

## A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING MISSION INDRADHANUSH AMONG PARENTS IN SELECTED URBAN AREAS OF PUNE CITY

Ms. Sonal Kurane<sup>1\*</sup>, Miss. Vaishnavi Khamkar<sup>2</sup>, Miss. Pallavi Pawar<sup>2</sup>, Miss. Aishwarya Bhosale<sup>2</sup>.

1. Clinical Instructor, Bharati Vidyapeeth (Deemed to be University) Collage of Nursing, Pune.
2. Student, GNM Nursing, Bharati Vidyapeeth College of Nursing, Pune.

\*Corresponding Author

### ABSTRACT

The most vulnerable population to catch diseases are the children aged below 5 years. In the year 2021, 5 million children globally were not able to celebrate their 5th birthday<sup>1</sup>. In India itself, the child mortality rate is 32 per 1000 births<sup>2</sup>. Most of these deaths can be prevented through immediate treatment and management but the most effective and least expensive method is immunization. **The present study title:** - A descriptive study to assess the knowledge regarding Mission Indradhanush among parents in selected areas of Pune City. **Material and Method:** A quantitative research approach with exploratory research design was used for this study. Non-probability purposive sampling technique was used for the samples of 100 parents. Each sample's age, gender, education, and number of children were recorded. Descriptive and inferential statistics were used in data analysis. The findings of the knowledge status were associated with the demographic variables. **Results:** - In this study, 81% had good knowledge and 17% had excellent knowledge. Similar results were seen in a study conducted at Bhubaneswar as 64% of mothers had adequate knowledge. **Conclusion:** - Despite the large population and shortage of medical staff, efforts have been made for the immunization of children and to avoid vaccine-preventable diseases. The launch of the Mission Indradhanush program has helped to speed up the vaccination process. In this study, it was recorded that the majority of the samples had good knowledge of Mission Indradhanush which is a very good indicator regarding the importance of immunization for children among parents. There is awareness among parents of the need to immunize their children and thus prevent deadly diseases without spending money.

**Keywords:** Parents, Mission Indradhanush, Assess, knowledge.

### INTRODUCTION

The most vulnerable population to catch diseases are children aged below 5 years. In the year 2021, 5 million children globally were not able to celebrate their 5th birthday<sup>1</sup>. In India itself, the child mortality rate is 32 per 1000 births. Most of these deaths can be prevented through immediate treatment and management, but immunization is the most effective and least expensive method. In the year 1985, India's immunization program was launched and it was one of the largest immunization drives at that time. The initiative taken by the Government of India was a healthy one, keeping in mind the safety of children but it was difficult to run this program. There were lots of shortcomings and despite being active for 30 years, 35% of children did not receive vaccines at all during their first year of life. In return, this led to early

deaths among children which were preventable through immunization. To tackle these issues and shortcomings of the immunization program, the Government of India launched Mission Indradhanush in 2014 with a target of 90% full immunization in our nation by the year 2020. The purpose of this program is to reach the underserved population where weekly immunization sessions are not being held. In addition, migratory populations of slum areas, construction site workers, brick kiln workers, and nomadic populations who reside in forest and tribal areas are the main targets for immunization<sup>3</sup>. Mission Indradhanush targeted immunization against diseases of Diphtheria, Pertussis, Tetanus, Polio, Tuberculosis, Measles, Hepatitis B, and Hemophilus Influenzae-B. Along with these, some selected states have been vaccinating against Japanese Encephalitis, Rubella, Injectable Polio Vaccine, and Rotavirus since 2016. Furthermore, the pneumococcal conjugate vaccine was also included in Mission Indradhanush against pneumonia in 2017. The Intensified Mission Indradhanush (IMI) program was run in 3 stages. IMI 2.0 was run from December 2019 to March 2020 which had four rounds.

**NEED OF STUDY** is a known fact and evidence has been provided that children who are unimmunized and partially immunized are at higher risks of being affected by diseases and disabilities. Furthermore, they are more prone and liable to death when compared to those children who are fully immunized. The most common reasons for non-immunization and partial immunization were unawareness, illiteracy, childhood illness, concern regarding adverse effects after immunization, non-availability of vaccines and vaccinators at session, parents prioritizing work over immunization of children, and the immunization session being too far away have been reported the most by the Indian population. In addition, language barriers among migrant workers, unwillingness to immunize children due to insufficient knowledge about the benefits of vaccines and false information being provided that money is required to get children vaccinated have also been significant issues for incomplete and partial immunization of children in India. According to the National Family Health Survey-5 (2019-21) of Maharashtra, 95 percent of children are at least partially vaccinated; only 5 percent have not received any vaccinations at all. Overall, there was an encouraging change in the coverage of all basic vaccinations (from 56% to 74%). In the Pune district, children aged 12-23 months were surveyed for basic vaccines (BCG, MMR, Pentavalent, DPT, and Polio). 58.1% of children received all basic vaccinations, 36.9% of children received age- appropriate vaccines and 12.6% of children had not been vaccinated. People living in slums are still lacking the awareness and importance of immunization and thus are a prospect for an outbreak of vaccine-preventable diseases. To conclude, parents are not aware of Mission Indradhanush and have very little knowledge regarding this flagship program to immunize children and pregnant women.

**AIM OF THE STUDY** To assess the knowledge regarding Mission Indradhanush among parents in selected urban areas of Pune city.

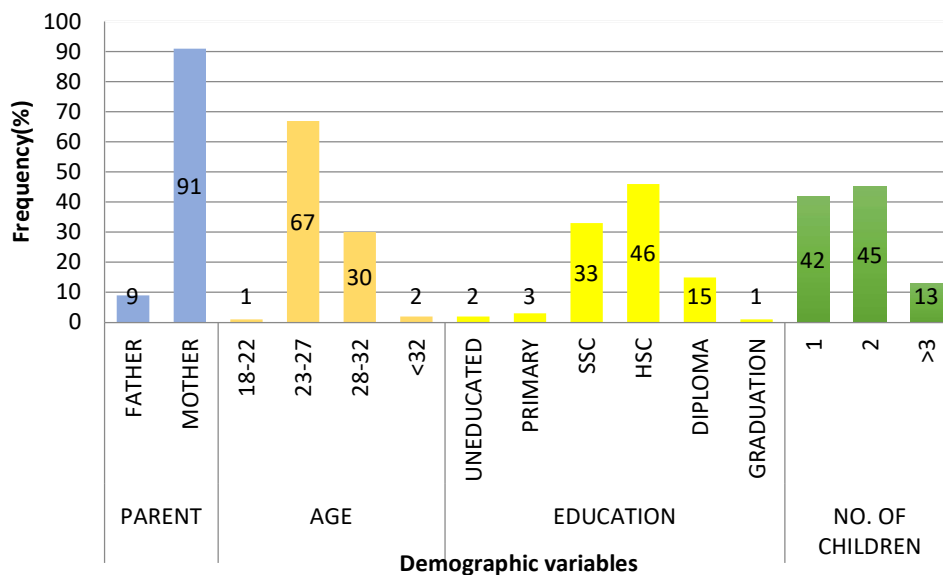
**METHODOLOGY:** -In this study Research approach is a quantitative approach, the Research design is descriptive research design, the Samples are parents from selected urban areas of Pune city, Sample size is 100. The reliability score is 0.90 Tool is reliable. **Pilot study was done;** a Research study is feasible. Limitations of the study are ,Conducted in selected areas of

Pune ,Sample size was only parents. Only measured knowledge of Mission Indradhanush and Limited time set for study conduction

**Description of tool is** Section I – Demographic Variables, Section II - Self-structured Knowledge Assessment Questionnaire. Inclusion criteria is Mothers or Fathers having at least one child below 5 years. Exclusion criteria are Parents who cannot read or understand Marathi or English. Who will not be available during data collection. This study with a sample size of 100 parents is limited only to selected areas of Pune city and those parents who can read or understand English or Marathi can be partakers based on their willingness.

## RESULTS

**I. Demographic variables.** The demographic variables in this study were parents, age, education, and number of children. The majority of the samples in this study are mothers with 91(91%) samples and only 9(9%) samples are fathers. The majority of the samples were from the age group of 23-27 years with 67(67%) samples, 30(30%) were aged between 28-32 years, 2(2%) were aged above 32 years and 1(1%) was from 18-22 years age. Regarding educational status, most samples 46(46%) had completed HSC. SSC was completed by 33(33%) samples, 15(15%) had done diploma, 3(3%) had completed primary education, 1(1%) had done graduation and only 2(2%) were uneducated. 45(45%) samples had two children, 42(42%) had one child and the remaining 13(13%) had >3 children.

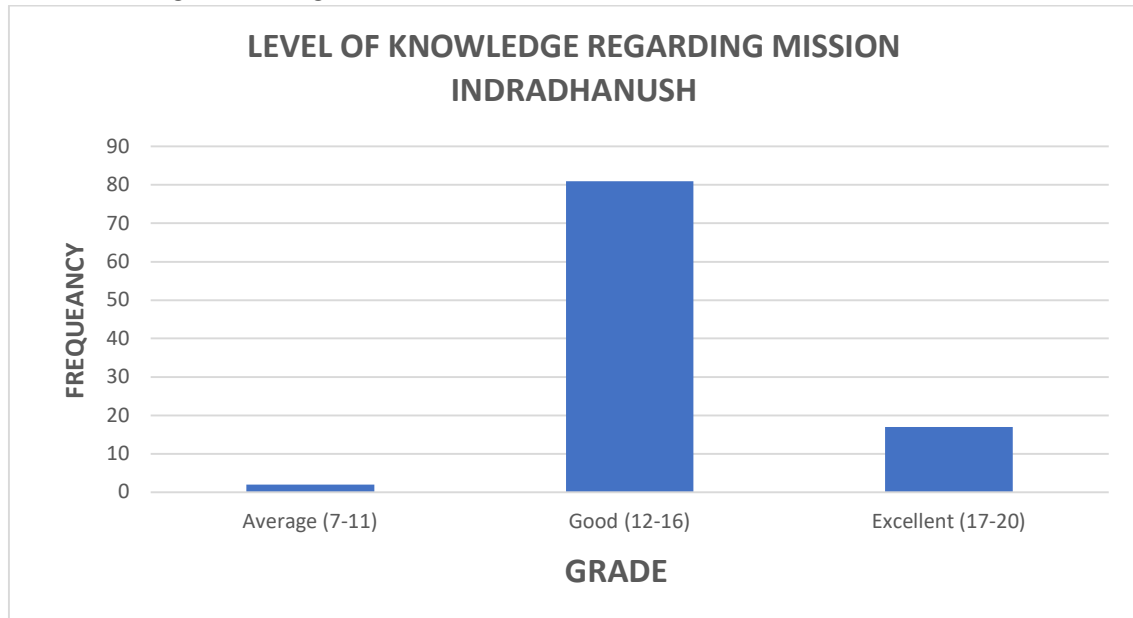


**Fig. no. 1** Frequency Distribution of participants as per Demographic Variables.

Grade (Range)	Frequency	Percentage (%)	Mean	SD
Poor (0-6)	0	0%	15.23	±1.44
Average (7-11)	2	2%		
Good (12-16)	81	81%		
Excellent (17-20)	17	17%		

**Table no. 1 Distribution of knowledge scores, Mean score and Standard Deviation**

**Table 1** represents that 81% parents had good knowledge, 17% had excellent knowledge and 2% had average knowledge. The mean score is 15.23 and standard deviation is ±1.44.



**FIGURE NO 2 :- Bar Diagram Showing The Level of Knowledge Regarding Mission Indradhanush**

**II. ASSOCIATION OF KNOWLEDGE SCORES WITH DEMOGRAPHIC VARIABLES:** - There is no association between knowledge scores and demographic variables.

**DISCUSSION**

**Representation of demographic variables-**

Majority of the samples in this study are mothers with 91(91%) samples and only 9(9%) samples are fathers Majority of the samples were from the age group of 23-27 years with 67(67%) samples, 30(30%) were aged between 28-32 years, 2(2%) were aged above 32 years and 1(1%) was from 18-22 years age. Regarding educational status, most samples with 46(46%) had completed HSC. SSC was completed by 33(33%) samples, 15(15%) had done diploma, 3(3%) had completed primary education, 1(1%) had done graduation and only 2(2%) were uneducated.45(45%) samples had two children, 42(42%) had one child and the remaining 13(13%) had >3 children. In this study, majority of the research participants with 67% belonged to the age group of 23-27 years and 30% were between 28-32 years. Similar result was noted from study conducted at Bhubaneswar where majority of the samples were in the age group of

20-34 years with 94%<sup>15</sup>. In this study, 33% samples had completed education up to SSC and only 1% were graduate degree holders. Similar result was noted from study conducted in Indore where 380.2% of the samples had completed SSC and 0.4% had completed graduation<sup>16</sup>. In a study conducted in Ambala, Haryana, 34% mothers had excellent knowledge which is a similar result to the present study where 17% had excellent knowledge. However, in present study only 2% have average knowledge and none had poor knowledge while in the previous study 26% had average knowledge and 13% had poor knowledge<sup>17</sup>. In this study, 81% were having good knowledge and similar result was seen in a study conducted at Kalaburagi, Karnataka where 77.2% had adequate knowledge<sup>18</sup>. In a study conducted at Meerut it was seen that 58% had adequate knowledge and 2% had poor knowledge. Similar result is seen in present study as majority have good knowledge and 2% have average knowledge<sup>19</sup>. In a study conducted at Kollam, Kerala, 70% mothers had poor knowledge and 30% had average knowledge before the video assisted teachings. However, these study results do not fall in line with the present study as 81% parents had good knowledge, 17% had excellent knowledge and 2% had average knowledge<sup>20</sup>.

**Findings related to knowledge of Mission Indradhanush:** -In this study, 81% had good knowledge and 17% had excellent knowledge. In the present study only 2% have average knowledge and none had poor knowledge.<sup>17</sup>

## CONCLUSION

Despite the large population and shortage of medical staff, efforts have been made to immunize children and avoid vaccine-preventable diseases. The launch of the Mission Indradhanush program has helped to speed up the vaccination process. In this study, it was recorded that the majority of the samples had good knowledge of Mission Indradhanush which is a very good indicator regarding the importance of immunization for children among parents. There is awareness among parents of the need to immunize their children and thus prevent deadly diseases without spending money. Vaccination of children helps to protect our nation as these young ones are the future of our country. It is very pleasing to know that today's parents are realizing the significance of immunization and have knowledge regarding Mission Indradhanush. According to the National Family Health Survey-5 (2019-21) of Maharashtra, 95 percent of children are at least partially vaccinated; only 5 percent have not received any vaccinations at all. Overall, there was an encouraging change in the coverage of all basic vaccinations (from 56% to 74%). In the Pune district, children aged 12-23 months were surveyed for basic vaccines (BCG, MMR, Pentavalent, DPT, and Polio). To conclude, parents are not aware of Mission Indradhanush and have very little knowledge regarding this flagship program to immunize children and pregnant women.

**Acknowledgement:** - I most sincerely convey my deep gratitude to my guide Ms. Sonal Kurane for her remarkable guidance and academic support during this study.

## REFERENCES

1. UNICEF Data. *Under-five Mortality*. 2023. Available from: <https://data.unicef.org/topic/child-survival/under-five-mortality/>
2. ETHealth World. India accomplishes landmark achievement in child mortality reduction. 2022

- Available from: <https://health.economicstimes.indiatimes.com/news/policy/india-accomplishes-landmark-achievement-in-child-mortality-reduction/94396551>
3. Government of India Ministry of Health and Family Welfare. *Mission Indradhanush Operational Guidelines 2016*.
  4. Government of India Ministry of Health and Family Welfare. *Intensified Mission Indradhanush Dashboard*. Available from: <https://imi4.mohfw.gov.in/>
  5. Government of India Ministry of Health and Family Welfare. *Focus on Universal Immunization: Dr. Mansukh Mandaviya launches Intensified Mission Indradhanush (IMI) 4.0. 2022*  
Available from: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1796099>
  6. Arun Singh. Mission Indradhanush (MI) and Intensified Mission Indradhanush (IMI): The Immunization Programmes in India – A Brief Review. *Gut and Gastroenterology*. 2018; 1(1): 01-03.
  7. Ruchi Thakur, Aanchal Anant Awasthi, Neha Taneja, Rajiv Janardhanan. The Evaluation of Immunization Coverage under Mission Indradhanush: a review. *International Journal of Community Medicine and Public Health*. 2020; 7(12): 5229-5236
  8. NEXT IAS. *7 years of Mission Indradhanush*. Available from: <https://nextias.com/current-affairs/27-12-2021/7-years-of-mission-indradhanush>
  9. International Institute for Population Sciences (IIPS) and ICF. 2021. *National Family and Health Survey (NFHS-5), India, 2019-21: Maharashtra*. Mumbai: IIPS.  
Available from: [http://rchiips.org/nfhs/NFHS-5Report\\_MH.shtml](http://rchiips.org/nfhs/NFHS-5Report_MH.shtml)
  10. Sanjeev Singh, Damodar Sahu, Ashish Agarwal, Lakshmanan Jeyaseelan, Ambily Nadaraj, Meeta Dhaval Vashi. Coverage, Quality, and Correlates of childhood immunization in slums under national immunization program of India: A cross-sectional study. *Heliyon*. 2019; 5.