CHAPTER IV

DATA EXERCISE

4.1 INTRODUCTION

Globally, more than 4 million children die each year due to ARI, one every 8 seconds, specifically from pneumonia, because of the lack of appropriate antibiotics given orally for 5 days, which costs approximately 20 cents/ treated child. Acute respiratory infection poses a significant problem in Nepal too. Among the 100 thousands deaths in children under 5 years of age in the country from all causes, ARI alone accounts about 40,000 of deaths (MOH, 1994).

Early diagnosis of severe ARI and earliest anti-microbial treatment by community health workers can reduce the mortality and morbidity from severe ARI. For this purpose a simple and specific criteria has been developed up by WHO Standard Case Management (SCM). According to WHO guidelines on SCM, the acute respiratory infections can be classified according to the severity of illness into three grades. No pneumonia (cough and cold) is diagnosed if a child has no fast breathing and no severe chest indrawing. Severe pneumonia is diagnosed, if a child has severe

chest indrawing and fast breathing. Very severe disease is diagnosed, if a child has stopped feeding well, abnormally sleepy, has convulsion, fever or low body temperature and stridor in a calm child.

This chapter deals with how the data was collected, analyzed and presented in providing ARI case management services. The findings will suggest how the intervention could be improved based on the lesson learned from the data exercise. The purpose of the study is to improve the level of ARI case management among ARI children under 5 years old at the grass root level through the FCHV who are already existing in the health care system of Nepal and therefore, no new man power will be needed. Intervention will be done through FCHVs training, on ARI case management according to the existing training manual on ARI. Along with the training, strengthening of availability of primary antibacterial for ARI will be carried out with increased supply at the sub-health post in Thakre Village. The treatment will be provided to the child at the doorstep of the intervention village through a trained FCHV.

The intervention is designed for improving ARI case management services among ARI children under 5 years old and will be provided through FCHV from January 1999 to December 1999. Prior to case management services through FCHV. Drug supply at the sub health post will also be strengthened as a part of the intervention. Case management services for children under 5 years old with ARI will be the main component of the proposed intervention. Impact assessment will be carried out after completing a year of case management services by FCHV to children under 5 years old with ARI of the intervention village. Impact assessment will answer different

questions, 678 such as; Identification of severe and non severe ARI by FCHV, Correctness of drug administration by FCHV and advice to mothers by FCHV to take care of their child, number of referred cases by FCHV, problem/ constraints faced during intervention, mothers acceptance regarding the ARI treatment at door step and supply of antibacterial for ARI etc.

4.2 OBJECTIVES

The objectives of the data exercises are:

1. To find out the level of knowledge in ARI case management among FCHV of targeted intervention areas.
2. To find out the willingness of the FCHV on ARI case management.
3. To modify the intervention based on the lesson learned from data exercise.

4.3 METHOD

Semi-structured interview, focus group discussion and documents review will be used to assess the impact of given intervention. The interview and discussion were used in the Nepali language. Data exercise was done through a semi-structured interview and focus group discussion with the FCHV of Thakre Village. It is done to refine the data collection method as well as data collection instruments. Both the methods will be done according to the prepared guidelines.

Prior to going to the field for data collection a lot of information relevant to my study was taken from the key partners of the central level and district level and targeted village which are described below in the procedure of data collection.

4.4 SAMPLING

There is no need for sampling because all of the FCHV of the village were there in the meeting. According to the Health Policy of Nepal. There are 9 FCHV in the village. As far as possible I will try to involve in the data exercise all of them. After the intervention the same technique will be applied for appraisal with FCHV.

4.5 DATA COLLECTION PROCEDURE

The following steps were taken for data collection. The data was collected in May 1998.

4.5.1 Interaction with key partners at the central level

Review of existing reports/ documents was done to find out the context of the intervention regarding the locality, National Health System; manpower available and quantity of drug supply.

a) Health Management Information System Section (HMIS)

I contacted HMIS section of DHS for the collection of required documents on ARI. This section under the Department of Health Services collects health related data from all over the country and publish the reports and gives feedback to the health institution. I collected the Annual Report of DHS for the fiscal year 1994/1995. This report gave me a lot of information such as episodes of ARI in children under 5 years old in the country, morbidity and mortality of ARI in every districts, region wise population of the country etc. According to this report, 60% of the cases contacted to the health facility were pneumonia and severe pneumonia. In these reports, episodes of ARI and severe ARI in the districts are also given. It is the only authentic report in Nepal about health information. The total population, under 5 year old population, percentage of pneumonia and severe pneumonia cases by stages is given in appendix IX and X.

b) Logistic Management Division (LMD)

As I have already mentioned that LMD is responsible for the purchase of drugs and supplies them to all public health institution of the country. I contacted a responsible person at the LMD to know the supply information on drug. I took drug supply information to SHP for the year 1995 and 1996 from this division. There I observed a great contrast in the supply of primary anti-bacterial, in comparison with episodes of ARI in under 5 year olds in Nepal. I discussed with Mr. R.K. Sharma, who is carrying out program and plan of necessary drugs and came to know that the demand is not fulfilled, because of the scarce resources. According to him the supplied

medicine is sufficient only for 4-6 month (in an average) at any given health institution. He appreciates me for my investigation. The table showing contrast in episodes and supply of ARI antibacterial is given in appendices XI, XII and XIII.

c) National Health Training Center (NHTC)

Another key informant of my study were NHTC officials who are directly or indirectly or involved in all types of training to the various levels of health workers. The officers said that the FCHV get only basic training of 15 days duration covering all PHC components in which there is very brief information about ARI in under 5 year olds. In the 15 days training packages the time for the ARI session is only one hour. The time allotted is minimal in view of the severity of ARI, which is not sufficient to give sufficient knowledge and skills to FCHV. According to NHTC officials it will be very beneficial if training could be given to the FCHV in ARI case management. They assured me for possible help during the intervention period to train FCHV.

d) National Health Education Information and Communication Center (NHEICC)

One main part of my study is to provide IEC materials to the FCHV and the mothers. According to NHEICC official's IEC materials are supplied only up to the SHP. I requested them to supply IEC materials about ARI case management to the grass root level (ward level) where FCHVs work. When I briefed my study to them they became very happy and they ensured me that they will help in all sort of activities during the intervention period providing necessary IEC materials. They also assured

me that they would launch ARI IEC materials campaign in the intervention village, after the intervention is started.

e) Child Health Division (CHD)

I contacted the Public Health Officer, who is looking after the ARI section in the Child Health Division. High mortality and high morbidity among children under 5 years is a major concern in the division. Therefore, activities like training to health post in-charge, nurses and doctors were organized in the past. However, grass root level health worker like FCHVs are not addressed therefore far in Dhading District for imparting knowledge and skills on ARI case management.

f) District Health Office

I contacted the District Health officer on the telephone and collected information regarding morbidity and mortality due to ARI and the supply of ARI drugs to the Sub-Health post located in the intervention village. The DPHO of Shading District told me about the high number of ARI in his district. He also mentioned that there is poor case management due to the low contact of mothers to the health facility as well as the insufficiency of needed antibacterial in the grass root level health institutions. As a part of data exercise, I also contacted District Health Office of Dhading District and inquired about the date of the FCHV refresher review meeting to be conducted in Thakre Sub-Health. In this context, I was informed that the FCHV refresher review meeting is going to take place on May 25 and 26 of 1998.

4.5.2 Interaction with Local Stake Holder at the Targeted Site:

a) Pre-field activities: -

The necessary things required for the data exercise in the field were collected prior to going to the field. The semi-structured interview and focus group discussion guidelines were prepared at Kathmandu and translated into Nepali. The paraphernalia required for data collection were cameras, reels, tape recorder, cassettes, semi-structured interview forms etc.

I went to the intervention village with my two friends on May 25, 1998. The friends were ex-student of Chulalongkom University and were my friends in the study and now they are working in LMD of DHS and NHIECC of DHS. It took us two and half hours to reach the Thakre sub-health post from Kathmandu, the capital of Nepal. The data exercise carried out for a period of two days at the intervention village.

b) Thakre SHP

First I met the SHP in charge and introduced myself and explained my aim. I inquired with him about the ARI problem and its reporting. The SHP in charge mentioned that there is no such system to report ARI except for the HMIS form. At the same time I met the VHW of that village and got information on the Thakre village. He said that during his field visit many of the FCHVs were eager to serve the ill people but due to the lack of knowledge and skills they were unable to save the lives of the people especially children under 5 years old. According to him, there are more than 900

hundred children in the village. When I said him about my plan of intervention he was very happy and he promised to help me whenever possible during intervention. On the same day we met the FCHVs and introduced each other. The FCHVs came to the sub-health post for the refresher review meeting. All nine FCHVs of that village were present for the meeting. Therefore, it was a great opportunity for us to talk to them.

c) Local VDC members

I contacted the two VDC members during my visit to the intervention village. I inquired with the VDC members about the ARI problem in the village and briefed my plan of intervention. They said that many of children are dying each year, lack of drug in the sub-health post and poor management of ARI in the village by the mothers. They were very happy to hear that the program on ARI case management services will be launched in the village. They were willing to support this intervention activity from their sides by involving VDC. They were happy because it is going to be carried out by the FCHVs of their village by providing appropriate medicine for ARI in their doorstep through FCHVs.

d) Group interview with Mothers of children under 5 years old.

There were 9 mothers attending the sub-health post when we arrived at the sub health post. We requested for the mothers to talk with us about their problem and all of them agreed to do this as they were waiting for their turn in the sub-health post. 6 mothers had come there with their children, because they had fever, cough and runny nose, one child looked seriously ill, was crying and had chest indrawing. The mother

of this child told us that the child was sick for 5 days and had difficulty in breathing, therefore she had to come to the SHP after walking for about 2 hours; two other children had diarrhea ands one had ear discharge.

The women told us that the major problems with the children are diarrhea, cough and cold; worms infestation and fever. When asked, what did they do for a child with cough and cold, the answer was they kept the child warm and gave hot foods and hot drinks. For cough and cold nothing special was done by the FCHV. One woman told us that a lady (probably FCHV) suggested her to go to SHP for medications and get all the vaccines. This woman visited the sub-health post but did not get drugs. She was advised to buy the medicines from a medical shop, which she did. The women told that the services were OK from the SHP but raised the question what is the use of the health workers, who can not even examine a sick child and give drugs immediately. Just prescribing medicine does not help them.

e) Semi-structured interview with FCHV

On the first day, I conducted semi-structured interview with 6 FCHVs. All 6 FCHVs who were present for the review meeting took participation in the semi-structured interview which was held when the meeting was over (3 had already left the meeting). We took consent from the FCHV prior to data exercise at the time of introduction; I described all things in brief. They were very happy hearing that we are going to conduct this program in their village and were very enthusiastic to talk with us. Interviews were conducted with them for about three and half-hour.

f) Focus Group Discussion wit FCHV

In the second day, 8 of the 9 FCHV participated in the Focus Group Discussion. One FCHV did not desire to participate in the discussion due to some personal problems. All the FCHVs were free and frank and ready to answer and discuss with us about the issues raised.

Due to the lack of space in the Sub-Health Post this process was held in a nearby club, Which was 5 minutes walk from the SHP. Besides, the club did not have many visitors to disturb our proceeding.

4.6 FINDINGS OF DATA EXERCISE

4.6.1 General Characteristics of Women

There were 9 women. They all were FCHVs from the intervention village. The age of FCHVs (participants of the interview and discussion) were between 25 and 47 years. All of them were Hindu. Six out of 9 were literate and two of them could sign their name in Nepali. All the women were housewives. All were married having 2 to 4 children each. Most of them have not taken any training except basic FCHV training, which was given to them during their recruitment as FCHV. They took that some 3 to 4 years ago and there was no any refresher training for them.

4.6.2 Interview findings

Semi-structured interviews were conducted with the 6 FCHVs of the intervention village. When I asked them what training had they gotten? Most of them did not have any training except the FCHV basic training. Among them two had gotten knitting training and community forestry training. When I asked about the respiratory problem in children, 4 FCHV said that they have seen children with respiratory problems and 2 said they have not. When I asked how can one recognize the ARI problem. They said from the seniors of their house (Grandmother, grandfather). Two of them said they have seen children with pneumonia. On the question, "What do you mean by pneumonia?" they could not answer the exact meaning. Regarding the number of children with ARI seen in the last 15 days. The following table shows the response.

Table 4.1 Number of children seen by 8 FCHVs ARI and drugs given during last 15 days

FCHV	No. of children seen	Did you give any drugs
No. 1	10	No.
No. 2	3	No.
No. 3	5	No.
No. 4	7	Yes
No. 5	5	No.
No. 6	2	No.

In given table 4.1, most of the FCHV are seeing the children with ARI in the village. Some FCHV were seen as very active and some less active. One FCHV had seen 10 children with ARI within 15 days but she was unable to give any medicine to the children. The same table also shows that none of the FCHV gave medicine to the ARI child except one because they are not supplied with medicine. Although one of the FCHV had given medicine to the child which she had bought for her own personal use and was only for fever.

When I asked how did they manage children with ARI, most of them said that they advised the family members to keep the child hot and send the child to traditional healers and one of them advised the mother to go to the SHP. She was very sad that she could not do anything for the child. If she had received any training it would have been better because the child that was sent to the SHP was very severe and it was late in the evening, when SHP was closed.

About their feeling on the management of child with ARI, all of them said that they would be happy to treat the child. Regarding their work as FCHVs giving treatment for ARI, 4 FCHVs said they would appreciate / cooperate us but 2 of them said they do not know. On the question, have you ever given any medicine to the children with ARI, all but one said no. One of the FCHVs said she gave paracetamol (cetamol) to the ARI child to lower the temperature. When I asked how did you give and where did you get this drugs, she said, I have purchased the drug from a medical hall for my personal use. When I asked them how would you feel if you get the drugs for ARI, they expressed the view that they would appreciate it. On the question, do you want to provide case management of ARI? All of them said, "it will be better if we

have medicine to give to the sick child but we do not know how to give medicine. If we get training on ARI we can manage the case. Villager will also co-operate with us if we can provide medicine to them in the case of illness.

4.6.3 FINDINGS OF FGD

There were 8 married FCHVs between the ages of 26 and 47 years old. At the beginning of the discussion they all were a bit unsure when moderator was going to ask question about ARI and ARI case management they were very interested and curious.

When moderator raised the issue they began to discuss and give their ideas and experience. Similarly the moderator raised other issues in consequence and getting information by encouraging them. In this process most of them seemed to enjoy sharing their ideas and experience of Acute Respiratory Infection and case management on ARI.

When the moderator put the question of what diseases are commonly seen in their communities, they said that diarrhea, skin diseases, cough and cold and worm infestation are the most common diseases in their community. Most of them have seen such cases in the community. They all have seen a child having cough, cold and fever. Two of them said they have not seen the ARI cases because the definition of ARI was not clear to them. When I put a question about the management of children under 5 years old with ARI, they gave different types of answers as some had advised to keep the child in a hot place and give them warm clothes to wear, some have advised to go to the traditional healers and some said they advised the mothers to go to the health

institution. Nobody has done any case management activities. When I put the question of problems during case management of ARI, they said we have not done the case management therefore far, therefore we did face any problems until now.

4.7 DISCUSSION

Primary data collection from the target group is an important step for designing appropriate intervention. Besides, the context and structure of any organization is important to enforce the improvement envisioned by the intervention.

We have taken FCHVs as the primary source of data. This is supported by the interview with VHW and the SHP in-charge. The concerns raised by the FCHVs were further validated by VDC members, mothers group and also by visiting the SHP.

The organizational structure was revisited from top to bottom from the Department of Health Services and the departments under it (central level). Besides, the District Health Office and SHP itself are the organizational structures for our targeted activities

All the revisited institutions and personnel shows that there is no such mechanism which influences the FCHV to seek help for training; though they are willing to help the community. Focus group discussion and semi-structured interviews revealed that FCHV have no adequate knowledge for ARI case management. Therefore it is appropriate for them to get the training for ARI case management. The

findings of the FGD and semi-structured interviews showed that FCHVs are committed to manage the ARI cases if they receive proper training and support on the subject.

Neither the structure nor the personnel seem to be aware of the ARI morbidity and mortality, which could be easily diagnosed and treated. There is an inadequate supply of essential drugs like primary antibacterial which is another constraints. It is also noticed that VDC members are interested and the involvement of local people in intervention will give sustainability to the problem.

4.8 CONCLUSION

The data exercise was done only to assess the need for training for the FCHVs. Most of the FCHVs were interested in recieving training. In the village the FCHV were helping the mothers in ARI case management in some ways. They all were eager to help the sick children and provide treatment for ARI, if the drugs are supplied to them. Mothers of the intervention village were also happy to get services from FCHVs. Members of the VDC were also positive and were ready to support the FCHVs in all ways. In short we can say:

1. FCHV are interested in receiving training.
2. They visit the houses every now and then frequently.
3. They are eager to help the sick children and provide treatment for ARI, if the drugs are supplied to them.
4. The VDC members were also positive for this intervention.

4.9 LESSONS LEARNED FROM DATA EXERCISE

- Not only quantitative, qualitative methods are also important in getting relevant information from community people regarding treatment on ARI.
- Various sources of information help to get broader ideas and views.
- Various methods help in triangulating the data.

4.10 LIMITATION OF THE DATA EXERCISE

The major limitation of the data is that it is relevant to Thakre sub-health post and the FCHVs working under it. Therefore it can not be generalized for other parts of the country. Similarly, training need and willingness of the FCHVs can not be generalized