



A Study To Assess The Knowledge Regarding Respiratory Tract Infections Among The Mothers Of Under Five Children Admitted In Selected Hospitals Of Gurugram''

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Abstract

The respiratory system plays a vital role in exchanging gases in our body. However, respiratory tract infections caused by viruses, bacteria, fungi, and parasites can affect the upper and lower respiratory tract, leading to acute or chronic illness. This study aimed to assess the level of knowledge among mothers of under-five children regarding respiratory tract infections and identify any association between their knowledge and demographic factors.

Convenient sampling was used to select 60 mothers, and data was collected through a structured questionnaire containing 30 knowledge-based questions. The study found that the majority (58.3%) of mothers had moderate knowledge scores, while 23.4% had adequate knowledge and 18.3% had inadequate knowledge about respiratory tract infections. Interestingly, the level of knowledge was significantly associated with the mother's age, family size, and education.

In conclusion, this study highlights the varying degrees of moderate knowledge about respiratory tract infections among mothers of under-five children.

(Key words: knowledge, respiratory tract infection, illness)

Introduction

Respiratory tract infections are a major cause of illness and death in children under the age of five, particularly in developing countries. Acute respiratory diseases claim the lives of more than 12 million children in underdeveloped nations each year, with pneumonia being the leading cause of death. Upper respiratory infections, such as the common cold, and lower respiratory infections, including pneumonia, are the most common types of respiratory illnesses in young children. Children in rural areas experience 3-5 episodes of acute respiratory infections per year, while those in metropolitan areas experience 5-8 episodes. Mothers play a crucial role in managing their child's health, as they are often the primary caregiver. Factors such as parental smoking behavior and exposure to home smoke pollution have been linked to an increased risk of acute respiratory infections in children. In India, acute respiratory infections are a significant cause of morbidity and mortality in children under five.

Acute Respiratory Infection (ARI) is a major cause of illness and death among children, leading to significant economic burden and healthcare utilization. It is a significant public health issue, particularly in developing countries. ARI encompasses Upper Respiratory Infections (URI) and Lower Respiratory Infections (LRI), with URI including conditions such as Rhinitis (Common Cold), Tonsillitis, Sinusitis, and ear infections, while LRI primarily presents as Pneumonia, characterized by an increased respiratory rate.

Children all around the world experience an average of 6-8 episodes of Acute Respiratory Infection (ARI) per year. In Pakistan, the incidence of ARI is high, with a survey conducted in 2011 indicating a prevalence of 16%. The survey also found that ARI is more common in urban areas of the country. Parents often administer over-the-counter (OTC) drugs to their children to alleviate the discomfort and distress caused by ARI, but the effectiveness of these drugs has not been proven and they can be hazardous. The Food and Drug Administration (FDA) and the American Academy of Pediatrics do not endorse the use of these drugs. As a result, safe home remedies and proper care are recommended to manage ARI in children.

A lack of awareness and understanding among mothers in developing countries regarding Acute Respiratory Tract Infection (ARI) highlights the need for an evaluation of their knowledge, attitudes, and practices. Researchers aimed to gather baseline data to better comprehend the magnitude of the ARI problem and add to the existing knowledge on the subject. The study's objective was to assess the knowledge, attitudes, and practices of mothers with children under five years of age regarding ARI.

Objectives of the study

- To assess the knowledge and attitude regarding respiratory tract infections among the mothers of under five children admitted in selected hospital of Gurugram Haryana .
- To find out the association of level of knowledge and attitude with selected demographical variables.

Hypothesis

- H₁ - There will be association between knowledge score of mother's of under five children with selected demographical variables.

MATERIAL AND METHODS:

RESEARCH APPROACH:

For this study a quantitative research approach was used to carry out the study objectives.

RESEARCH DESIGN: Descriptive experimental research design was used in this study.

Population

The study population included mothers who had children under five years of age in selected hospital Gurugram.

TARGET POPULATION:

The target population consists of the mothers of under five children admitted in hospital of Gurugram.

Accessible population

The accessible population of this study were Mothers of under five children admitted in Sgt hospital Budhera Gurugram.

SAMPLING TECHNIQUE:-In this study the sampling technique used to select the sample was non-Probability convenient sampling technique.

Sample Size

The sample for the current study were 60 Mothers selected from pedia opd , pediatric ward and postnatal ward of Sgt hospital.

Exclusion Criteria

- Those who were not willing
- Those who were not present at the time of data collection were excluded.

Inclusion Criteria

- Mothers of Under five children
- Those who were present at the time of data collection were included.

VARIABLES:

Variables use in the study they are

Independent variable : Knowledge

Demographic variables

DEVELOPMENT AND DESCRIPTION OF RESEARCH TOOL:

An research instrument is a tool used by a researcher to gauge participants interest in a study in order to gather the data .The structured questionnaire for assess the knowledge and attitude is the instrument employed in this study.

DESCRIPTION OF THE TOOL:

it was made up of two parts:

1 section A: first section include socio demographic variables.

2 section B : this section contains 30 self-directed knowledge and attitude assessing questions .

Section A: socio demographic variables

The socio demographic variables include age in years, education, monthly income, number of family member, number of under 5 children.

Section B: knowledge questionnaire.

The knowledge of the mothers assessed by using closed ended question in the questionnaire.

CONTENT VALIDITY OF THE TOOL:

Content validity is the degree to which the item in the tool accurately reflects the breadth of the content.

To guarantee the content validity of the tool created, which includes objectives and self structured questionnaire. The tool was sent to the experts. The experts accepted the tool and made a few adjustments.

PILOT STUDY:

A pilot study is the down version of the main study that is used to assess the viability of the suggested research methodology, in order to assess the feasibility of the study. Six samples were used in the pilot study to determine the viability of the study and the accuracy of the instrument.

DATA COLLECTION PROCEDURE:

A self structured questionnaire schedule was used to collect the data after obtaining the approval. The probability sampling (simple random sampling) approach was used to choose the sample. The sample size was 60. All respondents were cooperative during the data collection. The procedure of collecting the data was finished and the respondents were thanked for their cooperation and responses.

DATA ANALYSIS AND INTERPRETATION:

Data analysis is a method for organizing reducing, and giving meaning to data. Insight can be gained from the data by using descriptive statistics, which include measures of central tendency and dispersion as well as frequency distribution. Inferential statistics is intended to provide inference from a sample statistic to a population parameter frequently used to test the hypothesis.

Both descriptive and inferential statistics used for analysis of data which include;

- Frequency and percentage distribution of the subjects according to their chosen socio demographic variables.
- Evaluation of knowledge of the parents

ETHICAL CONSIDERATION:

In current study consent was obtained or taken from the mothers of under five children admitted in hospital of Gurugram Haryana.

Result

The analysis and interpretation of data have been organized and presented under the following sections

Section I- Sample characteristics

Section II- Knowledge levels of the sample and item wise analysis of knowledge of mothers'' of under- five children with regard to acute respiratory tract infections..

Section III- Relationship of knowledge score of mothers' of under-five children with selected variables.

The result of study interpreted that

- Majority (55%) of the mother were in the age group of 25 to 30 years. 23.3% were in the age group of 31 and above and remaining 21.7% were in the age group of below 25 years.
- Majority 66.7% of the mothers were educated and remaining 33.3% of the mothers(mother) were uneducated.
- Majority of the mother 66.7 were having income more than 5000. 23.3% mother were having income less than 5000 but more than 3000. 10% of mother were having income less than 3000.
- Majority of 63.4% population have above 5 family members.33.3% were having five family members in their family. 3.3% of mother were having four family members in her family.

Majority of 48.3% of sample are having one under 5 child. (41.7%) of mother having two under five children. (10%) of mother were having above 2 under five children.

Majority 58.3% of the mother were having moderate knowledge score regarding respiratory tract infection. 23.4% of mother were having adequate knowledge regarding respiratory tract infection. Only 18.3% of mothers were having inadequate knowledge regarding respiratory tract infection.

Table 1: Knowledge score of the mothers of under five children admitted in hospital regarding respiratory tract infections

Level of knowledge	Score	Frequency (F)	Percentage
Inadequate	0 – 10	11	18.3%
Moderate	11 – 20	35	58.3%
Adequate	21 – 30	14	23.4%

In Association of level of knowledge with selected demographical variables There was a significant relationship between level of knowledge with age of mother, family size and education of mother at the level of $p < 0.05$ level of significance hence the research Hypothesis is partially accepted and partially rejected. This study is supported by a descriptive cross sectional study was conducted by Primi Kumar(2022) showed that. Data was collected using structured interview method. 20% of mothers have good knowledge in prevention and 33% had good knowledge in management of ARI.

Conclusion

Mothers in the study demonstrated satisfactory knowledge regarding the symptoms of ARI, the impact of environmental conditions on ARI, exacerbating factors, and potential complications. Their attitude towards ARI was appropriate, with a preference for early consultation with qualified medical practitioners. The study found that mothers' knowledge, attitudes, and practices were positively influenced by higher levels of literacy.

Recommendations

- The study can be replicated on a larger sample to validate the findings and make generalizations.
- A comparative study can be conducted among the rural and urban mothers' of under-five children.
- A similar study can be conducted to assess the attitude of nursing personnel towards the implementation of acute respiratory control programme.
- A follow up study can be conducted to evaluate the effectiveness of structured teaching programme.
- A similar study can be done by using other teaching strategies i.e, self-instruction module

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