CHAPTER IV

DATA EXERCISE

4.1 Introduction

ARI Constitute a complex and heterogeneous group of diseases, together with the multiplicity of presenting syndromes, as well as the unreality's of official statistics in our developing countries has delayed the recognition of childhood ARIs as a major problem until recently.

In the last few years there has been significant Progress in our understanding of the problem of ARIs and their susceptibility to intervention in developing countries. Anatomical and etiological classification are of no practical values because most of ARI deaths occur in rural areas where physicians are not available. The stress now is more on recognition of the severity of illness, which calls for different courses of action. (Akbar, 1986).

Early diagnosis by mothers and antimicrobial treatment by primary health care workers can reduce the morbidity and mortality of ARIs. For these purposes, simple and specific clinical criteria has

been set up by WHO; Case Management.. Standard case management is a proven strategy for reducing the number pneumonia deaths among children in the developing countries. (WHO, 1991).

ARI classification based for case management is based on the severity of illness :

The young infant (age less than 2 months)

a) No Pneumonia (cough and cold)

signs :
- No fast breathing.
- No severe chest indrawing.

b) Severe Pneumonia :

signs :
- Severe chest indrawing
- Fast breathing (60 breath/minute or more)

c) very severe disease :

signs :
- Stopped feeding well.
- Abnormally sleepy.
- Convulsion.
- Fever or low body temperature.
- Stridor in calm child.

The child age 2 months upto 5 years :

a) No Pneumonia : (cough and cold)

b) Pneumonia :

signs :

- Fast breathing. (50 breath/minute or more)
- No chest indrawing.

c) Severe Pneumonia.

d) Very severe disease.

Research question :

- What are the existing Knowledge and Practice of mothers in case of ARI in their own under five children in a urban community, Dhaka city.
- What are the Patterns of sign and symptoms presenting in under five children with ARI in an urban community Dhaka.

Objectives :

- To assess the existing level of knowledge of mothers in their under five children regarding sign/symptoms of ARI.
- To determine the ability of mothers to identify (recognize) important signs of severe ARI and their care seeking pattern.
- To determine the home care Practices of mothers of children with ARI.

4.1.1 Rationale of this data gathering exercise

The central purpose of this data gathering exercise was exploratory for my proposal study and to gather information from mothers with ARI children and health care providers about mothers knowledge and practice of ARI in their own children.

This pilot study was in fact a testing of my research instrument. This study is concerned with ARI in under five children. It was mentioned earlier that in this age group ARI had very high morbidity and mortality. It should be borne in mind that ARI in childhood starts at home and mothers are the primary caregivers, so misinterpretation on the part of mothers of ARI sign/symptoms may lead to mortality. Similarly others health caretakers like physicians who are responsible to provide appropriate treatment, nurses who

would take care of the child and health workers who will keep track of the children conditions, are equally important to maintain child health so it was felt necessary to interview all these persons involved to assess properly the knowledge and practice in the case of ARI. This procedure is supported by the focused ethnographic manual developed by WHO. They advocated interview, group discussion with mothers, physician, nurses, health workers, in order to quantify the knowledge, attitude and practice of ARI. As qualitative research my aim was to explore ARI in context of health care providers, because they are information-rich data sources. Also they are the sources from where I can confirm my understanding, enrich my understanding. In effect to observe, interact and learn from this group of people, I developed good "gaining entree" with them. This interaction, knowledgeable information helped me to identify some key factors and particularly some important recorded data.

4.2 Introduction of Method :

This investigation utilized both qualitative and quantitative approaches to obtain data which included open ended interviews with health care providers and mothers seeking care for her sick child. Also I made an observation of the mothers and health care providers, how the interaction is, how they are behaving each other etc. in a health care centre.

4.3 Structured interview with health care providers

Eleven health care were interviewed in regard to their experiences and perceptions of ARI illness in under five children. The providers interviewed included 4 qualified doctors, 3 nurses and 4 para - medical practitioners (trained health workers).

A structured open-ended interview was utilized in this task. The aim of this procedure was to identify practitioners perception about mothers knowledge and practice of ARI in their own children. The mecical practitioners were chosen from different centres including public, NGO and from ARI control programme, to know their perception at different level. The selection was purposeful because of qualitative open ended discussion. The purpose of qualitative information is that it will allows free responses, open exploration of their knowledge or opinion. These doctors were chosen as they were trained for ARI control programme, and they had good background experience (getting information from other staff about these doctors). Similarly nurses and health workers were also trained for ARI control programme. My aim was to get rich information and to know multiple realities about mothers of under five children with ARI. The sample size was very small as this exercise was really an exercise to make basis for my proposed study on ARI.

Patton (1990) states, "Qualitative inquiry typically focuses in-depth on relatively small samples, even single cases (n = 1), selected

purposefully. Quantitative methods typically depend on larger sample selected randomly.

Bogdan and Biklen (1982), suggest that in quantitative research, one's sample should be representative of some larger population to which one hopes to generalize the research findings. In qualitative inquiry, sampling is driven by the desire to illuminate the questions under study and to increase the scope or range of data exposed to uncover multiple realities.

Quantitative sampling concerns itself with representativeness, and qualitative sampling with information - richness (Patton, 1990).

Question - 1 : Who brings the children to the health centres?

Ans : The providers replied that more than 90% cases mothers bring their children to health centres. They also stresses the important role of mothers.

Question - 2 : What are the sign/symptom the children present usually in a health center ?

Ans : Answers were multiple. Maximum providers mentioned that most common ARI in children found in the setting was common cold. They pointed out main serious sign and symptoms mothers paid attention to were combination of sign and symptoms.

Fever + Cough + Difficult breathing

Fever + Cough + Sore- throat.

Question - 3 : What are the triggering factors for the mothers to bring their children to health centers ?

Ans : Most providers answered that mothers perceive ARI is a serious illness, and that influence them to come to the centre. Some said better facility, reputation of that particular centre and doctor brings mother to these centres.

Question - 4 : What do you think the major problem of ARI is?

Ans : About major problem of ARI most providers had to think a lot before answering. But when asked to answer from their practical experience, poor communication with mothers transport problem, and in some places low accessibility to health care system, transport Problem were the main answers. Economic Problem, and less activity by health personnel were answers from few providers.

Question - 5 : Do mothers bring their children too late ?

Ans : They agree majority of mothers come in the early

stage or within time, but they also mention that about 20% mothers delay in care seeking.

The reasons for delay are:

* Father is away for a long time.
* Some of them have no money.
* Some parent waste their time with inappropriate practitioner.
* Some have transport problem.

Question - 6 : In your experience do mothers Practice self-care for their children. ?

Ans : Most providers said , still large number of mothers do not practice self-care for their children. When see fever and cough, they go to health providers without waiting for. According to these health providers better health education will improve situation.

Question - 7 : Do mothers know signs of severe ARI ?

Ans : Providers replied that regarding important signs of signs of pneumonia, mothers did not notice some serious sign exhibited by their children (chest indrawing, fast breathing). They give importance to fever and cough. Most trained practitioners supported the view that the mothers usually took their children with early signs of pneumonia, but

most mothers did not see chest indrawing or other signs of pneumonia.

Question - 8 : What kind of treatment do you usually advise ?

Ans : All providers follow the WHO guideline treatment i.e. for cough and cold no treatment, only advice, pneumonia cases – antibiotic, and severe pneumonia cases – referral to hospital.

Question - 9 : What variables makes one mother better care giver than another mother?

Ans : Answer were multiple. Caregivers said literate mothers and mothers who have more children takes better care as they have better knowledge. Some providers said young mothers also take good care of their children.

3.1 Discussion

Most of the qualitative data gathered was concerned with Practice in case of ARI of doctors nurses and health workers. It was noticeable that majority of the mothers could not properly describe the sign/symptoms of ARI. Still in this particular situation had a good Practice. Large number of children accompanied by their mothers to the health centres. As well it was also noticed that literate mothers took better care of the children as reported by the health care Personnel and also majority of mothers considered ARI as a serious illness.

One of the most important finding of this exercise, almost all the doctors, nurses and health workers interviewed were well aware of WHO case management Protocol and they use Practice it in managing ARI cases. Most of the doctors and nurses reported that the major Problem in managing ARI was less access to the health care centres and lack of communication with mothers. They also noticed that half of the mothers do not Practice home care which supported their observation, that in this Particular study site their might be lack of Proper Communication.

4.4 Interview with mothers :-

A total of 11 mothers were interviewed for the qualitative and quantitative data gathering exercise in Radda Bernen MCH clinic situated in Mirpur area of Dhaka city, Semi-urban area It is a well run managed clinic with a good reputation. It was felt that data collection in this centre would Provide adequate Pool of Potential subject. Moreover the Catchment area population mostly from slum are poor. So people attend here may represent the majority of population of Bangladesh. According to Bangladesh Census (1993) , Bangladesh has 122 millions people , of which 17 % below 5 years of age under five mortality. 122 per thousand live birth, Dhaka city has 7 million people.

Mothers were interviewed through structured questionnaire which was developed for the proposal study. These questionnaire were developed as per WHO recommendation and consulted with experts for its validity.

During the pre-testing of the questionnaire I found many questions were difficult for mothers to understand and I had to lead on many questions. The mothers know some of the sign and symptoms with a different name, for example mothers do not know the word "antibiotic" and "antipyretic" – they know them as "drug for killing infections" and "drug for killing fever" respectively. So the questionnaire were tested in terms of language, content, mothers reaction, time it takes etc.

Mothers were asked questions in Bengali language. The interview was taken in two days(11th and 12th March, 1996). Mothers were chosen on random basis; taking every third mother of ARI children, who came to this health center on that day. A female nurse was with the interviewer to ease the environment.

Table - 4.1

Specific characteristics of mothers (Total number of mothers - 11)

Characteristics	Total number of mothers	Percentage %
Age of mothers		
< 25 years	3	
25 - 29 years	4	
30 - 34 years	2	
35 - 39 years	2	
40 - 44 years	0	
Education of mothers		
0 year		
1- 5 years	8	
6 - 9 years	2	
10 - 12 years	1	
> 12 years	0	
Marital status of mothers		
Married and living with husband	9	
Separated	2	
Number of children		
1 (one child)	3	
2 (Two children)	7	
3 (Three children)	1	

Table shows 36 % mothers attending clinic were of 25 - 29 years age group, next came mothers (27 %) below 25 years of age. Majority mothers (72.7 %) had 0 - 5 years of schooling : Almost all mothers (82%) were married and living

with husband, only (18 %) mothers were separated. Majority mothers (63.6 %) had two children and 27 % mothers had one child.

Table - 4.2

Specific characteristics of the family

Characteristics	Number	Percentage
Family Size		
3 person	3	
4 person	7	
5 person	1	
Family Income		
Less than/equal to 2000 Taka	5	
More than 2000 Taka	6	
Occupation of husband		
Unemployed	1	
Government employee	1	
Vendor	2	
Labour	6	
Other	1	

This table shows the following characteristics. Most of the family had 3 or 4 members. Majority (54 %) family had income more than 2000 Taka but nearly 45.4 % of families income were equal or less than 2000 Taka. Among the father occupation, maximum were labour next the vendor.

Table - 4.3

Specific characteristics of the children

Characteristics	Total number	Percentage
Age :		
0 - 11 months	5	
12 - 23 months	3	
24 - 59 months	3	
Sex		
male	6	
female	5	
Immunization Status		
Completely immunized	7	
partially immunized	4	
Rank in the family		
first	4	
second	6	
third	1	

Table shows nearly half of the children (45.5 %) are 0 - 11 months of age group and rest were divided into 12 - 23 months (27.2 %) and 24 - 59 months (27.2 %) age group. In the gender distribution of children, male slightly ahead of female (male - 54.5 %, female - 45.5 %). Majority of children (63.6 %) were completely immunized, rest partially immunized. Majority of children are second or first child in the family.

Table - 4.4

Number of mothers correctly answered questions related to knowledge of ARI.

Questions	Correctly answered	
	Number	percentage
1. Transmission of ARI	3	
2. Seriousness of ARI	7	
3. Signs of severe ARI	5	
4. Recognition of fast breathing	4	
5. Recognition of chest indrawing	3	
6. Fluid requirements in ARI	3	
7. Pneumonia treatable at home	8	
8. Body temperature and sponging	9	
9. Keeping children warm in Winter Prevents Pneumonia	8	
10. Vaccine Prevents development of severe ARI	3	

From this table it is found that most of the mothers has good knowledge about body temperature and sponging, keeping children warm prevent Pneumonia, Pneumonia treatable at home and seriousness of ARI. But mothers have poor knowledge about transmission of ARI, fluid requirements in ARI, recognition of fast breathing and chest indrawing and signs of severe ARI.

Table - 7

Number and Percent of mother Practice of ARI management

Management of ARI	Practiced	
	No.	Percent
1. Immunization of DPT, Polio, Measles	9	
2. Identification of mild, moderate and severe cases :		
a) supportive treatment for cough and cold	2	
b) Antibiotic for Pneumonia	1	
c) Hospitalization for severe cases	3	
3. Increased quantity of food and fluids during illness and recovery.	5	
4. Clearing of blocked nose	10	
5. Loosing of tight clothing	9	

This table shows that mothers commonly Practice following ; clearing of blocked nose by soft absorbent, loosing of tight clothes, immunization of DPT, Polio, and measles. Also table shows very few mothers Practice supportive treatment for cough and cold, (18 %) antibiotic for Pneumonia (9 %) and hospitalization for severe cases (27.2 %). But half of the mothers Practice increased quantity of food and fluids during illness and recovery.

4.4.1 Discussion

Nearly half of the children (48 %) with ARI were within 0 - 12 months of age group and thereafter with the increase of age, gradually decreased morbidity.

Study by Selwyn B, (1990) for the Bostid group, showed that younger children consistently have a higher incidence of ARI.

It is evident from this data exercise (table - 3) that most of the mothers have low education (72 %) It can be inferred from these data that higher the illiteracy of mothers, the higher the morbidity of children from ARI. Illiterate mothers cannot take proper care at different stages of life and development of their children due to lack of proper education.

More than (90 %) of the mothers had one or two children which reflects the Partial Success of Bangladesh family planning programme. Moreover most of the mothers had poor knowledge regarding transmission of ARI, signs of severe ARI, fluid requirements in ARI, role of vaccination in ARI. It is surprising that although EPI coverage in Bangladesh is very good, questions related with vaccination were poorly answered. Most of the mothers had not experienced a danger sign, chest indrawing and consequently they could not recognize it. Therefore the etiology of

ARI and recognition of chest indrawing should be highlighted in health education.

Few mothers (27 %) practice home - care support of majority (73 %) mothers did not practice supportive home - care. This is one of the important finding that mother practice poorly in relation with identification and treatment of mild, moderate and severe cases, such as supportive treatment for mild cases, antibiotic for moderate cases and hospitalization for severe cases.

Mothers ability to recognize degree of ARI was limited. But it is difficult to come into conclusion because there are many words for the same disease and it may be that subject were not familiar with the word.

Another possibility due to that place where data was collected has a good network of health care facilities, which is readily accessible. Whenever a child became sick, mothers at first instance brought the child to the health centre. So there is less scope of any supportive care, but this in turn increases number of patient attending the hospital and cost of health care.

This data gathering exercise showed that knowledge and practice is not satisfactory but if dissemination of health education to the target population is undertaken, the mortality and morbidity of young infants and children could be reduced substantially.

4.5 Secondary data

From primary health care centres, these secondary data were collected, one from a public health centre (at Keraniganj) and the other from NGO administered health centre (at Mirpur). One of the major criteria for the collection of secondary data was, collected data should be reliable and should be feasible for the investigator.

After verbal conversation with ARI Project director of Bangladesh ARI control Programme, it was suggested that in and round Dhaka city there are several centres from where regular monthly data collected and available.

Among the list of other places Mirpur (NGO Centre) and Keraniganj (Public Health Centre) were chosen because both were within the urban area of Dhaka city, inhibited by low and poor income group of population. The garments industry which is one of major source of economy of Bangladesh, mostly situated in this area which is in Mirpur, north-west of Dhaka city. Rapidly growing small industries which have very important role in Bangladesh economy, are situated in Keraniganj. The population here mostly consisted of low income labour class people.

It was thought that these population would reasonably represent, majority population of Bangladesh. Moreover officials involved in either, centres were co-operative and congenial to the investigator. So not only the secondary data were collected but some other primary data were collected from these centres. Another facility was both the centres used to operate 24 hours a day throughout the week. Their routine was to send a monthly report of ARI cases of under five children who attended these centres to the central ARI control programme. Finally both of these centres followed the WHO ARI Protocol in case - management.

Radda MCH-FP Centre

*Plot No. 324, Road No. 6, Block "B", Section No. 10
Mirpur, Dhaka-1216, Bangladesh
Telephone : PABX : 801303, 380284
Direct : 801059

Table-4.6

Monthly Report on ARI
(NGOs)

Name of the NGO: **Radda MCH-FP Centre ***
(Radda Barnen)
Plot # 324, Road No.6, Block - B
Section-10, Mirpur, Dhaka, Bangladesh
Tel: 380284/ 801303
Working Area: Zone 7 & 8 of Dhaka City Corporation (DCC)
covering six wards (2, 3, 5, 8, 9, & 11)

[Consolidated Report of Six Outpatient Clinics]

Reporting Month : November 1995 **Date :12.12.95**

ARI Diseases	0-02 Mo.	2-12 Mo.	01-05 Yr.	Total	Death Cases	Remark
Cough & Cold	105	590	352	1047	-	
Pneumonia	-	445	315	760	-	
Severe Pneumonia	94	86	58	238	-	
Very Severe Disease	09	03	05	17		All cases refered to Hospital

Report Prepared by:
Sultana
Dr. Rekha Sultana

Name & Sign.
of Program Manager
Bushra
DR. BUSHRA AMENA
ACTING PROGRAM

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* CLINIC LOCATION
A. Fixed Clinics (3) :
1. Section - 10, Mirpur (near roundabout).Located in Zone 8: Ward # 03
2. Section - 01, Mirpur (near Mukti Jodha Market). Located in Zone 8:Ward # 09
3. Section -12, Mirpur, Plot no.149, Road No.2/1. Located in Zone 8: Ward # 02
B. Satellite Clinics (3) :
1. Baunia Bandh,Block - C,Section -12.Located in Zone 8: Ward # 05
2. Kotbari (near the barrage).Located in Zone 7 : Ward # 09
3. Kallyanpur (Pora Basti). Located in Zone 7: Ward # 11

4.5.1 Result and discussion :

This is the monthly report of ARI diseases in under five children, showing age group in relation with the disease, in a NGO administered clinic (Radda - MCH - FP centre) in Mirpur area, Dhaka city. Every clinic or medical centre where ARI Control Programme is going on, Produce monthly statistics as per WHO classification. (Cough and cold, Pneumonia, Severe Pneumonia and very severe disease). The majority children (63 %) attending the centre with ARI is 0 - 12 months of age group.

Also table shows (50 %) children attending this centre comes with only cough and cold. About (48 %) of children attending here comes as Pneumonia and Severe Pneumonia cases. It is also remarked that in this monthly report there is no entry in Pneumonia a group in 0 - 02 months age group children, as WHO classification of this age group does not have Pneumonia group. This age group has only severe Pneumonia classification, because any young infant who develop pneumonia termed as Severe Pneumonia.

Table - 4.7

Monthly State of ARI (< 5 children)

Health Complex (Keraniganj)

January - 1996

	ARI Classification According to Age															Grand Total	No. Death
	No Pneumonia				Pneumonia			Severe Pneumonia				Disease					
	0-2 months	2 - 12 months	1 - 5 year	Total	2-12 months	1-5 year	Total	0-2 months	2-12 months	1-5 year	Total	0-2 months	2-12 months	1-5 year	Total		
OPD	25	44	55	124	22	21	43	1	0	0	1	0	1	0	1	169	
INDOOR	X	X	X	X	2	2	4	3	6	1	10	X	2	X	2	16	2
HEALTH WORKERS	3	6	2	11	35	18	53	X	X	X	X	X	X	X	X	64	
GRAND TOTAL	45	78	148	271	67	55	122	4	7	1	12	0	3	0	3	408	2

Table - 9

4.5.2 Monthly statement of a public health Centre:

This a monthly statement of ARI in under five children, in a government health complex which has OPD an indoor, five sub-centres in an urban community. It is interesting to note that every health complex maintain WHO classification of ARI in collecting the data.

This table shows the morbidity and mortality of ARI in the month January , 1996. Majority of Pneumonia cases (58.2 %) are within 0 - 12 months of age group. 66.4 % of children attending this health complex comes as no Pneumonia (cough or cold).

One more important thing to notice that among all the children (32.8 %) nearly one third are the incidence of Pneumonia. Also table showing only 64 children (15.6 %) visited by health workers.

Table - 4.8

Yearly Statement of ARI (1995)

Dhaka Children Hospital

MONTH	No Pneumonia				Pneumonia				Severe Pneumonia				Very Severe Disease				Grand Total	No. Death
	0-2 m.	2-11 m.	1-5 m.	Total	0-2 m.	2-12 m.	1-5 y.	Total	0-2 m.	2-12 m.	1-5 y.	Total	0-2 m.	2-12 m.	1-5 y.	Total		
Jan.	X	X	X	X	X	X	X	X	X	X	X	X		X			X	X
Feb.	23	135	97	255	X	208	90	298	125	186	17	328	18	15	8	41	922	8
Mar.	27	49	10	86	X	132	26	158	104	72	7	183	11	6	1	18	445	17
Apr.	32	173	81	286	X	167	64	231	53	97	31	181	1	6	1	8	706	15
May																		
Jun.	5	92	72	169	X	87	44	131	30	86	23	139	6	4	X	10	449	11
Jul.	48	148	110	306	X	223	85	308	193	216	35	444	29	32	13	74	1132	14
Aug.	40	130	107	277	X	216	99	315	134	204	20	358	21	23	10	54	950	9
Sep.	21	130	113	264	X	175	79	254	111	154	20	285	19	22	7	48	851	7

MONTH	No Pneumonia				Pneumonia				Severe Pneumonia				Very Severe Disease				Grand Total	No. Death
	0-2 m.	2-11 m.	1-5 m.	Total	0-2 m.	2-12 m.	1-5 y.	Total	0-2 m.	2-12 m.	1-5 y.	Total	0-2 m.	2-12 m.	1-5 y.	Total		
Oct.	52	82	115	249	X	115	68	183	134	46	12	192	8	13	5	26	650	10
Nov.	36	124	100	260	X	78	72	150	57	59	18	134	3	17	9	29	573	16
Dec.	15	145	104	264	X	99	60	159	38	84	21	143	3	5	3	11	577	11

Source - ARI Control Programme

Dhaka , Bnagladesh

Table - 10

4.5.3 Yearly statement of ARI, Dhaka Children Hospital

This Dhaka Children Hospital is one of the biggest and best Pediatric hospital in Bangladesh. This hospital offer primary to tertiary treatment. Since private medical cost is higher in Bangladesh. It is possible that majority of the people will attend this hospital, where treatment is offered with a minimum cost. Usually patients in the different level of severity (no Pneumonia, Pneumonia and severe Pneumonia) comes here from the Catchment area of the hospital, consisted of the largest urban slum area of Dhaka as well as very poor to middle income group of population, usually comes to this hospital. It is possible that emergency and non emergency patients come over here. Of course, a good proportion of cases are referred here, but no such data were available that how many patients comes directly or through referral system.

Table shows majority of (66 %) children belongs to Pneumonia and severe Pneumonia group are below 12 months of age, which confirms of other studies which were done before in

Table - 4.9

ARI MORBIDITY AND MORTALITY IN SELECTED AREAS IN BANGLADESH IN 1995

Total number of ARI cases reported in 1995-108460

Male - 56544(52%)

Female - 51916(48%)

ARI CASES BY DIAGNOSIS AND SEX

Classification	Total		Male		Female	
	No	Precent	No	Percent	No.	Percent
No Pneumonia	64227	59%	35057	62%	29170	56%
Pneumonia	36510	34%	17528	31%	18982	36%
Severe pneumonia	5407	5%	2827	5%	2580	5%
Very Severe Disease	2316	2%	1132	2%	1184	3%
Total	108460	100%	56544	100%	51916	100%

ARI CLASSIFICATION BY AGE

Age	No pneumonia		Pneumonia		Severe pneumonia		Very severe disease	
	No.	Percent	No.	Percent	No.	Precent	No.	Percent
0-2 month	17341	27%	--	--	1406	22%	857	37%
2-12 month	21195	33%	17525	48%	2217	41%	903	39%
1-5 years	25691	40%	18985	52%	1784	33%	556	24%
Total	56396	100%	36510	100%	4407	100%	2316	100%

developing countries. Still good number of children (23 %) comes in OPD as no Pneumonia group. probably from Catchment area.

Table - 11

4.5.4 ARI Morbidity and mortality in selected areas in Bangladesh in 1995.

In 1993 Bangladesh Government adopted WHO case management in controlling ARI. In order a central ARI training centre was established. The primary aim was to train up physician, nurses and other health care personnel, about the WHO case management Protocol - to set up a referral system between primary to tertiary health care centre to identify and arrange proper communication system and to keep up a constant surveillance on ARI cases in Bangladesh.

ARI Control Programme objective was to reduce mortality morbidity due to ARI and to Prevent the incidence of sever ARI. These targets were to be implemented Phase by phase by subsequent years.

These secondary data collected were the summation of monthly reports of ARI Personnel from some different health centres (Primary, secondary and tertiary level)

Cases occurring in the community treated by Private Physicians , other healers or attend others health centres, outside this ARI control scheme were not included in this report. Thus, these secondary data would not essentially reflect the accurate figure of ARI situations of these communities.

Table shows that 59 % of ARI cases belongs to no Pneumonia group. No remarkable difference between ale and female incidence of ARI. Though in literature it was reported that the incidence of cases were more male, but in this setting no remarkable difference. More than 60 % of ARI incidence belongs to 0-1 yr. group of age and majority of them are either Pneumonia or severe Pneumonia.

Maximum death of children from ARI observed in 0 - 2 months age group and 78 % in age group 0 - 12 months. Other studies in developing countries also confirm death among children more common within this 0 - 12 months of age group. Death rate in this table is less than 1% (0.39 %) which is just contrasting to national figure (CFR 10%). Most probable cause is that after attending health centres most of the deaths could be averted which gain strengthen the case management program of WHO.

4.6 Limitations and delimitations of the study:

This study faced a number of limitation right from the beginning, firstly due to the objectives, the study should be a qualitative observational study. But due to limitation of scope and time it could not be possible.

As the study instrument was questionnaire, and in pre-testing it was found there were many difficulties for mothers to understand some questionnaire, it was not possible to follow up interviewing procedure, so there may be chance of miscommunication and bias. The time period assigned for the study was also insufficient, moreover the financial support was not there. Also limited number of research works and literature presented a constraints in carrying out research.

There were also a number of delimitations. Unavailability of resources manpower and time were factors for curtailing some of the in-depth interview related to this study. The sample size was small, and no statistical inference could be drawn because of small sample size.

4.7 Effect of this research study on HCS (Health care system).

This research study will find out and assess the present knowledge and practice of mothers in their children with ARI. Findings may identify group of mothers who are at high risk, for health education planning.

This assessment of mothers knowledge and practice will give a guideline to the extent of education mothers need. Improved health education will bring mothers with their children earlier to health care providers, even the frequency will be more. As a whole it will improve the health behaviour of mothers, which will lead better quality of life. As a result of behavioural changes of mothers, profound and long term changes in child survival and development will occur.

From my data gathering exercise (secondary data), shows that limited number of children visited by health workers. Findings of this result will show the importance to improve the quality and effectiveness of training, which will improve their skill in communication with mothers.

4.8 Conclusion

In this data gathering exercise, data were collected from primary, secondary and tertiary health centres. Primary and secondary both qualitative and quantitative data were collected including open ended interview. Although this data gathering exercise was limited by very small

number of subjects and data, and the quality of gather data can be questioned. Yet this kind of technique of assimilating primary and secondary data could be an alternative method of health situation assessment in developing countries specially in Bangladesh where the health budget is already overstrained.

The reason for these preventable ARI deaths include – maximum mothers do not know and cannot recognize important signs of ARI and they do not know, the disease is in the mild, moderate and severe stage, which makes many mothers delay in seeking medical care. Because the important objective is that, ARI (mainly pneumonia) should be diagnosed early, before it becomes life threatening. Moreover the home care management of mothers for their own children is also poor, as in my data gathering exercise showed few mothers practice home care management.

This findings may give a guideline that mothers need more education and training for their behavioural change. Also health care providers need a shared understanding how to develop a effective communication with mothers. Moreover health workers should be encouraged to visit household in the assigned areas.

A comprehensive strategy of ARI through primary health care infrastructure should be made which includes a communication strategy to increase awareness among mothers. In my primary and secondary data collection, it was seen children upto 12 months have the maximum episodes of illness and maximum number of deaths. These age group

children should be on the priority list of attention. More research should be done to evaluate changes in mothers perception, behaviour and practices of ARI in their own under five children.