

ORIGINAL ARTICLE

Home Remedies Practiced among the Parents in the Age Group 5 to 15 Years for the Prevention and Treatment of Acute Respiratory Infection

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ABSTRACT

Introduction: Acute respiratory infection is the leading cause of mortality in children with majority of death occurring in developing countries and pneumonia is the most serious outcome of ARI in young children according to the national demographic health survey and also the major cause of death. Early prevention and treatment are one of the best ways to lower the cases of acute respiratory infection in children and this can start at home by creating awareness about the home remedies practiced. Keeping this in mind, we formulated research objectives to know the home remedies for acute respiratory infection and to assess the practice among parents.

Method of the study: The study we conducted was a descriptive study amongst 241 parents of children between 5-15 years of age using non-probability purposive sampling. They were given self-instructed checklist which comprised of statements to assess home-based practices. The study was conducted in selected outpatient departments of All India Institute of Medical Sciences Raipur.

Results: The analysis of the study was done using descriptive statistics. According to the parents' response, the results of the study came out nearly 86.72% having poor practice and 0.45% with good practice of home-based remedies of acute respiratory infections.

Discussion: According to a study conducted by Sudhir Mishra and his colleagues in New Delhi, usage of honey, ginger, tulsi etc was the mostly used home-based practice for prevention and treatment of acute respiratory infections in children. Our study concluded that the usage of ginger/herbal tea, tulsi water, turmeric milk was the mostly used practices by the parents.

Conclusion: Adequate practice of parents on home remedies is required for prevention and treatment of acute respiratory infection in children. From the study,

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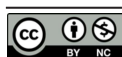
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the researchers found that many parents believe home remedies are beneficial for the prevention and treatment of acute respiratory infections in children. But in contrary to this they have poor practices in it.

KEYWORDS

• Acute Respiratory Infections • Home-remedies • Home-based Ayurvedic practices

INTRODUCTION

Acute respiratory infections are the infections of the respiratory tract and are classified as upper respiratory tract infections (URIs) or lower respiratory tract infections (LRIs). The airway from the nostrils to larynx forms the upper respiratory tract and from trachea to the bronchioles and the alveoli forms the lower respiratory tract. URIs is the most common infectious diseases. They include rhinitis (common cold), sinusitis, ear infections, acute pharyngitis or tonsillopharyngitis, epiglottitis, and laryngitis and the LRIs in children are pneumonia and bronchiolitis. Acute respiratory infections are one of the leading causes of mortality in children with majority of death occurring in developing countries and if not treated, can spread to the entire respiratory system.¹

Background of the study

Acute respiratory infection, which usually begins as a viral infection in the nose, trachea (windpipe) or lungs, is one of the leading causes of mortality in children with majority of death occurring in developing countries.²

Pneumonia is the most serious outcome of ARI in young children according to the national demographic health survey and also the major cause of death which could be prevented to a large extent through early diagnosis and treatment.³

According to the document prepared by the Department of Child and Adolescent Health and Development, World Health Organization, traditional cough and cold remedies such as tea with honey or a mixture of lemon and honey have been and will continue to be used for respiratory infections in many parts of the world. Other ingredients like tamarind, ginger, eucalyptus etc are used in different recipes that vary. Even though there have been few efficacy studies on use of traditional medicine, there is

no reason to believe that they are less safe or effective as they contain harmless ingredients and are safe to use and easily available. So, soothing home-made remedies should be encouraged to be used to prevent and treat acute respiratory infections.⁴

It was estimated by the World Health Organization (2001) that, seeking prompt and appropriate care could reduce child deaths due to acute respiratory infections by 20%. Health seeking behavior is determined by the individual perception of self, diseases and the availability, accessibility and affordability of health care services. Many studies show that millions of mothers and their children are living in a social environment that does not encourage healthcare seeking behaviours.⁵

Method & materials: A non - experimental descriptive study was used to assess the home remedies practiced for the prevention and treatment of acute respiratory infection among parents of children 5 - 15 years of age. The size of the sample was 241 & Non probability purposive sampling technique was used.

Ethical consideration: Ethical clearance was obtained from the Institutional Ethics Committee wide letter no: 1703/IEC-AIIMSRPR/2002). Data were collected after getting formal permission from the concerned authorities. An informed consent was taken from each participant after explaining the purpose of the study.

Data collection measures: A self structured Questionnaire & checklist was used for data collection, which was validated by experts and was found reliable. The assessment checklist was found to be 96% reliable with test-retest method = 0.96. Questionnaire consisted two sections: (The data collection tools are socio demographic Performa (age, gender, religion, education, occupation, income, type of family, area of residence, previous knowledge about

ARI and also include age, gender, history of previous illness and present illness in their child.) and checklist (Checklist that to assess the home remedies practiced for the prevention and treatment of ARI. It is self-constructed and has 20 statement to assess home remedies practiced by parents for the prevention and treatment of acute respiratory infection.) which is validated by experts. The duration of data collection was 4 weeks.

Statistical analysis: Descriptive statistics were used for the analysis of data as per the study objectives. In the descriptive analysis, calculations were done by using frequency, percentage, range, mean, & standard deviation. The data was presented in different frequency, table cross tabulation and chart and Analysis was done using SPSS & MS Excel.

RESULTS

Section-A

Table 1: Frequency and percentage distribution of demographic variables of parents of children 5-15 years of age

N=241

S. no.	Demographic variables	Character	Frequency	Percentage (%)
1	Age (in years)	20-30	76	31.5
		31-40	127	52.7
		>40	38	15.8
2	Gender	Female	197	81.7
		Male	44	18.3
3	Religion	Hindu	217	90
		Muslim	14	5.8
		Christian	9	3.7
		Others	1	.4
4	Occupation	Professional	10	4.1
		Semi professional	12	5.0
		Clerical/Shop/ Farm	110	45.6
		Skilled worker	18	7.5
		Semi-skilled worker	11	4.6
		Unskilled workers	10	4.1
		Unemployed	70	29.0
5	Level of education	Illiterate	29	12
		Primary school	34	14.1
		Middle school	44	18.3
		High school	48	19.9
		Diploma	20	8.3
		Graduate	37	15.4
		Post graduate	29	12.0
6	Monthly income	2000 and above	168	69.7
		1000-1999	64	26.6
		750-999	1	.4
		500-749	8	3.3
7	Type of family	Nuclear	155	64.3
		Joint	85	35.3
		Extended family	1	.4
8	Area of residence	Rural	119	49.4
		Urban	122	50.6
9	Source of information	Television/Radio/Newspaper	125	51.9
		Social media	68	28.2
		From another person	47	19.5
		If others	1	.4

The analysis revealed that:

Age: Out of 241 samples, all 241 children were under 5 - 15 years of age.

Age of Parents: Out of 241 samples, 76 (31.5%) sample were between 20-30 years of age, 127 (52.7%) were between 31 - 40 years of age, 38 (15.8%) were above 40 years of age.

With regard to Gender of Parents: Out of 241, 197 (81.7%) were females and 44 (18.3%) were males.

Concerning the Occupation of Parents: Out of 241 samples, 10 (4.1%) were professional, 12 (5%) were semi professional, 110 (45.6%) were clerical/shop/farmer, 18 (7.5%) skilled worker, 11 (4.6%) were semi-skilled worker, 10 (4.1%) were unskilled worker, 70 (29%) were unemployed.

With regard to Level of Education of parents:

Out of 241 samples, 29(12%) were illiterate, 34 (14.1%) were primary, 44(18.3%) were middle school, 48 (19.9%) high school, 20(8.3%) diploma, 37 (15.4%) were Graduate, 29 (12%) were Post Graduate.

In relation to Monthly income: Out of 241 samples, 168 (69.7%) were 2000 and above, 64 (26.6%) were between 1000-1999, 1 (0.4%) were 750-999, 8 (3.3%) were between 500-749.

In relation to Living area: Out of 241 samples, 119 (49.4%) were living in rural area and 122 (50.6%) were living in urban area.

Concerning the Source of information regarding COVID 19: Out of 241 samples, 68 (28.2%) got information through social media, 125 (51.9%) through Newspaper/ radio / television, 47 (19.5%) through from another person, 1 (4%) through others.

Section-B**Table 2:** Demonstrate the frequency and percentage distribution of demographic variables of children

S. no.	Demographic variables	Character	Frequency	Percentage (%)
1	Age	5-10	140	58.1%
		11-15	101	41.9%
2	Gender	Male	111	46.1%
		Female	130	53.9%
3	History of any previous acute respiratory infection in child	Yes	191	79.3%
		No	50	20.7%
4	History of any present acute respiratory infection in child	Yes	57	23.7%
		No	184	76.3%

The analysis revealed that:

Age of Children: Out of 241 samples, 140 (58.1%) of parents had children of age 5-10 years and 101 (41.9%) have children of age 11-15 years.

With regard to Gender of Children: Out of 241, 130 (53.9%) were females and 111(46.1%) were males.

With regard to history of any previous acute respiratory infection in child: Out of 241 samples, 191 (79.3%) had previous history of acute respiratory infections and 50 (20.7%) had no any previous history.

With regard to history of any present acute respiratory infection in child: Out of 241 samples, 57 (23.7%) has present history of acute respiratory infections and 184 (76.3%) have no any present history.

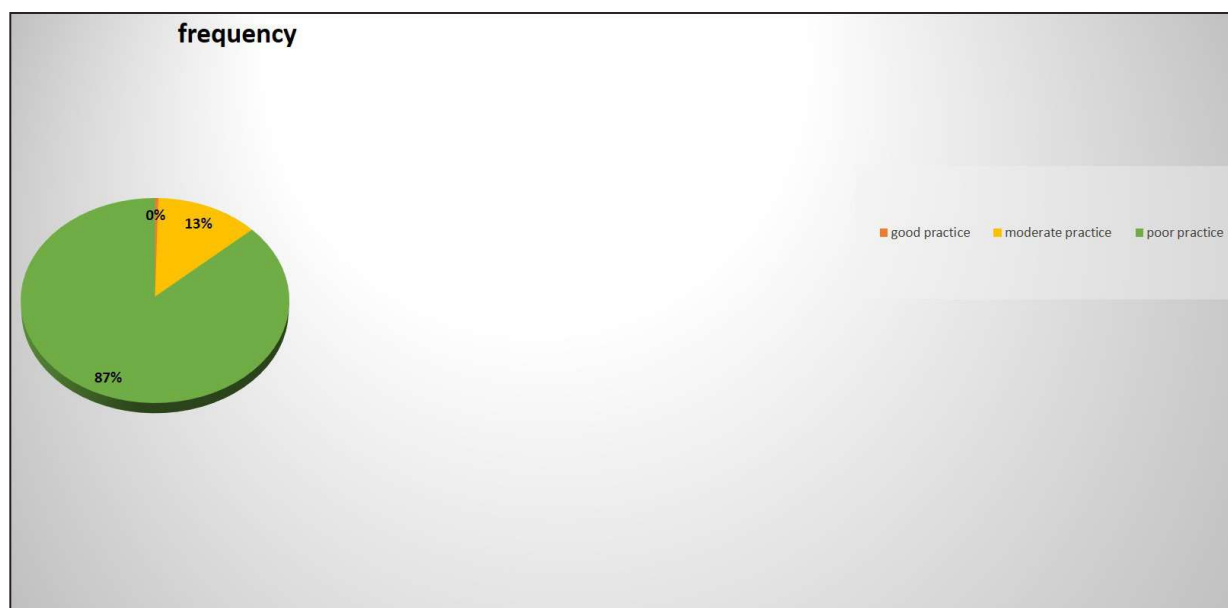
Section-C**Table 3:** Frequency distribution and percentage of parent's practice regarding prevention and treatment of ARI in children of age 5-15 years

S. no.	Questions	Frequency	Percentage
1	Massaging chest with mixture of ghee and rock salt	Always -36	14.9
		Sometimes -69	28.6
		Never -139	56.4
2	Massaging chest with mixture of camphor and mustard oil	Always - 37	15.4
		Sometimes - 94	45.6
		Never - 94	39.00

S. no.	Questions	Frequency	Percentage
3	Rubbing chest with sesame oil	Always - 36	14.9
		Sometimes -61	25.3
		Never - 144	59.8
4	Oral intake of powdered Ajwain with honey	Always - 44	18.3
		Sometimes - 94	39
		Never - 103	42.7
5	Oral intake of Fitkari alum with honey	Always - 23	9.5
		Sometimes - 80	33.2
		Never - 138	57.3
6	Oral intake of Mulathi with honey	Always - 26	10.8
		Sometimes - 99	41.6
		Never - 116	48.1
7	Pinch of Dry ginger powder with of honey	Always - 45	18.7
		Sometimes -97	40.2
		Never - 99	41.1
8	Oral intake of powdered Neem with water/ honey	Always - 24	10
		Sometimes - 79	32.8
		Never - 138	57.3
9	Drinking luke warm Ashwagandha water	Always - 30	12.4
		Sometimes - 76	31.5
		Never - 135	56
10	Drinking luke warm cinnamon water	Always - 34	14.1
		Sometimes - 77	32
		Never - 130	53.9
11	Oral intake of Vasa in luke warm water/ honey	Always - 33	13.7
		Sometimes - 64	26.6
		Never - 114	59.8
12	Sipping of Tulsi water	Always - 100	41.5
		Sometimes - 81	33.6
		Never - 60	24.9
13	Oral intake of Cardamon powder with honey	Always - 62	25.7
		Sometimes - 80	33.2
		Never - 99	41.1
14	Drinking Ginger tea/ Herbal tea / Peppermint tea/cardamom tea/ Masala tea	Always - 114	47.3
		Sometimes - 84	34.9
		Never - 43	17.8
15	Oral intake of Bharangi in powder form with honey	Always - 42	17.4
		Sometimes -67	27.8
		Never - 132	54.8
16	Drinking turmuric milk for immunity	Always - 96	39.9
		Sometimes - 72	29.9
		Never - 73	30.3
17	Oral intake of Aconitum Heterophyllum with honey	Always - 43	14.1
		Sometimes -44	18.3
		Never - 163	67.6
18	Oral intake of Albizia lebbeck (Sherish)powder with honey	Always - 18	7.5
		Sometimes - 45	18.7
		Never - 178	73.9
19	Oral intake of Pipli with honey	Always - 11	4.6
		Sometimes - 60	24.9
		Never - 170	70.5
20	Using essential oil like Eucalyptus /Peppermint oil for aromatherapy	Always - 16	6.6
		Sometimes - 36	14.9
		Never - 188	78.0

Table 4: Practice level of home remedies for treatment and prevention of ARI

Practice	Frequency	Percentage (%)
Good Practice	01	0.41%
Moderate Practice	31	12.86%
Poor Practice	209	86.72%

Pie Chart

SECTION-D

Table 4: Mean, standard deviation and range of parent's level of home-based practices regarding prevention and treatment of acute respiratory infection in children of age 5 – 15years.

S.No	Home-based practices regarding prevention and treatment of ARI
Mean	13.27
Standard deviation	5.51
Range	32

FINDINGS AND DISCUSSION OF STUDY

1. To assess the practice of parents on home remedies for prevention and treatment of acute respiratory infection.

The analysis of the data from the study reveals that among 241 parents, (209) which is 86% of the total data have poor practice regarding usage of home remedies for prevention and treatment of acute respiratory infection, (31) parents which are 12% of the total data has

moderate practice and only (1) out of 241 has a good practice of home remedies in prevention and treatment of acute respiratory infection. The result we obtained is contrary to other studies which we have referred.

The findings of the study were contradictory with the study conducted by Khalida Naz Memon, Khalida Shaikh. Their study was a descriptive cross-sectional, conducted on 488 mothers of children of age less than 3 years in Pakistan about the perceptions and home practices on ARI. The findings revealed that about 94.4% of the mothers interviewed confirmed the use of one or more home remedies.

According to a study conducted by Sudhir Mishra and his colleagues in New Delhi, usage of honey, ginger, tulsi etc was the mostly used home-based practice for prevention and treatment of acute respiratory infections in children. Our study concluded that the usage of ginger/herbal tea, tulsi water, turmeric milk was the mostly used practices by the parents.

IMPLICATIONS

The results obtained from the study helped the researcher to drive certain implications for Nursing education, Nursing practice, Nursing research. Health education is an important tool for a health care agency. It is one of the most cost-effective interventions to promote healthy living. Many of the parents are unaware to use home-based measures for prevention and treatment of acute respiratory infection because of ignorance and lack of information. Some states that they are fearful to use home remedies on children as they doubt its effectiveness. Use of selected topic is very important in life as they are very helpful for the prevention and treatment of acute respiratory infection and improves the children's quality of life and reduces the suffering. Thus, the information provided through Ayurveda based self-instructional module helps the parents to improve their knowledge and practice of home based Ayurvedic remedies for the prevention and treatment of acute respiratory infection.

RECOMMENDATIONS

Similar study can be conducted using larger number of samples selected by probability sampling for wider generalization.

A comparative study can be conducted to assess the practice of parents of children in age group 5 to 15 years for prevention and treatment of acute respiratory infection.

A similar study can be conducted on different settings with different demographic variables.

A similar study can be conducted by an alternative system of medicine in different settings with same demographic variables.

CONCLUSION

Adequate practice of parents on home remedies is required for prevention and treatment of acute respiratory infection in children. But the home-remedies practiced by the parents of children in the age group 5-15 years is poor in the prevention and treatment of acute respiratory infection. From the study, the researchers found that many parents believe home remedies are beneficial for the prevention and treatment of acute respiratory infections in children. But in contrary to this they have poor practices in it.

Conflicts of interest: We have no conflicts of interest to disclose.

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