

## Knowledge, Attitude and Practices of Mothers Regarding Acute Respiratory Infection (ARI) In Urban And Rural Communities Of Ahmedabad District, Gujarat

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**Abstracts:** Background: Acute respiratory tract infection is a major cause of morbidity and mortality in developing and also developed countries. About 13 Million under 5 children dies every year in the world, 95% of them in developing countries, one third of total deaths are due to acute respiratory tract infection (ARI)<sup>1</sup>. Objective: To assess the knowledge of mothers regarding acute respiratory tract infection (ARI) in urban and rural communities of Ahmedabad district. Materials and Methods: A cross sectional study was covering 500 mothers living in urban (five zone) and rural (five primary health centre (PHC) of sanand taluka) area of Ahmedabad district from September 2008 to March 2009. Results: Questionnaire regarding knowledge revealed that 35.2% of mothers preferred private set up as a place of choice for treatment (more in urban area 58.4%). 71.4% of mothers preferred allopathy as a choice of type of treatment. 40.8% of mothers rated diseases as serious (more in urban area 54.4%). 50.8% mothers were illiterate (70% in rural area) and 70.4% mothers were housewives. Conclusion: The study strongly towards the low utilization of basic health services in government set up, lack of mother's education especially in prevention and control of ARI. Health education can change health care seeking behaviors and attitude of parents and other family members to take care of the ARI child during illness. [ Prajapati B et al NJIRM 2012; 3(2) : 101-103]

**Key words:** Cross sectional study, random sampling method and place of treatment

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**Introduction:** Acute respiratory tract infection is a major cause of morbidity and mortality in developing and also developed countries. ARI is an infection of any part of respiratory tract or any related structures including Para nasal sinuses, middle ear and pleural cavity. It includes, a new episode means occurring in an individual who has been free of symptoms for at least 48 hours and also all infections of less than 30 days duration except those of the middle ear where the duration of acute episode is less than 14 days<sup>1</sup>. In the developing countries out of ten, seven deaths in under 5 children are due to ARI. National family health survey (NFHS -3) revealed that two weeks before the survey 6% of under 5 children had symptoms of an ARI (cough, short and rapid breathing). Out of these children 69% were taken to a health facility or health provider for treatment. Average adult has 2-4 episodes per year and a child has 6-8 episodes per year. In rural area, lack of basic health services, lack of awareness, and other associated factors like overcrowding, environmental factors, defects in immune system, overuse and misuse of antibiotics, poverty, absence of ventilation, indoor air pollution are responsible

factors. It is estimated that at least 300 million episodes of ARI occur in India every year, out of these about 30 to 60 millions are moderate to severe ARI. While every 6<sup>th</sup> child in the world is Indian, every 4<sup>th</sup> child who dies, comes from India. Approximately 4 millions of total deaths are due to pneumonia that is why pneumonia is a leading cause of death in under five children. Control of respiratory infection did not deserve high priority because of the difficulties involved in preventing and managing these infections. It is impossible to identify the specific etiological agent in each patient which is also a problem

**Material and Methods :** A cross sectional study was carried out in 500 mothers living in urban area (five zone) and rural area (five primary health centre of sanand taluka) of Ahmedabad district during September 2008 to March 2009. Out of 500 mothers (250 for Urban and 250 for rural areas) of Ahmedabad District were studied. For urban area, Ahmedabad city has 6 zones. 5 zones were chosen by simple Random Technique. Each zone has 7-9 wards, one area of each ward of each 5 zone was selected. For rural area, Ahmedabad has 10 Talukas,

out of these, Sanand Taluka was selected by simple random technique. Through this technique 5 primary health centre (PHC) were selected. In studied area, data collections start from no 1 house till 50 mothers were interviewed for both urban and rural area. Predesigned, pretested questionnaire was used for data collection. The questionnaire included information regarding knowledge about acute respiratory tract infection (ARI), type and place of treatment, education and occupation of mothers. House to house survey was done for data collection. Data was analysed by Epi-info 2002 package.

**Result and Discussion:** According to religion, majority of mothers were Hindus (80 %). Overall Literacy status of mothers was found to be 49.2%. About half of mothers were Illiterate (50.8%). Among illiterate, highest, i.e.70% of mothers were from rural area, while 31.4% of mothers were from urban area. Total literate mothers, 33.6 % were graduate in urban area. In rural area, 28.4 % mothers had educated up to primary level (Table 1).

**Table 1: Distribution of mothers according to literacy status**

Literacy status of mothers	Urban		Rural		Total	
	No	%	No	%	No	%
Illiterate	79	31.4	175	70	254	50.8
Primary	46	18.4	71	28.4	117	23.4
Secondary & Higher Secondary	41	16.4	4	1.6	45	9.0
Graduate & Post graduate	84	33.6	0	0	84	16.8
Total	250	100.0	250	100.0	500	100.0

According to occupation, 70.4% were housewives, followed by 8.4% were labourer. In urban area, 80.4% were housewives, 9.6% were engaged in labourer & services. In rural area, about more than half of 60.4% were housewives followed by 27.2% were labourer (Table 2).

The level of knowledge was not satisfactory regarding seriousness of ARI. About more than half (59.2%) of mothers rated diseases as casual, while

40.8% of mothers rated diseases as serious. Rating of diseases as casual was more in urban area (54.4%) as compare to rural area (27.2%) respectively (Table 3).

**Table 2: Distribution of mothers according to occupational status**

Occupation of mothers	Urban		Rural		Total	
	No	%	No	%	No	%
Labourer	24	9.6	68	27.2	92	18.4
Agriculture	1	0.4	29	11.6	30	6.0
Services	24	9.6	2	0.8	26	5.2
Housewife	201	80.4	151	60.4	352	70.4
Total	250	100.0	250	100.0	500	100.0

**Table 3: Knowledge of mothers about ARI**

Knowledge of mothers	Urban		Rural		Total	
	No	%	No	%	No	%
Serious	136	54.4	68	27.2	204	40.8
Casual	114	45.6	182	72.8	396	59.2
Total	250	100.0	250	100.0	500	100.0

Our findings compare with study carried out by Saini NK<sup>2</sup>, Kapoor SK<sup>3</sup>, Denno DM<sup>4</sup> and Simiyu DE<sup>5</sup>. About 61.4% of mothers preferred government set up as a place of Choice for treatment but 35.2% of mothers preferred private treatment. In urban area, 58.4% mothers preferred private set up as a place of Choice for treatment, as compare to rural area (12.4%) respectively (Table 4).

**Table 4: Choice for place of treatment**

Choice for place of treatment	Urban		Rural		Total	
	No	%	No	%	No	%
Government	99	39.6	208	83.2	307	61.4
Private	146	58.4	31	12.4	177	35.2
Quacks	5	2.0	11	4.4	16	3.2
Total	250	100.0	250	100.0	500	100.0

**Table 5: Preference for type of treatment**

Preference for type of treatment	Urban		Rural		Total	
	No	%	No	%	No	%
Household	51	20.4	58	23.2	109	21.8
Allopathic	171	68.4	186	74.2	357	71.4
Homeopathic	28	11.2	6	2.4	34	6.8
Total	250	100.	250	100.	500	100.

A study was carried out by Aung T<sup>6</sup> and Saini NK<sup>2</sup> showed that more mothers preferred government hospitals for treatment of ARI. About three-fourth (71.4%) of mothers preferred allopathy as a choice of type of treatment. 21.8% preferred household remedies as a choice of treatment. Allopathic treatment was slightly more in rural area (74.2%) as compare to urban area (68.4%) but Homeopathic treatment was more preferred by urban people (11.2%) as compare to rural area (2.4%) respectively (Table 5). Our finding is compare with the study done by Kapoor S K<sup>3</sup>.

**Conclusion:** The study strongly towards the low utilization of basic health services in government set up, lack of mothers education specially in prevention and control of ARI. Above data revealed that in rural area, mothers had poor information regarding mode of transmission, diagnosis, availability of treatment, utilization of treatment and complication of acute respiratory infections. Health education can change health care seeking behaviors and attitude of parents and other family members to take care during acute respiratory infection (ARI). There is need for strengthening of information education activity (IEC) in reproductive and child health programme (RCH) or Integrated Management of Neonatal and Child Illness programme (IMNCI), raising female literacy level will go a long way in prevention of morbidity amongst children in general and ARI. Proper training of health workers regarding identification, management and timely referral cases of ARI and strong supervision, monitoring and evaluation of reproductive and child health programme (RCH) specially acute respiratory

infection (ARI) component in peripheral area i.e anganwadi, subcentres and primary health centres (PHC).

**Acknowledgement:** We are thankful to health staff of urban and rural area of (block health Officers, anganwadi workers, ASHA workers) ahmedabad district for their help during data collection and the mothers of children who had shared their valuable experiences and spent precious time.

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