

A Study To Assess The Knowledge And Attitude Regarding Immunization Among Caregivers Of Under Five Children In Pediatric Wards, Opd, Immunization Clinic

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Abstract

Introduction: The study was conducted to assess the knowledge & attitude regarding immunization among caregivers of under five children in Pediatric wards, OPD & immunization clinic of JMMC & RI. Objectives: To assess the level of knowledge regarding immunization among caregivers of under-five children. To assess the level of attitude regarding immunization among caregivers of under five children. To associate the level of knowledge & attitude regarding immunization among caregivers with selected sociodemographic data variable of caregivers. Methodology: A descriptive cross-sectional research design consisting of 80 caregivers of under five children was selected using convenience sampling technique. The knowledge was assessed by using a self structured questionnaire & attitude assessed using attitude scale. Result: The study showed that, majority of the caregivers 34 (42%) belong to the age group 26-30 years. More than half of peoples 66 (82%) were females & 68 (85%) of informants were mother. Most of the caregivers belongs to Christian 29 (36%), majority of them are jobless 48 (60%) & 27 (34%) are having are having high school education. Regarding the economic status of caregivers, 44 (55%) was APL. Majority of children 77 (96%) were immunized according to their age & 65 (81%) of caregivers have previous knowledge on immunization. In conclusion the study reveals that for the component immunization & immunization status 10 (13%) have inadequate knowledge, 46 (58%) have moderate knowledge, 24 (48%) have adequate knowledge. In vaccine preventable diseases 37 (46%) have inadequate knowledge, 30 (38%) have moderate knowledge & 13 (16%) have adequate knowledge. The study also shows that 26 (33%) have high attitude towards immunization, 53 (66%) have moderate attitude. The study shows that there is significant association between caregiver's knowledge & selected sociodemographic variables such as religion and occupation. Religion ($\chi^2=13.897$, $P=0.008$), occupation ($\chi^2=12.568$, $p=0.014$). Also there is a significant association between caregiver's attitude & selected sociodemographic variables such as gender, relationship with child. Gender ($\chi^2=7.815$, $p=0.005$), relationship with child ($\chi^2=7.512$, $p=0.006$). Conclusion: The study highlights that majority of caregivers of under five children possess moderate knowledge and attitude regarding immunization.

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I. Introduction

Immunization is a global success story, with vaccines being considered as one of the safest, cost-effective, and successful public health intervention to prevent deaths and improve lives¹. It is the process of giving a vaccine to a person to protect against diseases. Humans has both active and passive immunity. Active immunity develops after the exposure to a pathogen, either through infection or vaccine. Passive immunity occurs when antibodies transfer from one person to another. Vaccine induced immunity is a form of active immunity, that provides long-lasting protection against future infections from same pathogen. Children under the age of five represent a vulnerable population. They are prone to many infectious diseases due to their immature immune system and frequent exposure to germs. In India they constitute 13% of the total population². So it is important to invest in children's health for a positive future. In 1980s India had high child mortality rate due to low vaccination coverage, frequent outbreaks of preventable diseases and inadequate

health access. In solution to this Government of India launched Universal Immunization Programme (UIP) in 1985³, by providing free vaccinations against 12 diseases to reduce child mortality and morbidity. Despite global efforts to increase vaccine coverage, many children, especially in developing regions, still suffer from vaccine-preventable diseases like measles, pneumococcal disease, diphtheria, tetanus, polio, hepatitis, refers to six killer disease that contribute to high child mortality rate⁴. A critical factor influencing vaccination rates is the knowledge and attitude of caregivers, who play a key role in deciding whether to vaccinate their children or not. These decisions are shaped by various factors, including access to healthcare, cultural beliefs, misinformation, and awareness of the benefits and safety of vaccines. Also in some cases misconceptions regarding vaccine safety, fear of side effects, and lack of knowledge about immunization leads to vaccine hesitancy or refusal. The objective of the study is to determine the knowledge and attitude regarding immunization among caregivers of under- five-children.

Problem statement

A study to assess the knowledge and attitude regarding immunization among caregivers of under five children in paediatric wards, OPD and immunization clinic of JMMC& RI.

Objectives

1. To assess the level of knowledge regarding immunization among caregivers of under-five children.
2. To assess the level of attitude regarding immunization among caregivers of under-five children.
3. To associate the level of knowledge and attitude regarding immunization among caregivers with selected sociodemographic variables of caregivers.

Assumption

There is a significant association between the level of knowledge and attitude regarding immunization among caregivers of under five children with sociodemographic variables.

II. Material And Methods

Quantitative research approach was used.

Research design

A descriptive cross-sectional design was adopted to assess the knowledge and attitude regarding immunization among caregivers of under five children in pediatric wards, OPD, immunization clinic of JMMC & RI.

Research variables

Level of knowledge and attitude regarding immunization among caregivers of under five children

Socio demographic variable

Sociodemographic variables of caregivers include age, gender, and relationship with child, occupation, religion, education, socioeconomic status, vaccination status.

Setting of the study

The study was conducted in the Pediatric wards, OPD, immunization clinic of Jubilee Mission Medical College and Research Institute, Thrissur.

Population

The population of the study was the caregivers of children in the age between 0 to 59 months (birth to five years) in the pediatric wards, OPD, and immunization clinic of Jubilee Mission Medical College and Research Institute,, Thrissur.

Sample

80 samples were selected. The samples selected were the caregivers of children aged between 0 to 59 months.

Sampling technique

Non- probability, convenient sampling technique.

Criteria for sample selection

Inclusion criteria

Caregivers of under five children who are fully vaccinated.

Caregivers who are able to read and understand Malayalam
 Caregivers who are willing to participate

Exclusion criteria

Caregivers who are unable to understand or provide accurate response due to cognitive impairment.
 Caregivers of children who are critically ill.

Description of Tool

The tool consists of section A, section B and section C

Section A: Section A consists of Socio-demographic data variables of caregivers such as age, gender, relationship with child, occupation, religion, education, socioeconomic status and vaccination status.

Section B: section B consists of a self structured questionnaire to assess the level of knowledge regarding immunization among caregivers of under five children which, includes immunization, immunization schedule and vaccine preventable diseases.

Section C: Section C consists of a self structured attitude scale to assess the attitude of caregivers of children aged between 0 to 59 months towards immunization.

Plan for Data Collection

The researcher obtained a written consent from the concerned authority of the institution prior to the data collection. The data collection period was from 29/4/25 to 3/5/25. Researchers selected the sample using non-probability convenient sampling technique. 80 samples were selected from the pediatric wards, OPD, immunization clinic of JMMC & RI, Thrissur. Maximum number of samples collected each day was 30 and researchers were available in the ward from 8:30 am to 1:00pm. Researchers met the participants and then explained to them about the purpose of study. They were assured that all the data would be kept confidential and would only be used for the study purpose. Informed consent was obtained from each participant. The samples were thanked for the cooperation after data collection.

III. Result

Table1.1: Distribution of sociodemographic variable

Socio-demographic variables	Frequency(f)	Percentage(%)
Age in years		
18-25	11	14
26-30	34	42
31-35	20	25
36-40	15	19
Gender		
Male	14	18
Female	66	82
Other	0	0
Relationship with child		
Father	12	15
Mother & grandparent caregiver	68	85
	0	0
Religion		
Christian	29	36
Hindu	24	30
Muslim	27	34
Occupation		
Private job & Government Job	16	20
Business	16	20
Jobless	48	60
Education		
Below High school	24	30
High school	27	34
Degree & Postgraduate	29	36
Economic status		
APL	44	55
BPL	36	45
Immunization of child up to age		
Yes	77	96
No	3	4
Previous knowledge on immunization		
Yes	65	81

No	15	19
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Table 1.1 shows that most of the caregivers, 34 (42%) belong to the age group 26-30 years. The gender wise distribution shows that 66 (82%) were female, whereas the male counterparts were 14(18%)

Table 1.2Frequency and percentage distribution of samples based on knowledge regarding immunization

Components	Inadequate knowledge		Moderate knowledge		Adequate knowledge	
	f	%	f	%	f	%
Immunization and Immunization Schedule	10	12	46	58	24	30
Vaccine preventable diseases	37	46	30	38	13	16

Table 1.2 shows that for the component immunization and immunization status 10 (12%) have inadequate knowledge, 46 (58%) have moderate knowledge, 24 (30%) have adequate knowledge. In vaccine preventable diseases 37 (46%) have inadequate knowledge, 30 (38%) have moderate knowledge and 13 (16%) have adequate knowledge.

Table 1.3: Frequency and percentage distribution of attitude of caregivers towards immunization

Level of Attitude	Frequency f	Percentage %
Low Attitude	1	1
Moderate Attitude	53	66
High Attitude	26	33

Table 1.3 shows that majority of the caregivers, 26 (33%) have high attitude towards immunization, 53 (66%) have moderate attitude and 1 of them (1%) have low attitude.

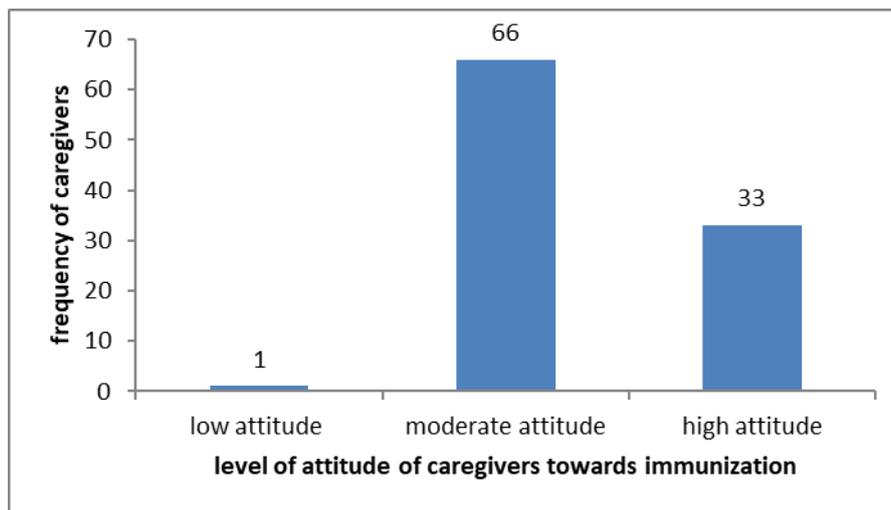


Figure 1: Percentage distribution of caregiver's attitude regarding immunization

Figure 1 shows that 33% of caregivers have high attitude,66% of caregivers have moderate attitude and 1% of caregivers have low attitude regarding immunization.

IV. Discussion

The present study was conducted to assess the existing level of knowledge and attitude of caregivers regarding immunization in paediatric wards, OPD & immunization clinic of JMMC & RI Thrissur .The sample size was 80. The study shows that in the component immunization and immunization schedule 10 (13%) of caregiver's have inadequate knowledge, 46 (58%) have moderate knowledge, 24 (48%) have adequate knowledge. In vaccine preventable diseases 37 (46%) have inadequate knowledge, 30 (38%) have moderate knowledge and 13 (16%) have adequate knowledge. This study was theoretically supported by cross sectional study conducted to assess mothers' awareness and knowledge of immunization. This study included 97 mothers who were visited in four main Maternal and Child Health (MCH) Centres at Minia city. One tool was utilized to

collect the necessary data, a structured questionnaire interview sheet. It was found that nearly half 46.4% of higher educated mothers gave vaccination at time compared with 50% of illiterate mothers didn't give their children vaccination at time. And the majority of not working mothers 84.6% didn't give their infants vaccinations at time. It was noticed that all of illiterate mothers didn't know the hazards, compared with 86.4% of educated mothers mentioned that occurrence of disease¹⁹.

V. Conclusion

The present study was conducted to assess the existing level of knowledge and attitude of caregivers regarding immunization in paediatric wards, OPD & immunization clinic of JMMC & RI Thrissur .The sample size was 80. The study shows that in the component immunization and immunization schedule 10 (13%) of caregiver's have inadequate Knowledge, 46 (58%) have moderate knowledge, 24 (48%) have adequate knowledge. In vaccine preventable diseases 37 (46%) have inadequate knowledge, 30 (38%) have moderate knowledge and 13 (16%) have adequate knowledge. The study shows that majority of the caregivers, 53 (66%) have moderate attitude toward immunization, 26 (33%) have high attitude and 1 of them (1%) have low attitude.

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