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A study to assess the effectiveness of self-instructional module on the knowledge of mothers regarding acute respiratory infection in under five-year children in selected urban health centre in selected city

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Abstract
Statement: A study to assess the effectiveness of self-instructional module on the knowledge of mothers regarding Acute Respiratory Infection in under five-year children in selected urban health centre in selected city.
Objectives: To assess the effectiveness of Self Instructional Module on knowledge regarding ARI among mothers of under five year children and To find out the association of knowledge score with selected demographic variables.
Methodology: Research Design used in this study is post-test only with control group design For present study sample size was 40 mothers of under five year children, simple random sampling technique was used for data collection.
Result: Mean Knowledge Score Was Mean ± SD 13.75±1.07, where as in experimental group, the mean score 23.60±1.19(SD). The unpaired- t test value 27.56 shows significant difference between the control and experimental group knowledge scores and chi score test shows significant association between the post-test knowledge score with demographic variables.

Keywords: knowledge, acute respiratory infection, self-instructional module, under five-year children

Introduction

Every child wherever possible lives and grow up in a family unit, with love and security in healthy surroundings, receive adequate nourishment, healthy supervision and efficient medical attention and is taught the elements of healthy living [1].

Health of the children has been considered as the vital importance to all societies because the children are the basic resources for the future of human kind. Child health depends up on prevention. Majority of child health problems are preventable. Modern approach of child health care emphasis on "Preventive care rather than curative care." Most of the childhood diseases are prevented by mother"s role [2]

Respiratory infection means an infection of any part of respiratory tract. The respiratory system contains nasal cavity, pharynx, larynx, trachea, bronchi, and lungs [3].

Perusal of early history of mankind reveals that children were valued mainly as future adult. Each child is an individual with his own pace of development which is influenced by many factors such as his constitution, his surrounding, his family and his opportunities for experience, the physical and mental care he receives and the emotional security he is able to achieve [4].

Children are more exposed to unhealthy conditions and to dangerous substances because they live their lives closer to the ground and, especially in the early years, they are frequently exposed through hand to mouth activities. Their central nervous system, immune, digestive and reproductive systems are more vulnerable than those of adults. Exposure of certain environmental toxins can lead to diseases during childhood [5].

The common illnesses in children less than three years of age were malnutrition (43%), Fever (27%), acute respiratory infection (17%) and diarrhoea (13%). However acute respiratory infection (ARI) is one of the commonest cause of morbidity in young children [6].

In india About 2 million children are born each year. Among total population in india 18% belongs to under 5 children group. But nearly 2 million of them do not live to the age of 5. It was almost same to the female and male children [7].

W H O reports in 2009 estimates the probability for dying of under 5 children to be around 91 per 1000 and India it was 19%. Morbidity is similar for in India and other countries. But mortality is 30 times greater in developing countries [3].

In India under 5 children"s top 10 cause of death was ARI and it is 11.2%, and it is the leading one. In worldwide study, ARI is in 3rd place [8].

Problem Statement

"A study to assess the effectiveness of self-instructional module on the knowledge of mothers regarding Acute Respiratory Infection in under five-year children in selected urban health centre in selected city."

Objectives

1. To assess the effectiveness of Self-Instructional Module on knowledge regarding ARI among mothers of under five-year children
2. To find out the association of knowledge score with selected demographic variables.

Inclusion Criteria

- Mothers of under five children
- Who all are present at the time of data collection.
- Who are able to read and write Marathi

Exclusion Criteria

- Who are not willing to participate.
- Mothers who are not visiting to urban health center

Description of the Tool:

This tool is to assess knowledge regarding acute respiratory infection. this tool consist following sections.

Section 1

Socio demographic data of Mothers mothers of under five children

In demographic data total twelve questions. It included age, religion, education, occupation, family income, house, type of family, number of people living in the family, number of children in the family.

Section 2

Structured questionnaire to assess the knowledge regarding ARI. Part 1: S tructure and function of respiratory system.

Part 2: Introduction of acute respiratory infection

Part 3: Causes of acute respiratory tract infection

Part 4: Clinical features

Statistical Analysis of data related to assessment level of the knowledge regarding acute respiratory infection.

Table 1: Assessment level of the knowledge scores regarding acute respiratory infection

Sr. No	Level of Knowledge	Control Group		Experimental Group	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Poor (Below 15)	13	65%	00	00%
2	Average (16-24)	07	35%	15	75%
3	Good (25-30)	00	00%	05	25%
4	Total	20	100%	20	100%

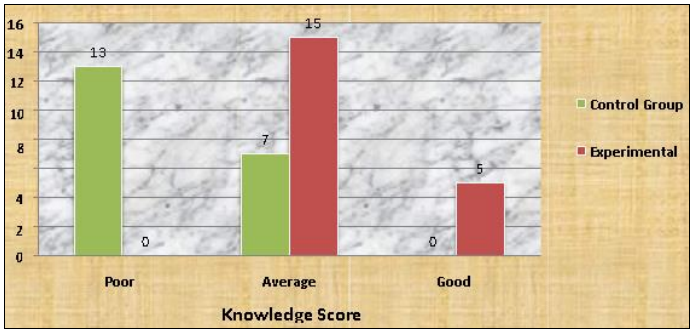

Fig 1: Distribution of Knowledge Score between two group

From the above table, in the Control Group, 13(65%) had poor knowledge, 07(35%) had average knowledge and none of them had good knowledge. But, in experimental group, 15(75%) was average knowledge, 05 (25%) was good knowledge and none of them was in good knowledge.

Section 3: Statistical Analysis of data related Effectiveness of the knowledge Score regarding acute respiratory infection between two groups.

Table 2: Unpaired t-test analysis for effectiveness comparing the two groups for knowledge score.

Groups	Mean Knowledge Score (Mean±SD)	Range	Median	Mode	Unpaired t-test	p-value
Control Group	13.75±1.07	12-15	13.5	13	27.56	0.0000 HS
Experimental Group	23.60±1.19	22-26	23.5	23		

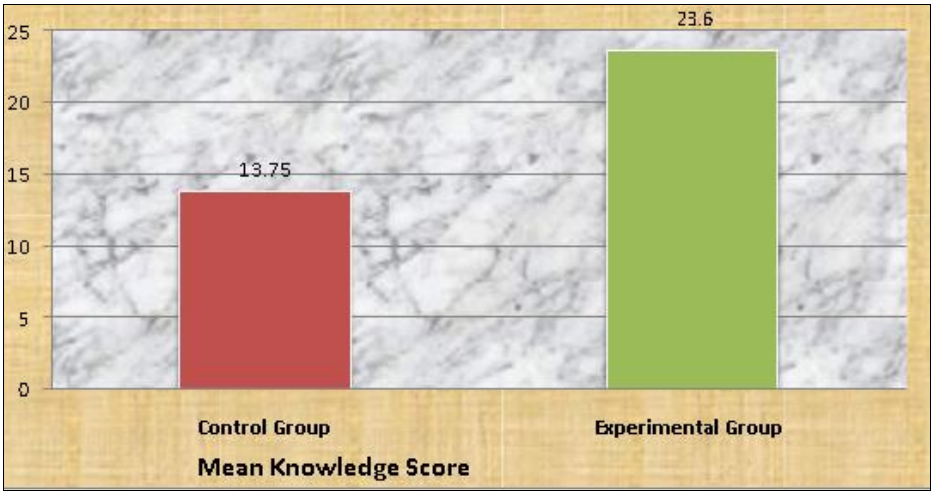

Fig 2: Comparison of mean knowledge scores regarding acute respiratory infection between two groups.

H0- There is no significant difference in Knowledge Score after implementing Self Instructional Module.
H1- There will be a significant difference in Knowledge Score after implementing Self Instructional Module.
The above table showed that Control Group and Experimental Group knowledge level regarding acute respiratory infection and it was found to be statistically significant at P
<0.05 level. Hence null hypothesis is rejected and research hypothesis was accepted. It provides the evidence that Self Instructional Module was significantly effective in providing knowledge of mothers regarding Acute Respiratory infection in under five-year children in selected Urban health Centre in selected city.

Section 4: Assessing the association of Experimental Group knowledge with selected demographic variable

Table 3: Chi-Square test analysis for association between Experimental Group knowledge with selected demographic variables

Sr. No.	Demographic Variables	Level of Knowledge				χ2-Value	p- value
		Average (16-24)		Good (25-30)			
		No	%	No	%		
Age in Years							
1	Up to 20 years	05	25	00	00	11.11	0.011 S
2	21 to 30 years	10	50	02	10		
3	31 to 40 years	00	00	02	10		
4	Above 40 years	00	00	01	05		
Educational Status							
1	Primary	03	15	00	00	7.429	0.037 S
2	Secondary	11	55	04	20		
3	Graduate	01	05	01	05		
4	Post Graduate and above	00	00	00	00		
Religion							
1	Hindu	09	45	01	05	7.644	0.054 NS
2	Christian	03	15	00	00		
3	Muslim	02	10	01	05		
4	Buddhist	01	05	03	15		
Occupation							
1	Service	01	05	00	00	3.590	0.166 NS
2	House wife	08	40	05	25		
3	Laborer	06	30	00	00		
4	Business	00	00	00	00		

Table 4

Type of house							
1	Kaccha	08	40	01	05	1.684	0.194 NS
2	Pakka	07	35	04	20		
Type of Family							
1	Nuclear	10	50	02	10	1.111	0.292 NS
2	Joint family	05	25	03	15		
No. of people living in house							
1	Three	10	50	03	15	0.759	0.684 NS
2	Four	04	20	01	05		
3	Five	01	05	01	05		
4	More than five	00	00	00	00		
Monthly family income							
1	Below 5000	01	05	00	00	0.495	0.781 NS
2	15001- 10000	10	50	04	20		
3	10001- 15000	04	20	01	05		
4	Above 15000	00	00	00	00		
Facilities used for cooking							
1	Gas	11	55	4	20	0. 800	0. 670 NS
2	Stove	2	10	1	05		
3	Chulla	2	5	1	05		
Number of under five-year children in family							
1	One	08	40	02	10	0.267	0.606 NS
2	Two	07	35	03	15		
3	Three	00	00	00	00		
4	More than three	00	00	00	00		

Table 5

1	**Yes**	**13**	**65**	**01**	**05**	**7.937**	**0.005 HS**
2	**No**	**02**	**10**	**04**	**20**		
Source of Knowledge							
1	Relative, friends	01	05	00	00	1.176	0.759 NS
2	Health professional	12	60	05	25		
3	Mass media	01	05	00	00		
4	News paper	01	00	00	00		

The above table presents outcomes of Chi-square analysis to find out the association between Experimental group knowledge of mothers regarding Acute Respiratory infection in under five-year children in selected Urban health Centre in selected city with selected demographic variables. Out of the demographic variables accounted for test for association the variables Age (χ^2 =11.11, df=3), Educational Status (χ^2 =7.429, df=3) and Previous knowledge about respiratory tract infection in children (χ^2 =7.937, df=3) were found statistically significant at 5% level (i.e. p<0.05). The rest of the variables were not significant at 5% level (i.e. p>0.05).

Result and Summary
Findings revealed that the for-control group Mean

Knowledge Score
Was Mean ± SD 13.75±1.07, where as in experimental group, the mean score 23.60±1.19
(SD). The unpaired- t test value 27.56 shows significant difference between the control and experimental group knowledge scores and chi score test shows significant association between the post-test knowledge score with demographic variables.

Scope of study Nursing Education

1. A study can conducted to understand the management of Acute respiratory infection among mothers.
2. A study can conducted for showing the student to understand current advance in Acute respiratory infection management.
3. A study can conducted to Study findings help to nursing student to know what is Acute respiratory infection complication with them in future.

Nursing Administration

A study can conducted to show the result to Administrator/ Manager regarding the deficiencies and what type of facilities required for knowledge on Acute respiratory infection.
As a part of administration, the nurse administrator plays a vital role in managing nursing department and hospitals.
A study can conducted to understand the Nursing administrators and manager regarding current status of nurse‟s job satisfaction and what factors are the factors influencing on it.
The findings provide knowledge to administrator regarding what type of facility required, through this finding they come to know how the knowledge of Acute respiratory infection.
A study can conducted for planning of recruitment of new nurses for what type of their expectation.

Nursing Research

Nursing research is essential aspects of nursing as it uplift the profession and develops new nursing norms and a body of knowledge.
A study can conducted to understand the status of updated nurses' knowledge which is essential for nursing research through satisfaction on research.

References

1. Gladys SB. Paediatric Nursing. 5th ed. Missouri [USA]: the C.V. Mosby cowpony publishers, 2000, 297.
2. A community health nursing manual "TNAI", Indian nursing year book p.45
3. National Institute of Healte & Family Welfare. Reproductive & child health module for medical officer (PHC). Munirka, New Delhi, 2000.
4. Duncombe M, welter B. pediatric nursing 5th edition, Bailliere Tin dall publishers, 1999, P.284.
5. World Health Report, 2008. Available from URL http://www.sfhp.org/files/PDF/healthed/Why are Children ENG.pdf.
6. National Family Health Survey [II] data, 199. available from URL: http://www.nfhsindia.org/data/ india/indintro.pdf
7. WHO ddy. PD Sly Breast feeding & Respiratory Morbidity in Infancy, Telethon Institute of child Health Research, Western Australia, 2002.
8. Mary E Rimsza, Pediatrics, Official journal of American accadmy of pediatrics, 2009, e 362.