHVs. But, similar uniform measuring devices among the community people have not been identified. Key informants explained that very few people should have knowledge about diarrhea associated complications for consultation of health personnel during diarrhea. Usually, the child is taken to the health personnel only with severe dehydration or after getting fever.

C. Possible Channels of Communication:

According to key informants, Radio and TV are important sources of CDD in their ward. Other sources include elder persons and FCHVs. Similarly, health personnel, school textbooks, posters are other sources. Other nominal sources are calendars, pamphlets etc. that are distributed by respective health facilities. Radio and TV are the main channels of communication available in the Village. Being portable

and cheap in the comparison to TV, Radio is used most. Since there is lack of regular sources of Newspapers, Magazines etc. in the Village, these media are irregular, and less accessible.

Ward manager and teacher explained that FCHV is providing CDD services in their community. The community people also believe her and follow her advice. On further asking, "Is she equally providing services among high privileged group and low privileged group people?", they answered that they have seen FCHV in many houses of their ward, but they are not sure whether she is equally visiting both groups. However, the ward chief answered that he will try to find out this. If he finds the FCHV not visiting equally to both groups, he will encourage her to do so.

Key informants answered that drama show will be more interesting and acceptable to the community people, to provide health education, since these people are very fond of this media. If informed earlier, most of the community people can be collected and attend the drama show. But, they are not sure of wall paintings and billboards, because, this form of media has not been introduced in their ward yet. However, they think that is media should also be impressive, since most of the community population will be exposed to these media many times, while walking in the Village.

4.11 DISCUSSION:

Both focus group discussion and key informant interview discussions were related with three basic components: identification of possible target audiences, identification of their needs and wants and identification of possible media in the study area. The findings suggest for the following conclusions.

Since mothers are the first responders of the children during Diarrhoeal Diseases including case management at household and contacting other personnel (if not recovering at the home), it seems that they should be the primary target audience of the proposed health education program. Similarly, fathers and grandmothers should be the secondary target-audience as they are second responders to the children after mothers. In addition, the intervention program can be intended towards the entire community members, because, they can directly or indirectly influence the behavior of the primary target audiences (mothers of children under 5 years of age).

The mothers recognize Diarrhoeal Diseases as one of the important prevailing illnesses among the children in their community and also perceive the disease as a health problem. They know that diarrhea can kill their children. It suggests that mothers of this ward are aware about the dangers of diarrhea. Every respondent defined diarrhea as loose motion more than 4-5 times in a day. NCDDP has defined diarrhea as "frequent passing of loose motion more than 3 times a day. These discrepancies seem to be nominal. However, the NCDDP definition will be included

in the proposed health education messages and disseminated towards the target population.

Most of the respondents answered that stale foods and dirty water (that consists causative organisms) are the main causes of diarrhea, which suggests that they have knowledge about infective diarrhea. But, still some respondents perceive Diarrhoeal Diseases with evil spirits/evil eye, milk teeth eruption etc., which indicates that they should be acquainted with the biomedical concept of diarrhea (However, it is difficult to eliminate these sorts of religious and cultural beliefs immediately, still an attempt should be continued). Similarly, the community people still connect diarrhea with cold exposure too. The reviewed literatures does not show any relationship between diarrhea and cold exposure, therefore, the findings will be reported to NCDDP and their decision will be applicable while designing the health education messages. Every respondents answered that death (due to body fluid loss i.e. dehydration) is the danger of diarrhea. But, besides dehydration, they have no idea about other dangers of diarrhea, such as: undernutrition, secondary infection. At the least they should be acquainted with undernutrition, which is another main cause of death after dehydration.

The knowledge of the respondents on giving fluids and foods during diarrhea also seems to be poor. The respondents have the knowledge that fluids should be provided during diarrhea, but they are not aware of the quantity of fluids (increased/usual/decreased amount). Only 4 respondents answered that fluids (including the soups of vegetables, cereals and pulses) should be increased which was

the correct answer. 6 respondents (out of 16) answered that fluids should be provided as much as the children want, but the fluids in diarrhea should be continued, and even increased more than usual although the children may not want then. It is advised by NCDDP that even if the child refuses, the fluids should be continued slowly. Similarly, 6 respondents answered that glucose water and ORS solution should be fed and even the plain water should be stopped, which suggests that they should be further educated on providing the amounts and types of fluids during Diarrhoeal Diseases. Plain Glucose water has no role in the management of Diarrhoeal Diseases that should be included in the health education message. Gruel (thick drinks made from cooked rice, wheat, maize, sorghum, millet, cassava etc), soups (made from legumes, cereals, potatoes, meat, fish) with light salt and yogurt like drinks are NCDDP recommended fluids for diarrhea. Therefore, this message should be provided in the proposed health education program.

Similarly, the knowledge of the respondents on providing nutritious foods during diarrhea is also very poor. Every respondents answered that nutritious foods (meat, fish, egg etc.) should be withheld during diarrhea. Diarrhea can cause under nutrition, which is another most important cause of death after dehydration. Therefore, well-cooked nutritious foods (including meat, fish, eggs, cereal products) are recommended during and after diarrhea in order to prevent undernutrition. However, the precaution should be taken that high fiber or bulky foods, (such as: coarse fruits and vegetables, fruit and vegetable peels and whole grain cereals) should not be given in such a condition. Similarly, foods with excessive sugar also should not be provided since they can make diarrhea worse. This information should be included

in the proposed health education messages and disseminated towards the target population.

The knowledge on ORS usage during Diarrhoeal Diseases is satisfactory among the community people, but they have some misconception about ORS. Most of them think that ORS is the medicine against diarrhea, where others think ORS provides energy. The findings of focus group discussion and key informant interviews suggest that very few people have the knowledge that ORS replaces the body fluids lost during Diarrhoeal Diseases. Therefore, the actual role of ORS (that ORS replaces body fluids) should be disseminated in the proposed health education messages.

The knowledge on the correct preparation of ORS also seems to be unsatisfactory among the community people. Similarly, the available glasses in the community are different in the size. Uniformity in the measuring glasses is also a problem and therefore, a standard measuring unit (similar to the NCDDP provided measuring device) should be identified and disseminated towards them.

If a child passes many stools, is very thirsty or has sunken eyes, these are signs that suggest that the child is dehydrated and needs further treatment other than in the home. Similarly, if the child gets a fever, does not eat or drink normally, seems not to be getting better even after ORT and feeding, or has blood in their stool, are signs that indicate that the child is getting diarrhea associated complications and he/she should be taken to the health personnel. Thus, the mothers/caretakers of the children should have proper knowledge on the above signs/symptoms of diarrhea so

that they can go to the health personnel in time. But, the findings of focus group discussion and Key informant interview suggest that the knowledge of the mothers/community people on the above signs is very poor. Therefore, these signs/symptoms should be included in the proposed health education messages.

Radio, elder people, FCHVs, health personnel, and posters were found to be the main source of information in the Village. However, some of the people have TV also, which is another possible source of communication in the Village. But, it should be determined only by confirming, whether electricity is accessible in all wards including the availability of the TV. Radio is available among the majority of people and is also used by most of them. Usually, fathers and mothers in the family listen to the Radio the most in comparison with other family members. Evening News, Weekly TV series, Saturday afternoon film, Claps, Cinelahaar and Aaj Bholi Ka Kura are the most popular programs in the TV. Similarly, Women's programs, Nepali filmi songs, Saturday Radio program, Army program, Police program are most popular Radio programs among both group respondents. The convenient period for TV show is in the evening (7-9 pm) daily and in the afternoon on Saturday (2-5pm). Similarly, for Radio listening is in the evening (7-10 pm) daily and 1-2 pm every Saturday. Therefore, the proposed health education program, or short messages should be provided during these programs and convenient times.

Drama shows seems to be acceptable and accessible among a large number of community people, because most of them have already been exposed and very fond of this form of media. Wall paintings and Billboards will be a new form of media in the

ward, since most of the community people are not acquainted with these things. However, to identify the acceptability of these media it should be pretested among the target audiences before the introduction of intervention program. FCHVs are providing CDD services in the community and they are believed by most of the community people. Thus, they follow her advice. However, it is found that she is not visiting equally to all community people. Still, she can be utilized to provide face to face education and the practical demonstrations related to the proposed intervention program and also shall be encouraged to visit each group equally.

4.12 LIMITATION:

Selection of samples from a single ward of the study area is the main limitation of data exercise. At first, it was thought that the samples will be selected at least from 4 wards of the Village (out of 9 wards), but this idea was dropped, because of the bad weather. Since when the day arrived at the Village, it was raining, which caused difficulties to move on foot from one ward to another. Thus, the research team conducted focus group discussion only with the respondents of ward number 1. Their views do not represent all nine wards, and therefore, can not be generalized for the whole study area.

Key informant interviews were conducted among the ward manager, female community health volunteer, female ward member and primary school teacher, all of them are community level key informants. Other key informants such as: health post staff, public health officer, high school teachers etc. could not be interviewed due to

the same above reasons. Therefore, the information collected from the key informants is less informative, which can not be generalized for the whole study area, this is another limitation of the data exercise.

Focus group discussion, key informant interviews and review of service statistics were the proposed techniques of data collection in the original study. Review of service statistics in the Village health facility would be useful to identify the existing number and percentage of dehydrated cases recorded at the health post as well as at the community level, which could be compared during impact evaluation. But, this technique could not be tested (since the health post was situated in ward number 2) which is another limitation of the data exercise.

The researcher of this study is the student and still in the learning process. He conducted data exercise in the study area without close contact and supervision of his professors. Thus, there may be many other unidentified limitations during the data collection process, which is another serious limitation of this study.

4.13 LESSONS LEARNED

It was learned that focus group discussion is an effective technique to explore the psychological and behavioral aspects of the respondents. It is a self complementary data collection technique, because, during the data exercise, different supporting questions were identified (probing) in order to complement the original questions, which were far beyond the view of the researcher. Thus, it was concluded

that this technique can collect relevant information related to the subject matter, and therefore, should be useful in the original study.

It was also learned that the same question, in a focus group discussion, can be asked from different ways until the necessary information (in any important topic) is collected satisfactorily. For example the same questions were asked many times from different ways until the moderator collected precise information about the practices of using fluids and foods (during diarrhea) of the target population. It was also felt that some snacks or toys should be kept in advance to keep the accompanied child silent, if focus group discussion respondents are the mothers of small children. Because, in both discussions, some respondents were accompanied by small children resulting in disturbances by shouting and crying.

It was noted that the key informants sometimes contradict their previous views or statements. During earlier discussion, the female ward member (one of the key informant of the ward) answered that she has not seen the female community health volunteer doing her job satisfactorily so that most of the community people (including formal and informal leaders) are not happy with her. While on following discussion, she accepted that FCHV is providing education in the community up to household level in need. She also accepted that FCHV is visiting the community people from time to time, which suggests that FCHV is working well. Further more, the answers of other key informants (ward manager and teachers) also supported that the performance of FCHV is satisfactory, which indicates that the former answer provided by FWM was contradictory. Probably the previous statement was due to

misunderstanding the earlier question or due to personal biases. Thus, it was learned that any conflicting views or statements in a key informant interview should be confirmed by continuing further indirect questions (probing) with the same respondents or discussing it with other key informants.