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A Study to Assess the Immunisation Status and the Factors Responsible For Incomplete Immunization amongst Children in Urban Slums

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ABSTRACT

Background: As per the WHO estimates more than a billion children were vaccinated over the last decade. Currently immunization prevents 2- 3 million deaths every year. Health is a major economic issue for slum residents.

Objectives of the study: To assess the immunisation status and the factors responsible for incomplete immunization amongst children in urban slums.

Methods: A list of all slums and the number of households therein was collected from City Municipal Corporation Shivamogga of which 10 slums were selected by simple random sampling all the households in the selected slums were included in the study. Quantitative data were collected from the households of selected slums after taking informed consent using a pretested semi-structured questionnaire. Information about immunization of the under five children. Data were analysed by using SPSS software.

Results: In this study, among the 247 children studied, 61.94% were fully immunised, 38.05 were partially immunised. The most common reason for defaulting vaccination were knowledge (25.5%) followed by illness of the child (14.1%)

Conclusion: The availability of better healthcare facilities like government medical college in the proximity of these slums has led to good health seeking behaviour among them.

Keywords: Urban slums, immunisation, maternal and child health, Community.

INTRODUCTION

The health of children is of utmost importance to all societies as children are resources of future mankind. Immunization is the best indicators to evaluate the health services in the society. It is also one of the most cost-effective interventions to prevent illnesses, particularly in developing countries[1]

The World Health Organization launched the Global Programme of Immunization in 1974 and Government of India launched the same in India on 1st January, 1978, with a view to provide protection to the children against disease and to reduce infant mortality rate[2].

There is wide disparity with regard to the immunization coverage, among different parts of the country and different sections of the society, indicating the influence of various social, economic and cultural factors [3]. Most of these studies, conducted at the national and state levels and also in different small

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regions of the country are concentrated more on the primary vaccination given in the first year and not much is known about the status of older children[3-10]. So this study was taken up to know more about the vaccination coverage among the slum dwellers and the factors responsible for not receiving the vaccines.

OBJECTIVES OF THE STUDY

To assess the immunisation status and the factors responsible for incomplete immunization amongst children in urban slums.

MATERIALS AND METHODS

A community based, cross-sectional, descriptive study was conducted in selected urban slums in Shimoga town from January 2018–June 2018

As per the information by City Municipal Corporation of Shivamogga approximately there are 45 slums in the city. Purposive sampling technique was used in this study. A list of slums with the minimum of 50 households was made and 10 slums were selected by simple random sampling all the households in the selected slums were included in the study. Quantitative data were collected from the households of selected slums after taking informed consent using a pretested semi-structured questionnaire. The questionnaire contained items to collect socio-demographic details and immunization status of under 5 children. Immunization status of the child was assessed by looking into the mother and child health card, incase card was not available history of immunization was obtained from the mother.

Standard definitions were used to classify children based on immunization status.

Fully immunized: A child above one year of age who received all the vaccines as mentioned in universal immunization programme was considered fully immunized.

Partially immunized: If the child had missed even a single dose of vaccine as mentioned in universal immunization programme.

Unimmunized: Child who had received even a single dose of any vaccine.

Locked houses in the first visit were revisited, and those houses which were found to be locked in the second visit were excluded from the study.

Ethical approval: Before starting the study, ethical clearance was obtained from the Institutional Ethics Committee (Ref. No. SIMS/IEC/282/2016-17), Shimoga Institute of Medical Sciences, Shivamogga.

Statistical analysis: The data were entered into the excel sheet and analysed using SPSS software. The frequencies and percentages were calculated and represented in tables and figures.

RESULTS

Immunization status of children from 1-5 years was taken for analysis. The socio-demographic characteristics of the children studied are depicted in table 1. A total of 247 children were studied, of which 153(61.94%) were fully immunized, and 94(38.05%) were partially immunized and there was no child who was unimmunized. The frequency and percentage distribution of children based on the immunisation status is as shown in table 2. Further the various reasons for partial immunization are as shown in table 3.

Table 1: Sociodemographic profile of the children studied

Socio demographic variables	Frequency (%)
Age group	
1-2 years	99 (40)
2-3 years	42 (17)
3-4 years	82 (33.19)
4-5 years	24 (9.17)
Gender	
Male	141 (57.08)
Female	106 (42.91)
Educational status of mother	
Uneducated	5 (2.02)
Primary education	137 (55.46)
High school and above	76 (30.76)
Graduate	31 (12.55)
Socioeconomic status	
Class 1	3 (1.21)
Class 2	11 (4.45)
Class 3	61 (24.69)
Class 4	126 (51.01)
Class 5	46 (18.62)
Religion	
Hindu	89 (36.03)
Muslim	137 (55.46)
Christian	21 (8.05)
Total	247 (100)

Table 2: Immunisation status of children aged 0-5 years

Immunization status	Frequency (%)
Fully immunized	153 (61.94)
Partially immunized	94 (38.05)
Unimmunized	0 (0)
Total	247 (100)

Table 3: Reasons of defaulting for immunisation

Reasons	Frequency (%)
Lack of knowledge	63 (25.5)
Forgetfulness	31 (12.5)
Illness of the child	35 (14.1)
Family problems	17 (6.8)
Lack of initiative	30 (12.1)
Fear of adverse effects of vaccination	6 (2.4)
Did not get time	30 (12.1)
Bad experiences	2 (0.8)
Others	33 (13.3)
Total	247 (100)

DISCUSSION

Out of 854 households studied 339 (39.7%) households had children below 5 years of age. Immunization status of children from 1-5 years was taken for analysis. A total of 247 children were studied, of which 153(61.94%) were fully immunized, and 94(38.05%) were partially immunized and there was no child who was unimmunized. A study done by Shivani sinha et al[13] showed 40% children being fully vaccinated. 41.4% of children were fully vaccinated, 44.8% were partially vaccinated and 13.8% unimmunised in a study done by Sathish Chandra et al[14]. another study by Vinod et al[15] showed that 32.6% of the children were fully vaccinated. As compared to the findings of other studies, the vaccination status was better in this study, which can be attributed to the availability of better healthcare services in the urban areas.

The main reason for partial immunization was lack of knowledge (25.5%) followed by illness of the child (14.1%) Similar findings were seen in study done by khargekar *et al*[11]. and kurane *et al*[12].The various other reasons for defaulting were family problems, lack of initiative, bad experiences and fear of adverse events following immunization . Similar findings were seen in various studies done in various parts of the country [13-19].

CONCLUSION

There is a need for improving the overall immunization coverage and efforts are required particularly to improve the coverage among the older children so that the burden of vaccine preventable diseases could be reduced substantially. Awareness programmes regarding vaccination and its benefits should be strengthened.

LIMITATIONS

Some of the parents might have forgotten that the immunizations are incomplete.

The question may be asked may not be in detail to correctly ascertain if there were missing doses.

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