



KNOWLEDGE AND AWARENESS AMONG MOTHERS OF 12-23 MONTHS AGE CHILDREN ABOUT IMMUNIZATION IN RURAL AREAS OF DISTRICT NUH

Community Medicine

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ABSTRACT

Immunizations are generally considered the most successful and cost-effective public health intervention employed today. Vaccine is an immune-biological substance designed to produce specific protection against given disease and also stimulates the production of protective antibody and other immune mechanisms. National Family Health Survey-4 (NFHS-4) conducted during 2015-16 reported that only 13.1 % children in between the age of 12-23 months are fully immunized in district Nuh. Study aimed to determine the knowledge and awareness of mothers of 12-23 months children about immunization in rural areas of district Nuh. A cross sectional study was conducted among mothers having children aged 12-23 months in the field practice area of SHKM government medical college, Nuh. Data was collected using a pre-tested semi structured questionnaire from 228 mothers during a period of 12 months. In the study it was found that most of the mothers (92.1%) knew about immunization. Majority (89%) took their child for immunization. Most of (94.3%) mothers knew about the immunization programmes run by government while only 32.5% mothers knew names of vaccines given to children of 1 year age. It was also found that most of (78.1%) mothers had immunization card with them. Majority (96.9%) thought that government medicines were good but only (34.6%) knew about list of vaccines. In the study it was seen that 69.3% mothers knew about importance of vaccines and (60.1%) knew about AEFI management. Awareness generation campaigns can be planned and organized periodically to improve the knowledge, awareness and practices of immunization in the community.

KEYWORDS

immunization, children, questionnaire

INTRODUCTION

Immunizations are generally considered the most successful and cost-effective public health intervention employed today.¹ Vaccine is an immune-biological substance designed to produce specific protection against given disease and also stimulates the production of protective antibody and other immune mechanisms.² Despite the availability of vaccines, it is estimated that, around three million children die every year globally by vaccine preventable diseases.

Various studies showed that, the reasons for vaccination dropout were inadequate vaccine supply in the hospitals, lack of mother's knowledge about immunization benefits, routine immunization schedule, the number of doses required and also have the belief that too many vaccines can be harmful to the child, unawareness on the need for immunization and return for next dose and lack of faith in immunization among mothers.^{3, 4} In order to attain sufficient herd immunity for a disease in a community, to interrupt transmission of a vaccine preventable disease requires an adequate number of children be immune to that disease through full vaccination which is also administered in a timely fashion. Fully-vaccinated children receive all the doses of all recommended vaccines including those requiring multiple dose regimens.^{3, 4}

Children receiving fewer doses of vaccines than those recommended are considered to be under-vaccinated, and children who do not receive any vaccinations are non-vaccinated. Although it is well established from studies in other developing countries that the epidemiology of non-vaccination differs from under-vaccination, most of the studies in India have dichotomized the vaccination status as either complete or incomplete. Additionally, any delay in vaccination i.e., administering vaccine doses later than the national recommended schedule, predisposes children to risk of a vaccine-preventable disease (VPD) in the period when they have not acquired protective immunity through vaccinations.^{5, 6}

National Family Health Survey-4 (NFHS-4) conducted during 2015-16 reported that only 13.1 % children in between the age of 12-23 months are fully immunized in district Nuh.⁷ This study aimed to determine the knowledge and awareness of mothers of 12-23 months

children about immunization in rural areas of district Nuh.

MATERIAL AND METHODS

An observational cross-sectional study was carried out in population catered by Primary Health Centre (PHC), Nuh. The study was done for a period of 12 months from December 2020 to November 2021. Mothers of children between 12 to 23 months of age group who were residing in the study area for more than 6 months and who were willing to participate in the study were included in the study. Mothers not willing to participate were excluded from the study. The study was approved by Institutional Ethics Committee of SHKM government medical college, Nuh (Haryana).

Data Collection

House visit was done to cover sample size of all the mothers of children (12 to 23 months) residing in villages covered under PHC Nuh. Conversation was started with general discussion for rapport building and written informed consent was obtained from all the study subjects after explaining the objectives of study. All possible efforts were made to ensure privacy so that they can express their views freely. On the basis of the study interview schedule prepared knowledge and awareness of the mothers was assessed.

METHOD OF RECRUITMENT

There are 6 sub-centres under PHC Nuh. For the study purpose, 2 anganwadi centres (AWC) were selected randomly from each sub-centre. Therefore, 20 mothers from each of 12 anganwadi centres were visited to fulfill sample size. If respondent mother was not found at home, she was visited two more times to minimize the drop outs. If mother could not be contacted despite three visits she was labelled as non-respondent.

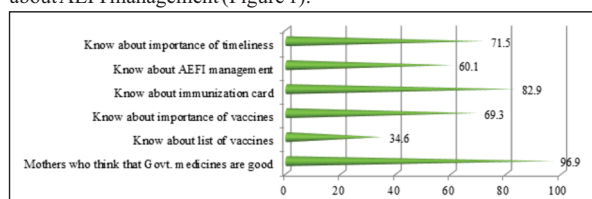
RESULTS

In the study it was found that majority (92.1%) knew about immunization and most (89%) of the mothers took their child for immunization. In the study it was found that 94.3% mothers knew about the immunization programmes run by government while only 32.5% mothers knew names of vaccines given to children of 1 year age (Table 1).

Table 1 Knowledge Of Mothers About Immunization

Variables	Frequency	Percentage (%)
Mothers who know about immunization		
Yes	227	99.6
No	1	0.4
Mothers who take their child for immunization		
Yes	203	89.0
No	25	11.0
Know about immunization programmes run by govt.		
Yes	215	94.3
No	13	5.7
Know about names of vaccines given to children of 1 year		
Yes	74	32.5
No	154	67.5
Availability of immunization cards with mother		
Yes	178	78.1
No	50	21.9

It was also found that 78.1% mothers had immunization card with them. Majority (96.9%) thought that government medicines were good but only 34.6% knew about list of vaccines. In the study it was seen that 69.3% mothers knew about importance of vaccines and 60.1% knew about AEFI management (Figure 1).

**Figure 1: Awareness of mothers regarding immunization**

DISCUSSION

Majority of mothers (n=210; 92.1%) knew about immunization. Similar finding of high awareness of immunization (about 90%) were reported among community members in previous studies.^{8,9,10} But study conducted by Parmar R et al (2020) found that majority of mothers (67.5%) were not aware about immunization.¹¹ Similarly, Singh S et al (2019) found that majority (93%) of the mothers did not have any idea of the VPDs and its prevention through immunization.¹² In a similar study by Khan MF et al (2019), majority of mothers (78.57%) had lack of information about immunization.¹³

Majority of mothers (n=203; 89%) took their child for immunization. In a similar study by Goyal S et al (2017) majority of mothers (82.59%) visited Anganwadi centre for immunization services of their children on 2 or more than 2 occasions.¹⁴

However, in a study conducted by Mahore R et al (2018) some of the mothers (44.8%), were too busy in their household work to take child for immunization.¹⁵ In a similar study by Singhal G et al (2016) some mothers (32.8%) did not take their child for immunization because of sickness.¹⁰

Majority of mothers (n=215; 94.3%) knew about immunization programmes run by government. Similar findings were found in a study conducted by Angadi MM et al (2013) in which majority of mothers (78.71%) had received their immunization from government establishments.⁸

Majority of mothers (n=154; 67.5%) did not know about names of vaccines given to children of 1 year. In a similar study conducted by Anusha et al (2018), majority of mothers (64.5%) did not know about vaccines to be given to their children.¹⁶

This study found that majority of mothers (n=178; 78.1%) had immunization cards available with them. In a similar study by Goyal S et al (2017) majority of mothers (71.9%) had immunization card available with them.¹⁴ However, in a study conducted by Agrawal K et al (2019) it was found that only 42% parents had immunization card available with them.¹⁷

The present study found that majority of mothers (n=221; 96.9%) did not think that government medicines are not good. Similar results were found in a study conducted by Narayanan SS et al (2018) which showed that 89% of parents agreed that all childhood vaccines offered by the government programme in their community were beneficial.¹⁸

The study found that majority of mothers (n=125; 54.8%) did not know about list of vaccines. In a similar study by Singhal G et al (2016), majority of mothers (77%) had no information regarding Immunization schedule.¹⁰ Angadi MM (2013) et al found in their study that 97% of mothers had no knowledge regarding immunization schedule and it was the major reason for failure of immunization.⁸

Majority of mothers (n=158; 69.3%) knew about importance of vaccines. In a study conducted by Kaur H et al (2019) it was found that majority of mothers (87.5%) knew about importance of immunization.¹⁹ Similarly, Mugada V et al (2017) found that majority of mothers (97.6%) knew about the need of immunization.²⁰

Majority of mothers (n=189; 82.9%) knew about immunization card in the present study. In a similar study by Desai PD (2016), majority of mothers (60.75%) knew about immunization card.²¹ Singhal G et al (2016) found in their study that majority (60.47%) of mothers knew about immunization card.¹⁰

The study found that majority of mothers (n=137; 60.1%) knew about AEFI management. In a similar study by Sankar BK (2018), it was found that majority (86.71%) of mothers knew about AEFI management.²² Joshi HK et al (2019) found in their study that some of mothers (48%) had the knowledge of the management of side effect of injectable vaccine.²³

Majority of mothers (n=163; 71.5%) knew about importance of timeliness of immunization. In a study conducted by Madhavi N et al (2016), it was found that lack of knowledge of place and time of vaccination among mothers (17.5%) was one of the most common reasons of partial or no immunization.²⁴

CONCLUSION

This study goes out as a wakeup call for all policy makers and healthcare providers, in that, providing the resources for immunization alone is a job which is half done and that health education is also an essential component that can go a long way in improving the prevailing scenario of immunization in the country. Awareness generation campaigns can be planned and organized periodically to improve the knowledge, awareness and practices of immunization in the community.

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