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Research Article

## AWARENESS, PRACTICES & BEHAVIOR OF MOTHERS ON INFECTIONS OF RESPIRATORY TRACT AMONG CHILDREN

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**Abstract:**

**Objective:** This research work aimed to evaluate the awareness, practices & behaviors of mothers on acute respiratory infections (ARI) among children having lower than five year of age.

**Methodology:** This was a transverse research work conducted in Pediatric Department of Jinnah Hospital, Lahore from November 2017 to January 2018. Total three hundred and thirty-five mothers were living in the same city and they had minimum one child of less than 5 year of age & visiting to this very hospital for clinical issue with the company of some other female were the part of this research work. The mothers from far areas or available in a difficult situation to interpret our questions were not the part of this research work. The primary language was English in questionnaire but for better interpretation, translation form was also available. Our professionals took the interview from mothers.

**Results:** We conducted this research work on three hundred and thirty-five children. Out of total, 68.0% (n: 228) children found with acute respiratory infections. The average age of patients were  $20.0 \pm 17$  months whereas average weight at the time of birth was  $2.70 \pm 1.80$  kg. The very frequent symptom was the presence of cough, which was in very severe condition in the season of winter, dust was the main factor of aggravation. Pneumonia was the very frequent complication of this problem and majority of mothers consulted the clinical expert for treatment. Fifty eight percent females (n: 192) practiced self-medication & the most common used medication was the use of paracetamol.

**Conclusion:** The findings of this research work showed that better awareness of mothers on respiratory infections, symptoms, the factors of aggravation and related complications. The attitude of the mothers towards these infections was satisfactory with in time consultation with a professional. Good rate of literacy has very strong impact on awareness, practices & behavior of mothers.

**Key Words:** Acute, respiration, infection, methodology, behavior, awareness, attitude, aggravation, satisfactory, cough, severe.

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## INTRODUCTION:

ARI is very important reason for high rate of morbidity as well as mortality among children of small ages and it is responsible for high costs. These infections are the vital causes for the health care services of children. It is a serious concern of health care particularly in the countries which are under development. These infections contains URI (upper respiratory infection) & LRI (lower respiratory infection). URI normally available with Rhinitis, Tonsillitis & infection of ear whereas pneumonia is the main presentation of lower respiratory tract infection. In the whole world, mean respiratory infection experience of a child is from six to eight spells in one year [1].

Occurrence of these infections in our country Pakistan is 16.0% according to one survey carried out in 2011 in Pakistan [2]. That survey showed that these infections are more common in the urban areas of the countries. Normally parents managed the OTC drugs (over the counter) to their child as these infections are the cause of distress as well as displeasure among parents. Proven effectiveness of these medicines is absent [3]. These drugs can be dangerous [4] and these are not under the endorsement of FDA (Food and Drug Administration) [5] and American pediatric academy [6]. In these conditions, remedy at home & appropriate care is very necessary. In the countries which are under development, the awareness, practices & behavior of mothers on these infections of respiratory infections required assessment, so researchers tried to gather basic data for better awareness of the prevalence of complication. These attempts will add in the knowledge about respiratory infections.

## METHODOLOGY

This transverse research work carried out in pediatric department Jinnah Hospital, Lahore from November 2017 to January 2018. There were more patients in this season. Holding the prevalence of respiratory

infections, confidence interval of ninety five percent & absolute accuracy required 0.050, the lowest size of samples was two hundred and four. All the mothers who were willing to participate included in this research work. Mothers who were available with at least one child under the age of 5 years and visited the hospital due to this infection and the accompanying females coming with them with one child of less than 5 year of age coming to hospital for any reason. The females who were unable to understand question & more from far areas were not the part of this research work.

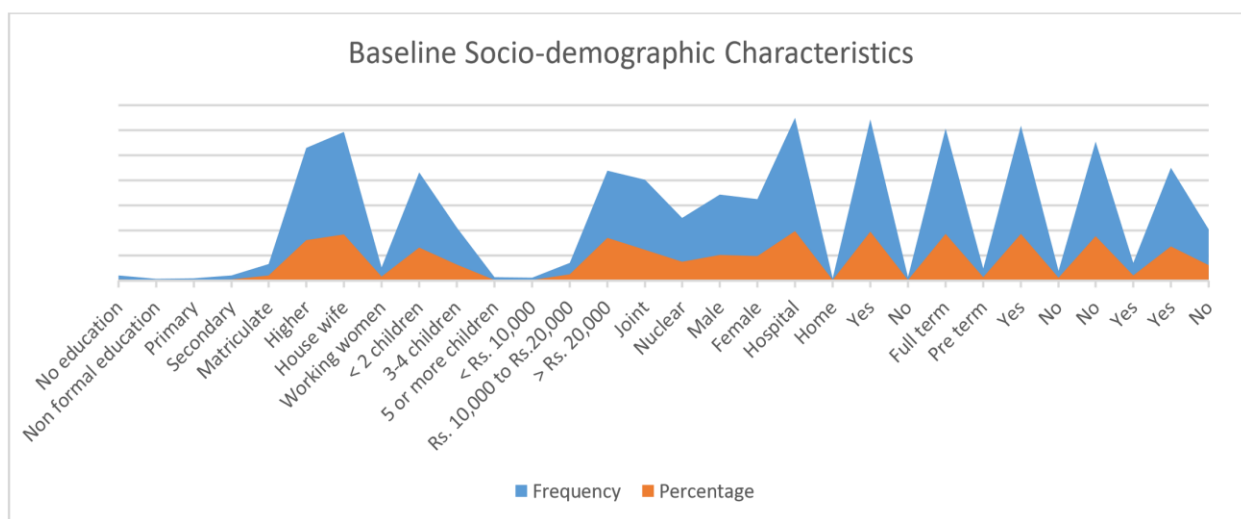
Ethical board of the hospital gave the permission to conduct this research work. We took the verbal consent from all mothers for their participation. We maintained their confidentiality. They were fully free to quit the study any time they want or do not response any question if they do not want. We used the English language for questionnaire and translation was also available. Our professional took interviews to collect the answer of those questions. There were many variables as sex, weight at the time of birth and education of mother which were independent. The most important dependent variables were symptoms of these infections, factors of aggravation and related complications. Various categorical factors as qualification, profession, parity, social & economic condition & family type. SPSS V.16 was in use for the statistical analysis of collected information.

## RESULTS

Interview of three hundred and thirty five females carried out. Among these, sixty eight percent (n: 228) were available with acute respiratory infections. Total 265 (81.0%) mothers were available with ten year of education (Table-1).

**Table-I: Baseline Socio-Demographic Characteristics of Study Population (n=335)**

Characteristics	Frequency	Percentage
Education (n=328)	No education	10.0
	Non formal education	4.0
	Primary	5.0
	Secondary	11.0
	Matriculate	33.0
	Higher	265.0
Occupation (n=323)	House wife	297.0
	Working women	26.0
Number of children (n=329)	< 2 children	216.0
	3-4 children	106.0
	5 or more children	7.0
Monthly household income per month (n=262)	< Rs. 10,000	6.0
	Rs. 10,000 to Rs.20,000	36.0
	> Rs. 20,000	220.0
Type of family (n=326)	Joint	201.0
	Nuclear	125.0
Children Gender (n=335)	Male	172.0
	Female	163.0
Place of delivery (n=330)	Hospital	325.0
	Home	5.0
Birth attended by qualified person (n=329)	Yes	322.0
	No	7.0
Term of the child (n=328)	Full term	304.0
	Pre term	24.0
Fully vaccinated children by EPI (n=329)	Yes	309.0
	No	20.0
Number of malnourished children (n=314)	No	278.0
	Yes	36.0
Number of breast fed children (n=328)	Yes	225.0
	No	103.0

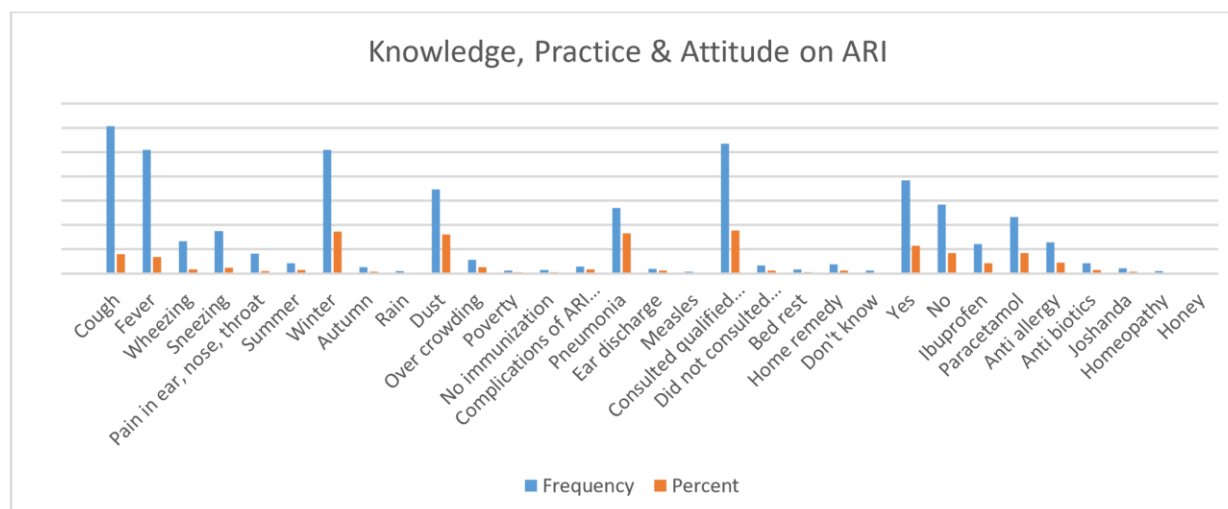


Ninety two percent (n: 296) females were housewives & sixty six percent females (n: 216) were available with less than two children. The average of children was  $20 \pm 17$  months whereas average age of mothers was  $29.0 \pm 4.0$ . The average weight at the time of birth of children was  $2.7 \pm 1.8$  kg. The average duration for the prevalence of respiratory infections was 5 days. Eighty five percent (n: 220) females were available with more than twenty thousand monthly income in their family. Sixty two percent (n: 2010) females were from joint family system & ninety nine percent (325) children got birth in the hospital. Fully vaccination for EPI and Pneumonia carried out as mentioned in table-1.

Eleven percent (n: 36) children were the victim of malnutrition & sixty nine percent (n: 229) were feeding through breasts (Table-1). Cough was the most common perceived symptom (40.0%, n=303), winter was the worst season (87.0%, n=255), dust was the most factor of aggravation (81.0%, n=174), Pneumonia was the most frequent complication (83.0%, n=135), and very common therapy choice was from clinical expert (89.0% n=268, Table-2). Fifty eight percent (n: 192) females were practicing self-medication & Paracetamol was the most common used medicine (42.0%, n=117, Table-2).

**Table-II: Knowledge, Attitude and practice of mothers on ARI (n=335).**

Knowledge		Frequency	Percent
What are the symptoms of ARI?	Cough	303.0	40.00
	Fever	255.0	34.00
	Wheezing	67.0	9.00
	Sneezing	88.0	12.00
	Pain in ear, nose, throat	41.0	5.00
Disease worsening environmental condition	Summer	21.0	7.00
	Winter	255.0	87.00
	Autumn	13.0	4.00
	Rain	5.0	2.00
Aggravating factors of the disease	Dust	174.0	81.00
	Over crowding	29.0	13.00
	Poverty	6.0	3.00
	No immunization	7.0	3.00
	Complications of ARI	14.0	9.00
	Fits	135.0	83.00
	Pneumonia	10.0	6.00
	Ear discharge	4.0	2.00
Treatment options for ARI	Consulted qualified doctor	268.0	89.00
	Did not consult doctor	17.0	6.00
	Bed rest	9.0	3.00
	Home remedy	19.0	6.00
	Don't know	6.0	2.00
Practicing self-medication in ARI	Yes	192.0	58.00
	No	142.0	42.00
Type of self-medication	Ibuprofen	61.0	22.00
	Paracetamol	117.0	42.00
	Anti-allergy	64.0	23.00
	Anti-biotic	21.0	8.00
	Joshanda	11.0	4.00
	Homeopathy	5.0	1.00
	Honey	1.0	0.50



### DISCUSSION:

The interview of mothers carried out in this research work and most of the females were available with their children [7, 8]. The research work showed the rate of literacy of ninety seven percent. Which is comparable with same research work conducted in Tharparkar showing rate of literacy as 74.0% [9]. Both research works showed the high literacy rate among the mothers from an urban background. The coverage of immunization of children with the EPI in current research work was 94.0% whereas it was 85.0% in a research work carried out in Kenya [10]. This research work displayed that 69.0% children with acute respiratory infections got breast feeding whereas in other study it was 65.0% [11]. In current work, eleven percent (n: 36) children were victim of malnutrition whereas a study in Nepal showed 38.0% (n: 23). Cough was the most common symptom (40.0%) followed by Fever (34.0%), wheezing (9.0%), sneezing (12.0%) & infection of ear (5.0%) whereas in a research work in Ghana, the most frequent symptoms were ribs retraction (22.0%), cough & lethargy (57.0%) [13]. Research work carried out in Dar-us-Salam, most important symptom was fever (92.50%) [14].

A research work from Tehran [15] showed that sixty two percent mothers (n: 141) preferred clinical experts. Chan [16] & Bhanwra [17] reported the high occurrence of utilization of antibiotic for ARI. These are not similar with our results. Farhad in his research work displayed the utilization of antibiotics in 5.0% [18] and Panagakau as 10.0% [19]. A research work from Multan showed the 58.0% mothers practicing selfmedication similar to this current research work [20]. Remedies at home were in practice of 6.0% participants. Some research works in Multan [20] & Lahore [21] display the home remedy's practice in

40.0% and 23.0% correspondingly. A research work from New Delhi [22] showed the Ginger as most utilized home remedy but this was Joshanda in current research work. The most common factor of aggravation was dust present in 81.0% whereas in one other research work of Myanmar it was affecting the 89.0% [23].

### CONCLUSION:

The awareness of the mothers about the symptoms of acute respiratory infections, factors of aggravation, and associated complications were appropriate. The behavior of in time consultation with the professional was also appropriate. Better rate of literacy has a strong impact on the awareness, practices & behavior of mothers.

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