

Original Research Article

## Study to Assess the Knowledge, Attitude and Practice about Acute Diarrhoeal Diseases among School Going Children and Their Parents in Rural Maharashtra

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### ABSTRACT

**Introduction:** Every year some 12 million children in developing countries die before they reach their fifth birthday, many during the first year of life. Out of all the childhood illnesses, acute respiratory tract infections, diarrhoeal diseases and malnutrition are the principle causes of illness and death in the developing countries. A major determinant of child health is the health and knowledge of the Child's mother. It has been seen that the mother is the main caregiver for the child in almost all societies. So, the knowledge, attitude and health practices of the mothers directly reflect on the health and vitality of the child.

**Objectives:** To find out the knowledge, attitude and practice towards acute diarrhoeal among school going children and their parents.

**Materials & Methods:** A pre structured & pretested questionnaires were used to assess the KAP of children's at school & their mothers at home. Scoring system was developed & was compared among children's & their mothers.

**Observations:** More than half of children had average knowledge but attitude and practice regarding diarrhoeal diseases was found very poor. Overall KAP score was also between poor to average whereas mothers were having very poor KAP about ADD.

**Conclusion:** A major determinant of child health is the health and knowledge of the Child's mother. So, the knowledge, attitude and health practices of the mothers directly reflect on the health and vitality of the child.

**Keywords:** ADD, Attitude Knowledge, Mothers, Practice.

### INTRODUCTION

Every year some 12 million children in developing countries die before they reach their fifth birthday, many during the first year of life. <sup>[1]</sup> Out of all the childhood illnesses, acute respiratory tract infections, diarrhoeal diseases and malnutrition are the principle causes of illness and death in the developing countries. <sup>[2]</sup>

Diarrhoeal diseases are reported to be the 2<sup>nd</sup> leading cause of child morbidity

and mortality. <sup>[3]</sup> Diarrhoeal disease continues to plague the developing world. Resulting in more than 3 million deaths, accounting for 17% of total childhood deaths i.e. under 5 years. <sup>[4]</sup> India ranks 1<sup>st</sup> for three quarters of death due to diarrhoea in under five population in the developing regions of the world (2004). <sup>[5]</sup>

A major determinant of child health is the health and knowledge of the Child's mother. <sup>[6]</sup> It has been seen that the mother

is the main caregiver for the child in almost all societies. So, the knowledge, attitude and health practices of the mothers directly reflect on the health and vitality of the child. Most of morbidity due to diarrhoea is such that, they can adequately managed at home. Health education on the aetiology, prevention and management of the diarrhoea has the potential to establish productive contact between the health services and the community, to increase the capability of the families to recognize the danger signs of diarrhoea in children and to encourage appropriate and early care seeking behaviors. Health education is an important aspect of primary health care. It is reported that, the incidence of diarrhoeal disease in rural India is 12% and in urban India is 9%. [7]

#### Objective

- To find out the knowledge, attitude and practice towards both acute diarrhoeal and acute respiratory diseases among school going children and their parents.

#### MATERIALS & METHODS

A Descriptive study was carried out among the secondary high school children (8<sup>th</sup> STD) Azad high school, Kasegaon from August to September 2011 to find out the level of knowledge, attitude and practice of children & their parents about acute diarrhoeal diseases. The mother was specifically selected for the study because she is primary caretaker of her children and her family. She is the one who spends maximum time with children and plays important role in inculcating health knowledge, attitude and practice in them. If the child had single parent i.e. father then the father would have been considered for the study but in current study no such child was found without mother.

A pre-structured and pretested questionnaire was used to get the information regarding definition, causes, signs, symptoms, treatment, preparation of ORS, prevention of diarrheal etc. Total 12 questions were asked to assess KAP of

ADD of which 4 for knowledge, 4 for attitude & 4 for practice for children & in case of mothers 13 questions were asked to assess KAP of ADD of which 4 for knowledge, 5 for attitude & 4 for practice. Scoring system was developed to assess both pre and post test performance of study and control group. Correct answer was given score 1 and wrong answer and uncertain answer 0. The grading of knowledge, attitude and practice was done as 0-1= Poor, 2=Average and 3-4 =Good. The grading for overall KAP was done as 0-3= Poor, 4-7=Average, 8-12= Good. This was done in consultation with statistician & with the help of reference studies number 52.

Data was collected related to knowledge, attitude, practice on diarrhoeal diseases among 8<sup>th</sup> students and mothers in predesigned and pretested questionnaire. The mothers were interviewed personally. Institutional Ethical Committee clearance & permission from school was taken before the start of study.

#### Observations

Following figures (I & II) shows that maximum number of children in both was having age of groups 14yrs and 13yrs where as male gender (boys) which was found in maximum number compared to female (girls).

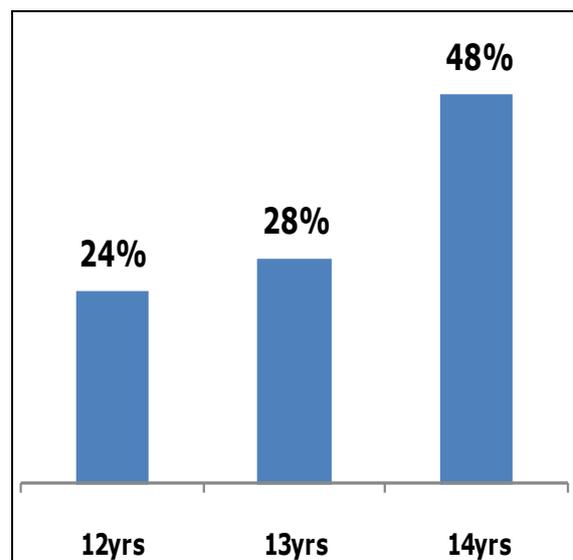


Figure 1: Distribution of Study group according to age group in 8<sup>th</sup> standard.

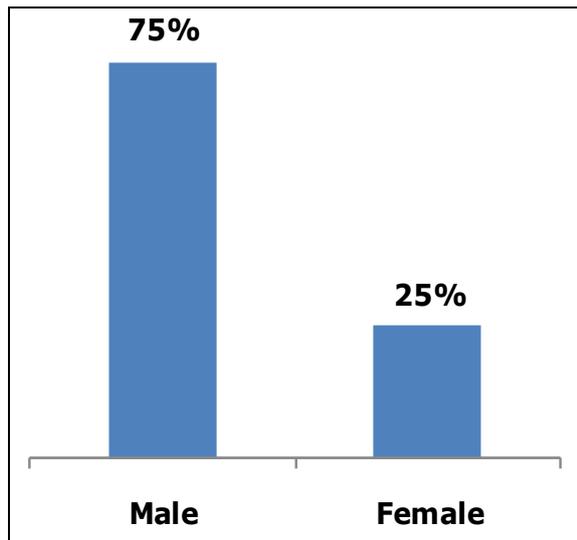


Figure 2: Distribution of Study group according to Gender in 8<sup>th</sup> standard.

Table I: Distribution according to parents Education, Occupation & socioeconomic Status

	Particulars	Study N=75 (%)
Mother Education	1) Illiterate	24(32)
	2) School Education	45(60)
	3) College Education	6(8)
Mother Occupation	1) Housewife	10(13.3)
	2) Farmer	39(52)
	3) Labour	19(25.3)
	4) Professional	7(9.3)
Father Education	1) Illiterate	16(21.3)
	2) School Education	41(65.6)
	3) College Education	18(24)
Father Occupation	1) Farmer	49(65.3)
	2) Labour	19(25.3)
	3) Professional	7(9.3)
Socioeconomic Status	1) Upper Class	14(18.6)
	2) Middle Class	51(68)
	3) Lower Class	10(13.4)

According to Table I, Majority of parents had school education (Mothers 57.3% and Father 56%) where as illiterate mothers were more than one third (36%). More than one fourth mothers of were engaged in one or the other form of work. Majority of them were engaged in farm work (46.6%) followed by labour work (30.6%). Similarly 90% of fathers were engaged in farming and 30% in labour work. It was observed that two third of students (64%) belonged to middle class followed by lower (20%) and upper class.

Table II & III shows the responses given by school children's & their mothers to the questions regarding KAP of ADD. Students were asked 12 questions to assess their knowledge, attitude and practice

regarding acute diarrhoeal disease. Table II showed the proportion of children given correct answers to the questions was from 5% to 74.7%. mothers were asked about 13 questions 4 each in K & P whereas 5 in Attitude section and the correct responses was from 2.7% to 53%.

Table II: proportion of correct answers by children to questions about KAP of ADD

Variables	Questions numbers	Correct Answers
		n=75 (%)
Knowledge	Question 1	56(74.7)
	Question 2	31(41.3)
	Question 3	20(26.6)
	Question 4	11(14.7)
Attitude	Question 5	13(17.3)
	Question 6	28(38.7)
	Question 7	11(14.6)
	Question 8	5(6.6)
Practice	Question 9	21(28)
	Question 10	11(14.7)
	Question 11	23(30.7)
	Question 12	11(14.7)

Table III: Proportion of Correct answers by the mothers of children's for questions about KAP of ADD

Variables	Question numbers	Correct Answers
		n=75(%)
Knowledge	Q1	40(53.3)
	Q2	26(34.7)
	Q3	19(25.3)
	Q4	10(13.3)
Attitude	Q5	20(26.7)
	Q6	21(28)
	Q7	15(20)
	Q8	14(18.7)
	Q9	24(32)
Practice	Q10	27(36)
	Q11	2(2.7)
	Q12	9(12)
	Q13	7(5.3)

Table IV: Distribution of children's according to KAP grades

Variables	Poor N=75 (%)	Average N=75(%)	Good N=75(%)
Knowledge	25(33.3)	42(56)	8(10.7)
Attitude	56(74.7)	19(25.3)	0 (0)
Practice	62(82.7)	12(16)	1(1.3)
Overall KAP	37(49.3)	8(50.7)	0(0)

Table V: Distribution of mother according to grades of KAP

Variable	Poor N=75 (%)	Average N=75(%)	Good N=75(%)
Knowledge	49(65.3)	7(9.3)	19(25.3)
Attitude	62(82.7)	6(8)	7(9.3)
Practice	67(89.3)	6(8)	2(2.7)
Overall KAP	51(68)	17(22.7)	7(9.3)

Table IV & V shows scoring of marks allotted to answers given by children & their mother separately. More than half of children had average knowledge but attitude and practice regarding diarrhoeal diseases

was found very poor. Overall KAP score was also between poor to average. Whereas more than 2/3<sup>rd</sup> mothers were having very poor Knowledge, Attitude & Practice about ADD.

## DISCUSSION

Generally the mother is the primary caretaker of the family and is thus charged with teaching her children proper health and hygiene practices. An illiterate or uneducated mother even though she takes care of her family, she may be less knowledgeable about teaching her children proper hygienic practices, subsequently leading to increased rates of infection and disease amongst her children.

According to age group and gender, mean age of 8th standard students was 13 yrs (range: 12-14). Majority of them were boys constituting 74.7% in study group and 70.7% in control group whereas only about 1/4th girls population was constituted in study & control group (25.3% & 29.3% respectively). In study of Danielle Ferreira de Magalhães et al [8] students from the 5th and 8th grades were participants of study. Mean age was 10 years (range: 9-14) in the 5th grade and 14 years (range: 13-17) in the 8th grade. And 46.8% were boys and 53.2% girls. As in current study there was no difference in study as well as control group.

In study of M R Savitha et al [9] reported illiteracy among mothers of 63.46% of study subjects and very less proportion of mothers with school and college education among study subjects. Whereas Huda M. Haroun et al [10] observed less proportion of maternal illiteracy (13.2%) among study subjects while as S. Broor et al [11] observed more proportion of maternal illiteracy (42.6%). In current study, almost 1/3rd mothers of 8th standard students were illiterates (32% in study & 40% in control group) and 1/4th mothers were illiterates among 9th standard (20.3% in study & 29.3% in control group) students.

Regarding maternal occupation in both 8th & 9th standard, majority of mothers were farmers & labourers whereas only

minimum proportion were housewives & professionals in both groups. In Lloyd Angela [12] study, 11% of mothers of children in an agriculture work, 3.36% on daily based labour, 1.68% domestic work for others, 85.71% were housewife.

These findings are almost similar to the studies of A. Tragler [13] & I.O. Fawole et al [14] in which significant increase in Knowledge, Attitude, Practice after experiment (Health education) was observed.

The proportion of correct answers among mothers, similarly Danielle Ferreira de Magalhães et al [8] observed the less proportion of correct answers by family members.

## CONCLUSION

A major determinant of child health is the health and knowledge of the Child's mother. It has been seen that the mother is the main caregiver for the child in almost all societies. So, the knowledge, attitude and health practices of the mothers directly reflect on the health and vitality of the child. In light of these observations, future school-based health and hygiene education programs should include strategies to involve family members, particularly mothers and siblings.

## REFERENCES

1. Gupta N, Jain SK, Ratnesh, Chawla U, Hossain S, S.Venkatesh. An Evaluation of Diarrhoeal diseases and Acute Respiratory infections control Programmes in a Delhi Slum. Indian Journal of Paediatrics May 2007; Volume 74:471-476.
2. WHO: Serious childhood problem in countries with limited resources, Background book on Management of the child with serious infection or malnutrition, Geneva, 2004.
3. Bhattacharya R, Kaur P. Epidemiological correlates of diarrhoea in a rural area of Varanasi. Indian Journal of Community Medicine 1989; Vol XIV, No 2:79-82.
4. WHO (2008), Weekly epidemiological record 15th feb-2008; No 7.

5. WHO (1999), Health situation in the South East Asia Region 1994-1997, Regional office for SEAR, New Delhi.
6. Klepp, K. I., Halper, A. and Perry, C. L. The efficacy of peer leaders in drug abuse prevention. *Journal of School Health*, 1986, Volume 56, Issue 47, page no 411.
7. Mini Sheth and Monika Obrab. Diarrhoea prevention through food safety education, *Indian Journal of Paediatrics* 2004; Vol 71:879-882.
8. Danielle Ferreira de Magalhães, José Ailton da Silva, João Paulo Amaral Haddad , Elvio Carlos Moreira , Maria Isabel Magalhães Fonseca, Marina Lúcia Lima de Ornelas , Barbara Kellen Antunes Borges , Zélia Maria Profeta da Luz. Dissemination of information on visceral leishmaniasis from school children to their families: a sustainable model for controlling the disease. *Jul, 2009 Cad. Saúde Pública, Rio de Janeiro*, 25(7): page no1642-1646.
9. M.R. Savitha, S.B. Nandeeshwara, M.J. Pradeep Kumar, Farhan-ul-haque, C.K. Raju. Modifiable risk factors for acute lower respiratory tract infections. *Indian journal of pediatrics*, 2007, Volume 74, page 55-60.
10. Huda M. Haroun, Mohamed S. Mahfouz, Mohamed El Mukhtar, and Amani Salah. Assessment of the effect of health education on mothers in Al Maki area, Gezira state, to improve homecare for children under five with diarrhea. *Journal of Family Community Medicine*. 2010 Sep-Dec; 17(3): page 141-146.
11. S. Broor+, R.M. Pandey\*, M. Ghosh, R.S. Maitreyi+, Rakesh Lodha, Tanu Singhal and S.K. Kabra. Risk factors for severe acute lower respiratory tract infection in fewer than five children. *Indian journal of pediatrics*;2001; Issue 38;page no 1361-1369.
12. Lloyd, Angela, "Maternal knowledge, attitudes and practices and health outcomes of their preschool-age children in urban and rural Karnataka, India" (2009). Graduate School Theses and Dissertations. Paper 2066.
13. A. Tragler. Health education in school children. *Indian journal of Paediatrics*. 1991 Vol 2, Page no 541-543.
14. I.W. Fawole, M.C. Asuzu, S.O. Oduntan and W.R. Brieger. A School based AIDS education programme for secondary school students in Nigeria: a review of effectiveness. *Journal of health education and research*; 1999, Volume 14 no 5, page 675 - 683 Christopher Vaughan, Julie Gack, Humberto Solorazano & Robert Ray. The Effect of Environmental Education on Schoolchildren, Their Parents, and Community Members: A Study of Intergenerational and Intercommunity Learning.

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