

**Original article:**

## Care takers Health Seeking Behaviour for Acute Respiratory Infection in children

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### ABSTRACT

**Background:** In India, most common childhood morbidities are fever, acute respiratory infections and diarrhoea. Effective early management at home and prompt health care seeking behaviour of care takers are the key strategies to reduce the dreaded consequences. The purpose of study was to assess care seeking behaviour of care takers during childhood illnesses and to determine reasons affecting care seeking behaviour.

**Methods:** A hospital based observational study was conducted in paediatric out patient clinic (opd) on children below three years of age with complains of fever with respiratory symptoms. 223 children were taken by calculating sample size by formula  $4PQ/L^2$ . Questionnaire using interview technique was used to illicit health care seeking behaviour of care takers accompanying the sick children. Results are interpreted in actual figures and percentages.

**Results:** For the current episode of illness, out of 223, 191 (85.6%) children had taken prior treatment and 32 (14.4%) children were brought directly to paediatric opd of study centre. Prior treatment was taken by allopathic doctors (46%), by traditional healers (32.4%), by medical store (10%), home remedies on advice of family and friends (5.7%) and by alternative system of medicine (4.7%). Primary reason for it being easy accessibility (28.3%).

**Conclusion:** Delay in providing effective treatment to common illness like fever was observed. Care takers had opted measures which were easily available and approachable ignoring the fact that delay in providing correct treatment can lead to serious consequences.

**key words:** Children, fever, acute respiratory infection, health seeking behaviour

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### INTRODUCTION

In a country like India, the mortality of under-five children is mainly due to acute respiratory infections (23%) and diarrheal diseases (18%) as per WHO report 2002<sup>1</sup>. These diseases can be easily managed at home in its initial stages. Mother's knowledge about danger signs and her prompt response in seeking appropriate care can save her child. Delays in seeking appropriate care, and not seeking care at all, contribute to the large number of child deaths in developing countries.<sup>2,4</sup> The World Health Organization estimates that seeking prompt and appropriate care could reduce child deaths due to acute respiratory infections by 20%

<sup>5</sup>. IMNCI strategy is helpful in not only developing skill of health care providers but also in improving mothers knowledge in identification of danger signs and care seeking behavior. Health care providers are trained to teach mothers about danger signs and counsel them on the need to seek care promptly if these signs occur. Thus its promotion will enable mothers to practice desired and accepted behavior. The aim of present study was to study on the health seeking behaviour of care takers towards their child's illness.

### MATERIAL AND METHODS

A cross-sectional observational study was done in tertiary care hospital of Gwalior. Study centre was

department of paediatrics of this hospital. For selection of study subjects those children below 3 years of age coming to the out patient clinic of paediatric department with the complaints of fever with any respiratory symptoms like cough, cold, difficulty in breathing, increased respiration. Exclusion criteria were children above 3 years and symptoms not pertaining to respiratory system were not included in the study.

Sample size was calculated by using the formula  $4PQ/L^2$ . Here Prevalence (P) was taken as prevalence of acute respiratory infection or fever in last 2 weeks in children under three years as 68.7%<sup>6</sup>, Q is (100-P) and allowable error (L) as 10%. Thus adjusted sample size of 200 was obtained. Pilot survey was done, proforma was finalised and it was decided to cover this sample within two months duration. Within the defined time period 223 children below three years with complains of fever along with respiratory symptoms were taken. Clearance for the study was taken from ethical committee from where the study was conducted.

Pretested proforma was used to obtain the required information after getting informed consent from the care taker accompanying the child. Mothers were always preferred for the interview. Details of age, sex, birth order, siblings, parents education and occupation, total income per month, previous history of similar illness, system of medicine previously sought for treatment and reasons for coming to this centre was obtained. The data was analyzed by using SPSS 12.0.1 software package.

## **RESULTS:**

### **General characteristics**

The present study conducted in opd of pediatric department. During two months of study duration 2544 children of different age groups came with variety of complaints. Out of these, 223 children below three years of age having fever along with respiratory symptoms were studied. 58.3% were males and 41.7% were females. 56.9% children came from nuclear families and 43% children came from joint families. These children came from both rural and urban background. 16.6% (37) children came from rural areas, 54.3% (121) children came from urban areas and 29.1% (65) children were residents of urban slums.

### **Health care seeking behaviour:**

History of episodes of similar illness in last one year was inquired. It was first episode in 60% children, second episode in 17% children, third episode in 8% children and fourth episode in 14.3% children.

For the current episode of illness, out of 223, 191 (85.6%) children were previously treated and 32 (14.4%) children were brought directly to paediatric opd of study centre. History revealed source of prior treatment taken. Children treated by allopathic doctors were only 88 (46%). While 62 (32.4%) children were treated by traditional healers, 19 (10%) by pharmacists, 11 (5.7%) by home remedies on advice of family and friends and 09 (4.7%) by alternative system of medicine. Prescription of the prior treatment taken was found in 71 (37%) cases only while rest 120 (63%) were treated without it. (Table 1)

Table 1: Source of previous treatment taken

Previous treatment taken for current illness	Number	%
1. Allopathic government (Paediatrician/ MBBS/ Other speciality)	57	29.8
2. Allopathic private (Paediatrician/ MBBS/ Other speciality )	31	16.2
3. Alternative medicine (Homeopathy/Unani/Ayurvedic)	09	4.7
4. Traditional healers	62	32.4
5. Pharmacists	19	10.0
6. Home remedies on Family/ friends advice	13	6.7
Total	191	100

Treatment received from prior source was determined through history, prescription and medicines brought to us. Children were treated by anti-malarial (10), anti-tubercular drugs (04), other antibiotics (46), anti-histaminic (23), anti-pyretic (47), analgesics (10), anti-parasitic drugs (5), others like calcium supplements, iron, multivitamins (19) and don't know what was given (27).

Reason for taking treatment from this hospital was asked. Majority (40%) told that children were

previously treated and cured for similar illness. 22.8% said family members suggested this hospital for treatment, 19% came because of co-operative behaviour of doctors and staff, 11.6% were referred and 1.3% came for investigations. 5% opted this hospital due to easy accessibility. But prior treatment was sought because of other reasons. Primary reason being easy accessibility (28.3%) and advice by family or friends (21.4%). (table-2)

Table 2: Reasons for taking treatment

Reasons for taking treatment	From previous source*		From this centre	
	number	%	number	%
1. Previously treated & cured	35	18.3	89	40
2. near to house/ easy accessibility	54	28.3	11	5.0
3. advice by family member/ friends	41	21.4	51	22.8
4. Co operative behaviour of doctors	21	11.0	43	19.2
5. Referred	00	00	26	11.6
6. for investigation	00	00	03	1.3
7. Advertisement	11	5.7	00	00
8. Economic reasons	29	15.1	00	00
Total	191	100	223	100

(\* 32 children were brought to opd without taking any prior treatment.)

Time lapse in reaching our hospital from onset of illness was assessed. Late arrival to centre was seen by those subjects who had history of prior treatment. Prompt treatment within few hours of illness was sought from our centre by 0.9% care takers in comparison to 14% from other sources.

For 2 days of illness, 61 (32%) children were treated by other sources while only 28 children (12.5%) came to our centre. Beyond 2 days of illness, children treated from our health centre were more in comparison to other sources. (table-3)

Table 3: Time lapse in approaching the source of treatment taken

Time lapse in approaching the source from where treatment was taken	Previous source	Our centre
Within few hours	27 (14.0%)	02(0.9%)
In 1-2 days	61(32%)	28(12.5%)
>2 days-1 week	51(26.7%)	82(36.7%)
Beyond 1 week	52(27.1%)	111(49.7%)
Total	191 (100%)	223(100%)

## DISCUSSION

It has been estimated that 20 percent of infants born in developing countries fail to survive up till their fifth birthday and 30 percent of child mortality is attributable to acute respiratory infections as an underlying or a contributing cause. ARI constitutes about 40% of total paediatric out patients and 20 percent of hospital admissions. Timely intervention and correct treatment is the key strategy to prevent the dreaded complications like pneumonia.<sup>7</sup> Several studies have proved that early diagnosis and prompt treatment can save many lives.

Our study aimed at finding the response of the care takers towards their child's illnesses. The present study conducted in a tertiary care hospital observes the pattern of treatment provided to 223 children suffering from fever with respiratory complaints. Various modalities of treatment were sought by the care takers. Most common was treatment by allopathic doctors like paediatrician or general physician in government or private settings (46%). Urban location might be the reason for this.

Traditional healers (32.4%) and pharmacists (10%) were also sought. These sources of treatment were sought due to easy accessibility (28.3%) and on advice by family or friends (21.4%). After receiving unsatisfactory primary treatment from the prior source these children were brought to the tertiary care hospital in the advanced stage of disease. Only 30(13.4 percent) children were brought within two days of illness.

Similar studies conducted on treatment seeking behaviour had different findings. Taking drugs by medical stores without prescription being the most preferred modality of treating the children.<sup>8</sup> Chandrashekar T Sreeramareddy et al interviewed 292 mothers and found pharmacies (46.2%) were the most common facility followed by allopathic medical practitioners (26.4%). No care was sought for 8 (2.7%) children and 26 (8.9%) children received traditional/home remedies.<sup>9</sup> Another study by Grace M Mbagaya et al observed that 32.4% mothers purchased and administered drugs for their sick children without seeking medical attention.

The most commonly reported reasons for this behavior were: the government health facilities were at a distance, the services are poor and inability to afford services at the private hospitals and clinics.<sup>10</sup> In other studies home remedies and traditional healers are first sought to relieve the symptoms.<sup>11-13</sup>

Like other diseases, this public health problem also has several determinants which contribute for its delayed management. Social factor like mother's education and occupation, income of family, economic class has been implicated to be an important determinant.<sup>9,14, 15</sup>

In our study, recall bias was an important limitation. Secondly, care takers accompanying the

sick child were mother, father and sometimes grand-parents. Description of history of illness given by mother was more reliable and accurate in comparison to other family members.

#### **CONCLUSION:**

The study observes the pattern of health seeking behaviour and delay in providing effective and appropriate treatment to sick child. Thus an effort should be done to change care takers perception and attitude towards child's illness. Mothers should be counselled and educated regarding effective management of minor illness at household level and recognition of danger signs so as to seek early medical care as stated in IMNCL.

#### **REFERENCES :**

1. World Health Report, Geneva, WHO 2002.
2. Sutrisna B, Reingold A, Kresno S, Harrison G, Utomo B. Care seeking for fatal illnesses in young children in Indramayu, West Java, Indonesia. *Lancet* 1993;342: 787-9.
3. D'Souza RM. Role of health seeking behaviour in child mortality in the slums of Karachi, Pakistan. *J Biosoc Sci* 2003;35:131-44.
4. Reyes H, Perez-Cuevas R, Salerom J, Tome P, Guiscafne H, Gutierrez G. Infant mortality due to ARI: influence of primary care processes. *Health Policy Plan* 1997;12: 214-23.
5. World Health Organization. Technical bases for the WHO recommendations on the management of pneumonia in children at first level health facilities. Geneva: WHO, 1991. (WHO/ARI/91.20.)
6. International Institute for Population Sciences. National family health survey (NFHS-3), 2005-06: India.
7. Suryakantha A H. Epidemiology of communicable diseases. In: *Community Medicine with recent advances*. 3<sup>rd</sup> edition, New Delhi : Jaypee Brothers Publishers; 2014:p.314
8. Shankar PR, Partha P, Shenoy N: Self medication and non-doctor prescriptions practices in Pokhara valley, western Nepal: a questionnaire-based study. *BMC Family Practice* 2002, 3:17
9. Chandrashekhara T Sreeramareddy, Ravi P Shankar, Binu V Sreekumaran, Sonu H Subba, Hari S Joshi and Uma Ramachandran: Care seeking behaviour for childhood illness- a questionnaire survey in western Nepal. *BMC International Health and Human Rights* 2006, 6:7
- 10 Grace M Mbagaya, Mark O Odhiambo, and Ruth K Oniang'o :Mother's health seeking behaviour during child illness in a rural western Kenya community. *African Health Sciences*. 2005 December; 5(4): 322-327

- 11 Niraula BB: Use of health services in hill villages in central Nepal. *Health Transit Rev* 1994, 4(2):151-66
- 12 Jimba M, Poudyal AK, Wakai S: The need for linking healthcare-seeking behavior and health policy in rural Nepal. *Southeast Asian J Trop Med Public Health* 2003, 34(2):462-3.
- 13 Shankar PR, Kumar P, Theodore AM, Partha P, Shenoy N: A survey of drug use patterns in western Nepal. *Singapore Med J* 2003, 44(7):352-6.
- 14 Shankar PR, Partha P, Shenoy N: A study on the use of complementary and alternative medicines therapies in and around Pokhara sub-metropolitan city, western Nepal. *Journal of Nepal Health Research Council* 2003, 1(2):30-34.
- 15 Neumark Y, Palti H, Donchin M, Ellenweig AY: Utilization of pediatric health services in Jerusalem. *J Community Health* 1992, 17(5):271-82.

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