ASSESSMENT OF PARENTAL KNOWLEDGE ON PEDIATRIC PNEUMONIA IN LARKANA, PAKISTAN: A CROSS-SECTIONAL STUDY

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ABSTRACT:
In the developing countries the largest cause of deaths in children is due to pediatric pneumonia which is known as an acute respiratory infection. According to the data of UNICEF it is estimated that about every hundred thousand children fourteen hundred children's suffer from this disease universally per annum. Even though public services like vaccinations, diagnosis capacity, public services, medical treatment and living condition has improved and it is very sad that from pneumonia after 45 second one child dies. A cross sectional descriptive study was conducted at Chandka medical college hospital larkana from 1st march 2023 to 31 august 2023. The questionnaire contains 2 dimensions i.e. knowledge dimension and Demographic dimension. The data was measured by frequencies and percentages on SPSS 23. A total of 480 participants took part in this study with 200 (41.6%) fathers and 280 (58.3%) mothers. 41–50 years group was most frequent with 40 %, Majority of the participants were married 93.1%. Most parents 389 (81%) were aware that pediatric pneumonia is caused by different pathogens and 417 (87%) also knew that due to severe cold in pediatric pneumonia can lead to death. The current study highlighted the importance of improving knowledge of parents regarding pediatric pneumonia. Not treating standardly pediatric pneumonia is a major concern, this study enables policy makers to look at this issue seriously and take necessary actions in community to prevent and mange this disease. Therefore these kind of studies at large scale should be conducted for further assessment.

Keywords: Pediatric pneumonia · Knowledge · survey.

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DOI: 10.53555/ecb/2024.13.03.16

INTRODUCTION:

In young children's and infants the leading cause of hospitalization is respiratory viral infection worldwide and it is also known to be the 2nd leading cause of infant mortality[1,2]**.** As per World health organization under the age of five years children's pneumonia is still the main cause of death and about eight hundred children died due to this deadly disease in 2016 and most importantly 90% of these newly cases are being found in developing counties where already medical resources are not of standard[3-5]. According to the data of UNICEF it is estimated that about every hundred thousand children fourteen hundred children's suffer from this disease universally per annum. Even though public services like vaccinations, diagnosis capacity, public services, medical treatment and living condition has improved and it is very sad that from pneumonia after 45 second one child dies[6]. Although the decrease in deaths due to pneumonia in children's has been slow than comparing with another infectious diseases[7]. It is caused by many different bacteria, viruses and even fungi and the most common bacteria which causes pneumonia is Streptococcus pneumonia[8]. The risk factors which leads to pneumonia re malnutrition, vitamin A and vitamin D Deficiency, exposure to cigarette smoking, low birth weight and lack of breast feeding[9]. Children's can suffer from asthma, reduced lung function, chronic obstructive pulmonary disease or even death at any stage of life as life time complication[10]. The KAP (knowledge, attitude and practice scale) it a tool used in the field if research especially in public health to identify peoples healthy behaviors. With the help of standardized question KAP surveys mostly provide qualitative and quantitative information regarding a specific research questions/targets [11] normally includes misunderstanding or either misconceptions like immunity of children's, pathogens, inadequate parental caring, dietary habit can lead to pneumonia in children[12] . Prevention of disease in young children's mostly rely on preventive measures by the parents, while caregivers can provide all the necessary measure and care to their children's so that they can keep their child safe and conditions must be under control[13,14].In this study the parental knowledge was assessed to check the information regarding pediatric pneumonia..

MATERIAL AND METHODS:

A cross sectional descriptive study with sample size of 480 (Random sampling) was conducted at Chandka medical college hospital larkana from 1st march 2023 to 31 august 2023. Informed consent was taken from the parents and then questionnaire was given to them which was duly filled and submitted by them, only those parents were included in this study who willingly and voluntarily participated in this study. The questionnaire was made according in accordance with the available literature[15-17]. The questionnaire contains 2 dimensions i.e. knowledge dimension and Demographic dimension. There were fifteen questions related with knowledge. The data was measured by frequencies and percentages on SPSS 23.

RESULTS:

A total of 480 participants took part in this study with 200 (41.6%) fathers and 280 (58.3%) mothers. 41–50 years group was most frequent with 40 %, followed by 31-40 years 27.9%. Majority of the participants lived in rural (71.4%) and rest lived in rural areas. Majority of the participants were married 93.1% as mentioned in Table No.1.

Table No.1: Demographic Data

	Frequency (percentage)
Total Participants	480 (100%)
Sex	
Male	200 (41.6%)
female	280 (58.3%)
AGE	
< 30	154 (32%)
31-40	134 (27.9%)
41-50	192 (40%)
RESIDENCE	
urban	137 (28.5%)
rural	343 (71.4%)
Marital status	
married	447 (93.1%)

others	33 (6.8%)
NUMBER OF CHILDREN	
1	312 (65%)
≥ 2	68 (135%)
SMOKING	
Never smoker	384 (80%)
Previous smoker	56 (11.6%)
Current smoker	40 (8.3%)

Most parents 389 (81%) were aware that pediatric pneumonia is caused by different pathogens and 417 (87%) also knew that due to severe cold in pediatric pneumonia can lead to death. 360 (75%) of the parents were also aware that routine blood examination is the most basic examination to diagnose pediatric pneumonia. 410 (85.4%) of the parents knew that elevation of white blood cells in children's with pediatric pneumonia in bacterial infection. 404 (84.1) knew the common type , 377 (78.5) were aware about prominent cause in pediatric pneumonia. 346 (72) parents knew about is recurrence, 311 (64.7) knew about its spread. 328 (68.3) parents knew that it is essential and helpful if the door and windows are closed. More than half of the parents were not having sufficient information regarding association between col and pneumonia or if there is any vaccine which can protects against them. Over half of the percent of the parent's believed that etiology, treatment and severity of pneumonia is same as in adult as mentioned in Table No.2.

Table No.2: Frequency and percentage of correct answers to questions in the knowledge dimension

ITEM	Frequency (Percentages)
different pathogens, such as bacteria, viruses, mycoplasmas, and chlamydia, etc. causes pediatric pneumonia	389 (81)
In which season pediatric pneumonia is highly prevalent?	151 (31.4)
Sign and symptoms of pediatric pneumonia?	353 (73.5)
Most basic test for diagnosis of pneumonia is blood examination.	360 (75)
The elevation of white blood cell during blood examination shows presence of pneumonia.	410 (85.4)
The major cause of pediatric pneumonia is its diseases resistance.	377 (78.5)
Bronchopneumonia is commonest pneumonia?	404 (84.1)
Additional factors such as foreign bodies, pathogen infection, feces, lipoids and amniotic fluid can also induce pneumonia.	311 (64.7)
With the closure of the windows and doors can prohibit wind and coldness, if there is a child having pneumonia.	328 (68.3)
Pneumonia can be infectious and it can be spread through respiratory tract and requires isolation.	317 (66)
Pneumonia is another type of cold	232 (48.3)
Severe disease can cause death	418 (87)
Its treatment, etiology and severity is similar to adults having pneumonia.	255 (53.1)
It can be prevented by vaccines?	201 (41.8)
Is it recurrent?	346 (72)

DISCUSSION:

This is the only study conducted at this institute regarding this kind of questionnaire, majority of the parents shown good knowledge toward prevention of pediatric pneumonia, in many areas family centered care has become normative practice[18,19] .Parents health professional must highlight the importance of those child's which are at the risk of detoriation and should perform active treatment. This research has revealed that parents

has better knowledge and in one of previous literature they showed that females possess better knowledge and attitude score because they spend more time with their children's[20] . Previous studies were also focused on Monthly income and they suggested that with more income the better knowledge was associated[21]. Parents with higher education are more understanding[22] as in our research the parents who never smoked were in majority and we assume that because they already knew the importance of health and being non-smoker. Our study found out that parents were having sufficient information about the pediatric pneumonia. But majority of the parents were unable to identify cold, flu or pediatric pneumonia differences[23]. Mostly the cases of pediatric pneumonia are nonspecific which includes, difficulty breathing, cough, tachypnea and fever[24]. The peoples who are working in the medical; field tend to have higher knowledge[22].

CONCLUSION:

Pediatric pneumonia is a major public health issues which takes millions of lives per annum, the current study highlighted the importance of improving knowledge of parents regarding pediatric pneumonia. Not treating standardly pediatric pneumonia is a major concern, this study enables policy makers to look at this issue seriously and take necessary actions in community to prevent and mange this disease. Therefore these kind of studies at large scale should be conducted for further assessment.

CONSENT FOR PUBLICATION: Not applicable.

CONSENT TO PARTICIPATE: Written informed consent was obtained from all subjects.

COMPETING INTERESTS: The authors declare that they have no competing interests

FUNDING: Not Applicable.

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