

# MOTHER'S KNOWLEDGE TOWARDS REVISED IMMUNIZATION SCHEDULE AT RURAL AREA

<sup>1</sup>Swati Astik Ingale, <sup>2</sup>Mayuri Vijay More, <sup>3</sup>Dr Mahadeo Shinde

## **ABSTRACT**

*Mothers are the first care providers of their children. One of the ways to achieve reduction of underfive mortality is to educate the mothers on matters pertaining to child care. Immunization is a most cost effectiveness health interventions known to the mankind Study objectives were to assess the knowledge regarding revised immunization schedule and find the association between pre-test knowledge score. **Methods:** descriptive study was conducted at primary health centre, Non-probability Purposive sampling technique was used for selecting 30 mothers of under five children. Data was collected with structured questionnaire Data was analyzed by using SPSS software. **Result:** Maximum number 18 (60%) mothers belong to the age group of 18 to 24 years, Majority of mothers 12(40%) studied up to secondary education, 27(90%) mothers were housewife, 23(77%) were Hindu, 18(60%) belongs to joint family, 13(44%) of mothers had monthly income of Rs 6000 to 10000 and 24(80%) received information from health professional like doctors and Nurses.it shows that Out of 30 mothers 18(60%) had inadequate knowledge, the mean knowledge score was  $17.4 \pm 3.54$ . The result shows that there was no any association found between the knowledge of mothers regarding revised national immunization schedule programme with selective demographic variables.**Conclusion:** : Based on the result of the present study concluded that knowledge of mothers of under five children regarding revised national immunization programme was inadequate level of knowledge; So there is a need to provide proper information about revised immunization schedule to the mothers.*

**Keywords:** Immunization Schedule, Children, Knowledge.

## **I. Introduction:**

India has the approximately 10 millions of the unimmunized children's. In the year 2005-2006 during family health surveys reports that the only 43.5% of a children's in India received that all of their primary vaccine

---

<sup>1</sup> Clinical Instructor, Faculty Of Nursing Sciences, Krishna Institute Of Medical Sciences Deemed To Be University, Karad (Maharashtra) India.

<sup>2</sup> Clinical Instructor, Faculty Of Nursing Sciences, Krishna Institute Of Medical Sciences Deemed To Be University, Karad (Maharashtra) India.

<sup>3</sup> Professor, Faculty Of Nursing Sciences, Krishna Institute Of Medical Sciences Deemed To Be University, Karad (Maharashtra) India.

by 12 month of the age. Main resource identified that poor coverage includes that inadequacy of community participations in routine immunizations [1]

In year 2010 it was a estimated that the 1.7 millions children's died from the vaccines preventable diseases. It was the likewise noticed that the 19.3 millions children's has been a incompletely vaccinated was there ,leaving of them susceptible to the vaccines preventable diseases mortality and the morbidity is the approximately of 50% of the all under of the vaccinated children's lives in the 3 countries of being one of them.[2]

The overall health of the all children's has a vital importance to all the societies because of children's are the basic resource of future mankind. In the any country mother and children's constitutes approximately 60% of populations. In India, a women child bearing age from (15 to 44 years)constitutes 19% of populations and the children's under the 15 years of the age constitutes about 59% of total populations . By virtue this a large number as well as the because of the being vulnerable to the diseases, mother and the children are major consumers of health services [3] .The promotion of the health is a social, as well as the individual responsibility. So it is known that the 5 millions children's were dying each year and another 5 millions were disabled by the infectious disease. [4]

Study by Patil K at all idea about that Structured Teaching Program was found convincing to improve the data on staff clinical escorts concerning Arterial Blood Gas Analysis[5]. Records helped preparing helps with keeping an eye on the techniques for focused clinical assessment yet may not consider the assumption of touch expected to see the parts. There is in no way, shape or form a suitable swap for clinical demonstration[6].SIM is practical in improving the data on patients encountering haemodialysis and affirmed advancement on driving this assessment was better result in the accomplishment of the patient[7].Study thought about that Informational booklet was genuinely reasonable to get data on picked emergency drugs among staff clinical escorts working at picked hospitals[8].The enlightening system concerning post dialysis home thought is a fundamental activity in improving controller's data on post dialysis home care[9].Planned preparing program on data on mothers with respect to factors influencing supporting status of preschool kids was beneficial to improve the data on mothers[10,11].The study acknowledged that there is strong need to set up the patients with persistently authentic program concerning early ambulation post heart catheterization[12].

The growth and the development of the children's is long term contributions of a country as the whole. The key is to attain goal of the health for all a primary health cares emphasizes on preventive principle. One of that most cost effectiveness health intervention is the vaccines for the all infectious diseases. An immunization is the high priority area in the care of a infant and children's. High immunizations rates have the almost eliminated of much infectious disease. Which is used to the decimate sizable of populations for countries. The number of the deadly and a disabling infectious disease can prevented by the timely administrations of the vaccines when the child is a effectively immunized at right age, and most of the these disease are either's entirely prevented or the at least modified: so that the child suffers from the mild diseases without any disability.[13]

The expanded programs of the immunization are started by WHO in year 1974 and has been improved coverage for the DPT, BCG, measles and polio about the 80% of the children's in the developing country. Over past years, Ministry of the Health and Population has been implemented national programs for the children's

immunization. Immunization is a most cost effectiveness health interventions known to the mankind. When a country can be successfully provides vaccine to their children's, they were already making the immense differences to health of their citizens. But immunizations alone are not the sufficient because of all areas of the healthcare were deserved attentions and resource. [14]

Mortality rate are may be the greater in a developing country, low resistance of children's against the infections. In developing world 23% of death among the children's under -five years occurs in first month. However 3 million babies in the developing countries die during the childhood. In the recent years however a relatively low immunizations level in these age group have a occasional scattered outbreak of the certain diseases. For these reasons in spite of national efforts some immunization are administered the optionally to improve immunizations levels of children's. This vaccination helps to the making the children's immune system is stronger. Children are whose partially immunized or not be immunized. May be risk for the diseases that this vaccine prevent. Still the peoples are unaware of immunization Schedule and its importance. Hence that study plays important role in the spreading awareness of immunization mothers of the under five children's. [15]

Assessing the immunizations coverage to helps the evaluate progress in the achieving programs objectives and in the improving services delivered. In addition, to evaluation of the immunization coverage are provides evidence whether it substantial progress towards the achieving vaccinations targets is a being made.[16]

## **II. Material and Methods:**

Research approach:- descriptive approach

Research design:- preexperimental.

Setting study:- rural area of western Maharashtra.

Sample size:- 30 mothers of under five children, residing at rural area.

Sampling technique:- Non-probability Purposive sampling technique

### **Sampling criteria**

Inclusion criteria:

1. Mothers of under five children residing at area.
2. Who are willing to participate in the study.

Exclusion criteria:

1. Who have received similar education regarding revised immunization schedule.

### **Description for Final Tool**

The structured questionnaire comprised of two sections.

### **Section 1) Demographic characteristics**

The characteristics include age, religion, educational status, occupation of the mother, monthly income of the family, type of family, source of information regarding revised immunization schedule. The mothers were asked to give relevant information in the space provided.

### **Section 2) Structured knowledge**

It consists of 35 items in multiple choice questions form and is divided into two part.

Part 1 : General aspects of immunization – 8 questions.

Part 2 : Knowledge of mothers regarding revised immunization schedule – 27 questions.

To assess the knowledge of mothers of under five children regarding revised immunization schedule programme.

### **Scoring Plan**

Out of all the items 35 questions were multiple choice questions which have four alternative responses. A score of 1 was allotted to each correct response and score value 0 was allotted to each wrong response. The total score was 35.

- DATA ANALYSIS PLAN:
- Data collected was tabulated and analyzed by using Descriptive & Inferential Statistics.

### **Ethical Consideration**

- Ethical clearance has been obtained from The institutional ethical committee of Krishna institute of Medical Sciences, Karad. Permission obtained from THO Officer, Patan. Consent was obtained from the respondents.

## **III. Results:**

**Table No. 1**

Distribution of frequency and percentage analysis of mothers of under five children according to demographic variables. N = 30

Table 1: Frequency and percentage distribution of demographic variables of subjects N=30

<b>Sr. No.</b>	<b>Demographic Variable</b>	<b>F</b>	<b>%</b>
----------------	-----------------------------	----------	----------

	Age in years		
	18 to 24 years	18	60 %
	25 to 30 years	9	30 %
	31 to 35 years	3	10 %
	Religion		
	Hindu	23	77 %
	Muslim	5	17 %
	Others	2	7 %
	Education		
	No formal Education	7	23 %
	Primary	6	20 %
	Secondary	12	40 %
	Higher Secondary	4	13 %
	Graduated	1	3 %
	Occupation		
	House wife	27	90 %
	Private	1	3 %
	Business	2	7 %
	Type of Family		
	Joint	18	60 %
	Nuclear	12	40 %

	Family Income (Monthly) in Rs.		
	Below 5000	12	40 %
	6000 to 10000	13	44 %
	11000 to 15000	4	13 %
	Above 15000	1	3 %
	Source of Information regarding revised immunization schedule		
	Family members	4	13 %
	Friends	0	0 %
	Media like TV, Radio, News Paper, Magzine etc.	2	7 %
	Health personnel like Doctors & Nurse	24	80 %

The data presented in the Table 1 reveals Maximum number 18 (60%) mothers belong to the age group of 18 to 24 years, 9(30%), Majority of mothers 12(40%) educational status was secondary, Majority of mothers 27(90%) occupation were housewife, 2(7%) were business and 1(3%) were private employee. Majority of mothers 23(77%) religion were Hindu, 18(60%) of them were staying at joint family. Majority of mothers 13(44%) monthly income were rupees 6000 to 10000, Majority of mothers 24(80%) got information from health professional like doctors and nurse, .

**Table 2 : Distribution of frequency and percentage of pre test knowledge score of mothers of under five children regarding Revised National Immunization Schedule programme.**

N=30

Sr. No.	Level of Knowledge	Pre Test	
		F	%
1	Poor (50 and below)	12	40 %

2	Average ( 51 to 75 )	18	60 %
3	Good (Above 75)	0	0 %
	Total	30	100 %

The above table shows the comparison of pre test knowledge of mothers of under five children regarding revised national immunization schedule programme. The pre test table depicts that majority of mothers of under five children residing at Morgiri Village, Patan, 18(60%) had average level of knowledge about revised national immunization schedule programme, whereas only 12(40%) of mothers of under five children had poor level of knowledge and no mothers of under five children had good level of knowledge regarding revised national immunization schedule programme.

**Table No. 3 Mean, median and standard deviation of knowledge score of mothers of under five children regarding revised national immunization schedule programme. N=30**

Area of analysis	Mean	Median	Standard deviation
Pre test	17.4	18.0	3.54

Pre test mean knowledge score and standard deviation was 17.4 ±3.54. There was a no any significant association between knowledge of mothers and Age ( $\chi^2=0.0942$ ), Religion ( $\chi^2=0.1127$ ), Education ( $\chi^2=0.5474$ ), Occupation ( $\chi^2=0.8038$ ), Type of family ( $\chi^2=0.5428$ ), Per capita monthly income of the family ( $\chi^2=1.0000$ ), Source of information about revised national immunization schedule programme ( $\chi^2=0.5762$ )

**Table No. 4 Association between demographic variables and pre test knowledge level of mothers of under five children residing at Morgiri Village, Patan on revised national immunization schedule programme. N=30**

Sr. No.	Socio demographic variables	No.	%	Pre test				Chi Square	P value
				Average		Poor			
				No	%	No	%		
1	Age								
	18 to 24 years	18	60%	13	72%	05	42%	2.801	0.0942 NS
	25 to 30 years	09	30%	03	17%	06	50%		

	31 to 35 years	03	10%	02	11%	01	8%		
2	Religion								
	Hindu	23	76.66 %	12	67%	11	92%	2.516	0.1127 NS
	Muslim	05	16.66 %	04	22%	01	8%		
	Others	02	6.66 %	02	11%	00	0		
3	Education								
	No formal Education	07	23.33 %	03	17%	04	33 %	0.3620	0.5474 NS
	Primary	06	20 %	04	22 %	02	17 %		
	Secondary	12	40 %	08	44%	04	33 %		
	Higher Secondary	04	13.33 %	02	11%	02	17 %		
	Graduate	01	3.33 %	01	6%	0	0		
4	Occupation								
	House wife	27	90 %	16	89%	11	92 %	0.06173	0.8038 NS
	Private	01	3.33 %	0	0	01	8 %		
	Business	02	6.66 %	02	11%	0	0		
5	Type of Family								
	Joint	18	60 %	10	56 %	08	67 %	0.3704	0.5428 NS
	Nuclear	12	40 %	08	44 %	04	33 %		
6	Family income monthly Rs.								



	Below Rs.5000	12	40 %	06	33 %	06	50 %	0.000	1.0000 NS
	Rs. 6000 to 10000	13	43.33 %	09	50%	04	33 %		
	Rs. 11000 to 15000	04	13.33 %	02	11 %	02	17 %		
	Above Rs. 15000	01	3.33 %	01	6%	0	0		
7	Source of information								
	Family members	04	13.33 %	01	6 %	03	25 %	0.3125	0.5762 NS
	Friends	0	0	0	0	0	0		
	Media	02	6.66 %	02	11%	0	0		
	Health personnel	24	80 %	15	83 %	09	75 %		

Table No. 4 shows the association of knowledge level of mothers of under five children residing at Morgiri village, Patan. Regarding revised national immunization schedule with their selected demographic variables, using chi- square test.

The analysis revealed that there was no any association found between the knowledge of mothers regarding revised national immunization schedule programme with Age ( $\chi^2=0.0942$ ), Religion ( $\chi^2=0.1127$ ), Education ( $\chi^2=0.5474$ ), Occupation ( $\chi^2=0.8038$ ), Type of family( $\chi^2=0.5428$ ), Per capita monthly income of the family ( $\chi^2=1.0000$ ), Source of information about revised national immunization schedule programme ( $\chi^2=0.5762$ )

#### IV. DISCUSSION

The study conduct to assess knowledge regarding revised immunization schedule among the mothers of the under five children .Out of 30 mothers in pre test 18(60%) had average knowledge, and 12 (40%) of mothers had poor knowledge. Pre test mean knowledge score and standard deviation was  $17.4 \pm 3.54$ . The result shows that there was no any association found between the knowledge of mothers regarding revised national immunization schedule programme with Age ( $\chi^2=0.0942$ ), Religion ( $\chi^2=0.1127$ ), Education ( $\chi^2=0.5474$ ), Occupation ( $\chi^2=0.8038$ ), Type of family ( $\chi^2=0.5428$ ), Per capita monthly income of the family ( $\chi^2=1.0000$ ), Source of information about revised

national immunization schedule programme ( $\chi^2=0.5762$ ). The study shows that mothers having inadequate level knowledge about the revised national immunization schedule.

The study recommended that need to provide accurate information and encouragement from health personnel needed to improve the knowledge about revised national immunization schedule programme.

Similar study was conducted by Kalavathi B et. al.at Madanapalle. The study findings shows that the level of the knowledge and the practices among the mothers of under -five children's regarding the immunization had inadequate knowledge.pre test mean (14.480)SD (4.700).Mothers having the inadequate knowledge about the revised immunization schedule.[17]

Consequence of present investigation were like an examination led by Aggarwal AK, Kumar R with respect to inoculation status among one hundred and thirty moms in the age gathering (15-44) years and 142 youngsters matured (12-59) months were chosen in Wardha area. Out of this 100 moms and 122 youngsters could be reached for assessment of vaccination inclusion and evaluating maternal information and works on with respect to inoculation 52.5% kids were completely vaccinated and 45.1% were mostly vaccinated. Immunization inclusion for B.C.G. furthermore, essential portions of DPT/OPV was 95.9% or more 85% separately. It was 57.4% for measles and 63.04% for promoter portion was 36.96%. Moms had an information in regards to requirement for inoculation yet a poor information in regards to the infections forestalled and portions of the immunizations.. The study recommended that mothers need to improve their knowledge regarding immunization thereby preventing disease which can be prevented by vaccine.[18]A similar study was conducted to support my study.[19]

## **V. Conclusion:**

Based on the result of the present study Low level of literacy of the mothers is the matter of a worry. The study shows that knowledge of mothers of under five children regarding revised national immunization programme was inadequate level of knowledge; So there is a need to provide proper information about revised immunization schedule to the mothers.

**Funding Sources:**Nil

**Conflict of Interest:** Nil

**Acknowledgement-nothing to report**

## **References:**

- [1] Rahman, M. Z., Waly, H., & Msadek, S. (1999). World development indicators 1999. The World Bank.
- [2] Kim-Farley, R. (1992). Global immunization. Annual review of public health, 13(1), 223-237.

- [3] Rimple, S. (2013). Essentials of Pediatric Nursing. Jaypee brothers medical publishers (p) ltd, second edition-2017, pg, (93-96).
- [4] UNICEF., & United Nations Children's Fund (UNICEF). (2008). The state of the world's children 2009: maternal and newborn health (Vol. 9). Unicef..
- [5] Patil, K. T., Zagade, T. B., Shinde, M. B., & Kshirsagar, V. Y. (2020). Effectiveness of structured teaching programme on arterial blood gas analysis among staff nurses of critical care unit. *International Journal of Advanced Science and Technology*, 29(3 Special Issue), 476–480.
- [6] Kale, U. B., Shinde, M. B., & Patil, S. K. (2020). Impact of video assisted learning with referenceto focused clinical health assessment on adultpatient among nurses. *Journal of Critical Reviews*. Innovare Academics Sciences Pvt. Ltd. <https://doi.org/10.31838/jcr.07.05.58>
- [7] Zagade, T. B., Shinde, M. B., Pawar, A., & Bhosale, T. (2020). Efficacy of interactive video clipping on preoperative state of anxiety among patients undergoing abdominal surgery. *International Journal of Advanced Science and Technology*, 29(4), 1204–1211.
- [8] Sebastian, A., & Shinde, M. B. (2020). Effectiveness of self-instructional module on therapeutic diet among patients undergoing dialysis in tertiary care hospital. *International Journal of Advanced Science and Technology*, 29(3 Special Issue), 450–454.
- [9] Salunkhe, P. S., Mohite, N. C., Shinde, M. B., & Kshirsagar, A. Y. (2020). Effectiveness of an informational booklet regarding knowledge of emergency drugs among nurses working at tertiary care hospital. *International Journal of Advanced Science and Technology*, 29(5 Special Issue), 651–656.
- [10] Jadhav, Y. A., Zagade, T. B., Shinde, M. B., & Patil, V. C. (2020). Assess the efficacy of health information on knowledge regarding post dialysis home care among caretakers of haemodialysis patients. *International Journal of Advanced Science and Technology*, 29(4), 1254–1264.
- [11] Naregal, P. M., Durgawale, P. M., Shinde, M. B., & Kakade, S. V. (2020). “Effectiveness of Planned Teaching Programme on Mother’s Knowledge On Factors Affecting Nutritional Status of Pre-School Children (3-5years) Attending Anganwadi in Selected Urban Slum Areas of Karad”. *International Journal of Advanced Science and Technology*, 29(4), 1246–1253.
- [12] Pawar, S. A., & Shinde, M. B. (2020). A study to assess the impact of knowledge about early ambulation on patient’s satisfaction post percutaneous coronary intervention, at tertiary care hospital, karad. *International Journal of Advanced Science and Technology*, 29(3 Special Issue), 455–463.
- [13] Hockenberry, M. J., & Wilson, D. (2018). Wong's nursing care of infants and children-E-book. Elsevier Health Sciences.
- [14] Hong, R., & Banta, J. E. (2005). Effects of extra immunization efforts on routine immunization at district level in Pakistan. *EMHJ-Eastern Mediterranean Health Journal*, 11 (4), 745-752, 2005.

- [15] Drain, P. K. (2012). Vaccine preventable diseases and immunization programs. Global Health Education Consortium (GHEC): World Health organization (WHO), 2004..
- [16] Sharma, R., & Bhasin, S. K. (2008). Routine immunization-do people know about it? A study among caretakers of children attending pulse polio immunization in east Delhi. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*, 33(1), 31.
- [17] Kalavathi, B., Shabana, S., & Somesula Suchitra, R. H. (2016). Effectiveness of structured teaching programme on knowledge and practice regarding immunization among the mothers of under five children in Gangannagaripalle village at Madanapalle. *IJAR*, 2(8), 709-712.
- [18] Aggarwal, A. K., & Kumar, R. (2005). The immunization status of children and reasons for partial immunization and non-immunization. *Indian Journal of Community Medicine*, 25(3)..
- [19] Vazir, S., & Naidu, A. M. (2008). To assess the level of knowledge among parents. *Indian Paediatrics*, 35, 959-65.