MARCH 2022 | Vol. 2 Issue 10 www.uijir.com

# A STUDY TO ASSESS THE KNOWLEDGE REGARDING IMMUNIZATION AMONG MOTHERS OF UNDER FIVE CHILDREN AT SELECTED RURAL AREA AT TONK RAJASTHAN WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET

Author's Name: <sup>1</sup>Mr. Abhilash Vijayvergiya, <sup>2</sup>Mr. Neeraj Verma

**Affiliation**: <sup>1</sup>Nursing lecturer, Tagore Nursing College, Jaipur, Rajasthan, India

<sup>2</sup>Nursing lecturer, Banasthali Vidhyapeeth, Newai, Tonk, Rajasthan, India

E-Mail: , neerajverma1820@gmail.com

DOI No. - 08.2020-25662434

## Abstract

World Health Organization (WHO) states the health is a state of complete physical, mental and social wellbeing not merely the absence of disease or illness. Health is more than just the absence of disease . It is affected by a wide range of spectrum of physical, mental, social and political factors Keeping the point of view this study was conducted to assess the knowledge regarding immunization among mothers.

## Keywords:

## INTRODUCTION

World Health Organization (WHO) states the health is a state of complete physical, mental and social wellbeing not merely the absence of disease or illness. Health is more than just the absence of disease. It is affected by a wide range of spectrum of physical, mental, social and political factors Keeping the point of view this study was conducted to assess the knowledge regarding immunization among mothers.

Several deadly and disabling infectious disease can be prevented by timely administration of vaccines when child is effectively immunized at the right age, most of these disease is either entirely prevented or at least modified so that child suffer from a mild disease without any disability.

Immunization is the process by which an individual's immune system become fortified against an agent known as the immunogen. They are important for both adults and children. in that they can protects children from the many disease out there. immunization not only protects children against deadly disease but also help in developing children's immune system.

The goal of immunizing children against chief disease responsible for child mortality and morbidity is indeed a noble one through the universal immunization program (UIP).

Decrease awareness, patient compliance and cost effectiveness play a major role in limiting the success of vaccine.

# **OBJECTIVES OF THE STUDY**

- 1. To assess the knowledge of mothers regarding immunization.
- 2. To develop an information booklet for mothers on immunization.
- 3. To find out the association between knowledge with selected demographic variables.



MARCH 2022 | Vol. 2 Issue 10 www.uijir.com

# **HYPOTHESIS**

HO - There will be no significant association between knowledge regarding immunization with selected demographic variables.

H1 - There will be a significant association between knowledge regarding immunization with selected demographic variables

## **ASSUMPTION**

In this study the researcher assumed that the mothers may have some knowledge regarding immunization.

#### **DELIMITATION**

This study is delimited to 100 mothers at selected rural area who meet the inclusive and exclusive criteria

## **CONCEPTUAL FRAMEWORK**

Conceptual framework is defined as a theoretical approach to the study of problems that are scientifically based, which emphasizes the selection, arrangement and classification of its concepts. A conceptual framework states functional relationship between events and is not limited to statistical relationship. Christensen J. Paula (1990) defines theory as "a set of concepts, definitions and propositions that project a systematic view of phenomena by designating specific interrelationship among concepts for the purpose of describing, explaining, predicting, controlling or prescribing the phenomena." Rosen stock and Becker 1974 modifies the health belief model to include these components, individual perceptions, modifying factors and various likelihood to actions. Conceptual model of this study is based on health belief model ( Rosen stock and Becker 1974). This model is intended to predict which individual would or would not use such type of knowledge regarding Immunization. It provides a broad base for assessing knowledge regarding immunization. These are three major concepts in health belief model.

- Individual perception
- Modifying factors
- · Likelihood of action

# **REVIEW OF LITERATURE**

# 1. Literature related to the prevalence of immunization

A study was conducted by Dr. Lokesh Kumar Sunkara et. al. in January 2016 on examined the immunization status of 1 to 5 years children of a rural area of Rajasthan. They have carried out a community based cross-sectional descriptive study of 330 sample size. They have found that out of 330 children, 248 (75.15 %) children were fully immunized i.e., those children who receive one dose of BCG, one dose of Measles, three doses of OPV and three doses of DPT vaccines up to 1 year of age, 60 (18.18%) were partially immunized i.e., those who have missed any one of the doses and 22 (6.67 %) were unimmunized i.e., those who have not received any type of vaccination.

A study was conducted by Ayyappadas Sabin Shivani et. al. in 2016 worked on a project named as Pre-Baby vaccination to provide vaccination notifications and reminders as SMS to the families of newborn and pregnant women at regular intervals by using their registered id. In the proposed system K-means clustering algorithm has been used and the families can access the static



MARCH 2022 | Vol. 2 Issue 10 www.uijir.com

information send by the system as a notification periodically.

# 2. Literature related to the Importance of immunization:-

A hospital- based study was conducted by Agarwal in 2014 also reported that the immunization status declined with age. among the various reason stated by the mothers in the present study about missing the vaccination it was found that lack of knowledge about routine immunization schedule (36.84%) and being busy with work (33.33%) were the major reason.

A study was conducted by PCTS (Pregnancy, Child Tracking & Health Services Management System) is an online web-based service provided by the Government of Rajasthan for facilitating the citizens. The system tracks pregnant women, infants and children online for providing the proper services and monitoring the immunization programmed to reduce maternal and infant mortality. Swasthya Sandesh Seva is used to send SMS alerts to the citizens and health workers.

## 3. Literature related to health Problems of Unimmunized Children:-

A Study was conducted by Kumar et al, Kar et al, and Yadav et al in 2014 in Jamnagar district to reported that female children and higher birth order were less likely to be fully immunized. As the present study was conducted in the hospital, it could have been that male children and lower-birth order children were paid attention for their sickness and hence more male children are found to be partially immunized or nonimmunized. Half of children (52.63%) belonged to a nuclear family and 45.61% belonged to socioeconomic class III as per the BG Prasad classification 2013. Regarding the mothers of these children, 64.91% were illiterate and 63.15% were housewives.

A study was conducted by Bhawan Sharma et al in 2013 was also observed 82.3% institutional deliveries among completely immunized and only 17.7% among partially / non-immunized child. There are multiple reasons behind partial and non-immunization of the child where the main reason in this study was sickness 36.06% of elder sibling after vaccination and the beneficiary 32.08% himself at the time of vaccination and lack of time for vaccination was 11.47%.

# **SETTING OF THE STUDY**

Setting is a physical location and condition in which data collection takes place in the study. To identify the knowledge of mothers of under five children at the selected rural area at Tonk Rajasthan.

## **VARIABLES**

Variables are qualities, properties or characteristics of persons, things or situation that change or vary. Three types of variables were identified in this study.

Independent variables:- Independent variable that stands alone and is not dependent on any other. In this study independent variable refers to Information booklet.

Dependent variables:- Dependent variables is the variable that the researcher is interested in understanding, explaining and predicting. In this study, knowledge of mothers of under five children regarding immunization.

**Demographic variables:-** Age, religion, education of the participant, occupation of the participant, family income, type of family, source of information and no. of under-five age children.

# RESEARCH SETTING

Research can be undertaken in a variety of setting which are specific place where information is



MARCH 2022 | Vol. 2 Issue 10 www.uijir.com

gathered. Some studies take place in a naturalistic setting in the field such as in people's home or place of work. At the other extreme, some studies are done in highly controlled 45 laboratory setting. Research makes decision about where to conduct a Study based on the nature of the research question and the type of information needed to address it. Setting is a physical location in which data collection takes place in a study. This study was undertaken in rural area at Tonk Rajasthan.

## **SAMPLE**

Sample refers to subset of the population that is selected to participate in a particular study. In this study, the sample consist of mothers of under five children who fulfill the inclusion criteria.

## **SAMPE SIZE**

A Sample size is a small portion of the population selected for a particular study. It constitutes a subset of total population. The sample of the present study comprised of 100 mothers of under five children who met the inclusion criteria were selected for the study. SAMPLING TECHNIQUE:-Sampling is the process in which representative units of a population are selected for study in a research investigation. Non-probability sampling is where sample are selected based on the judgment of the researcher to achieve objectives of the research at hand. 46 Purposive sampling technique is a strategy in which the researcher's knowledge of the population and its elements used to select sample which are typical to the population. Purposive sampling technique, a type of nonprobability sampling approach was used to select the sample of 100 mothers of under five children.

# **SAMPLING CRITERIA INCLUSION CRITERIA**

- Mothers who have children under five aged.
- Mothers who able to read and write.
- Mothers who are available during data collection.

#### **EXCLUSION CRITERIA**

- Mother who are not willing to participate in the study.
- Mothers who have children above five years aged.

## PILOT STUDY

Pilot study is a small-scale version of trail run for the major study. The function of this is to obtain information for improving the project or for assessing its feasibility and practical hitches. After obtaining permission from the concerned authority a pilot study was conducted in the month of May 2019 from 24-5-19 to 02-6-19. Ten mothers were selected in rural area at Tonk, using purposive sampling technique. Structured knowledge questionnaire was interviewed for 30 – 40 minutes. The collected data were analyzed by using descriptive and inferential statistics.

# **SUMMARY ANS CONCLUSION**

This chapter discusses the major findings of the study and reviews that in relation to findings from the result of the previous study. The present study is an effort to assess the knowledge among the mothers of under five children regarding immunization in selected rural area at Tonk.



MARCH 2022 | Vol. 2 Issue 10 www.uijir.com

To achieve the objectives of the study, descriptive survey research approach was adopted for the study 100 subjects those fulfilling inclusion and exclusion criteria were selected by the nonprobability purposive sampling technique. The subject was assessed by using socio demographic data and structured questionnaire prepared by the investigator.

The findings of the study are discussed following 3 main categories:

- Sample characteristics
- Knowledge score of participants on immunization
- Association of knowledge with selected demographic variables

#### SAMPLE CHARACTERISTICS

- Distribution in the study 53 % respondents belong to the age group 18 -25 years, 34% respondents to the age group of 26-30 years, 4% respondents belong to the age group 31 -35 years and 9% respondents belong to the age group above 36 years. The maximum participant in the research study from the age group of 18-25 years.
- Distribution in the study 72% respondents were belongs to the group of Hindu, 19% respondents were belonging to the group of Muslim, 6% respondents were belonging to the group of Christian, and 3% Respondents were belonging to the group of Others. The maximum participant in the research study from the religion group of Hindu. 74
- Distribution in the study 42% respondents were belongs to the group of primary education, 35% respondents were belonging to the group of upper primary and secondary, 10% respondents were belonging to the group of higher secondary education and 13% respondents were belongs to the group of graduation or above. The maximum participant in the research study from the Education of mother group of primary education.
- Distribution in the study 63% respondents were belongs to the group of Nuclear Family, 37% Respondents were belonging to the group of Joint Family. The maximum participant in the research study from the type of family of participant group of Nuclear Family.
- Distribution in the study 40% respondents were belongs to the group of housewife, 27% respondents were belonging to the group of government employee, 12% respondents were belonging to the group of private employee and 21% Respondents were belongs to the group of others. The maximum participant in the research study from the Occupation of mother group of housewife.
- Distribution in the study 36% respondent were belong to the group of Rs. 5000- 10,000, 27% respondent were belonging to the group of Rs. 10,001-15000, 15% respondent were belonging to the group of Rs. 15,001-20,000, 22% respondent were belong to the group of Rs. >20,000. The maximum participant in the research study from the monthly income of the family group of Rs. 5000-10,000.
- Distribution in the study 32% respondents were belongs to the group of Yes and 68% respondents were belonging to the group of No. The maximum participant in the research study from the previous knowledge regarding immunization group of No.
- Distribution in the study 48% respondent were belong to the group of one children, 29% respondent were belong to the group of two children and 23% respondent were belong to the group of three children. The maximum participant in the research study from the No. of under five children group of one children.



# Universe International Journal of Interdisciplinary Research (Peer Reviewed Refereed Journal)

© UIJIR | ISSN (0) - 2582-6417 MARCH 2022 | Vol. 2 Issue 10 www.uijir.com

# KNOWLEDGE SCORE OF RESPONDENTS ON IMMUNIZATION

- Level of knowledge of mothers of under five children 37% had Poor knowledge score, 24% had Average knowledge score, and 20% had Good knowledge score and 19 % had Very Good knowledge score and mothers of under five children had average knowledge score.
- Overall knowledge of mothers of under five children was 52.93% with mean knowledge median was 16 with standard deviation was 4.529. it showed that mothers of under five children had average knowledge regarding immunization.
- Area wise analysis of knowledge score of mothers of under five children indicated that maximum knowledge score regarding immunization was 51.62% information, knowledge and needs, 52.78% regarding knowledge, 54.50% regarding complication and management after immunization.

## III SAMPLE CHARACTERISTIC

Association of knowledge scores and selected demographic variables There is no significant association between knowledge of mothers of under five children and demographic variables such as age (x 2=9.919) with df 9, religion (x 2=2.949) with df 9, previous knowledge of immunization (x 2=1.133) with df 3 and at 0.05 level significance.

There is significant association between knowledge of mothers of under five children and demographic variables such as education of mother (x 2 = 26.163) with df 9, type of family (x 2 = 15.855) with df 3, occupation of mother (x 2 = 19.123) with df 9, income of family (x 2 = 25.223) with df 9, no. of under five children (x 2 = 18.309) with df 6, at 0.05 level of significance.

Hence the research hypothesis is accepted. The following conclusion were drawn based on the finding of the study:

- The level of knowledge of mothers of under five children regarding immunization shows that 37% had poor knowledge score, 24% had average knowledge score, 20% have good knowledge and 19% had very good knowledge score. 76 Overall knowledge of mothers of under five children shows that was 52.93% with mean knowledge median was 16 with standard deviation was 4.529. it showed that mothers of under five children had average knowledge regarding immunization.
- $\bullet$  There was an association between type of family and knowledge of mothers of under five children at 0.05 level of significance and p< 0.05. mothers of under five children with joints family had more knowledge regarding immunization.

## **BIBLIOGRAPHY**

- 1. Http://www.immandvacc.co.uk/immunisation-course.html.
- 2. Park K. Park's Textbook for Preventive and social Medicine. M/S Banarsidas Bhanot Publishers, 18th edition, January 2005: 342.
- 3. Rachna Kapoor, Sheetal Vyas; "Awareness and knowledge of mothers of under five children regarding immunization in Ahmedabad" healthline ISSN 2229-337X; Volume 1; Issue 1; July-December 2010 Pages 12-15.
- 4. Mrs.S.Selvakumari, "Knowledge of optional vaccines among Mother of Under Five Children" Journal of Management and Science, Vol. 1, No.1, Sep 2011, pp. 30-35.



MARCH 2022 | Vol. 2 Issue 10 www.uijir.com

- 5. Top vaccination for your child . vaxins Retrieved 29 july 2016
- 6. Park K. Park's Text book for Preventive and social Medicine. M/S Banarsidas Bhanot Publishers, 18th edition, January 2005: 342.
- 7. UNICEF. The invisible child: A look at the Urban child in Delhi. New Delhi
- 8. UNICEF; 1990. Lodha R, Dash NR, Kapil A, Kabra SK. Diptheria in urban slums in north India. Lancet 2000; 355 (9199): 204.
- 9. http://www.who.int/topics/immunization/en/
- 10. The NHP India website. [Online]. Available: http://www.nhp.gov.in/1missionindradhanush\_pg
- 11. World Health Organisation. Global immunization vision strategy Switzerland; WHO publications.2010 November 10.
- 12. Centers for disease control and prevention. National infant immunization week. Information and organization handbook atlanata: centers for disease control and prevention; 1995.
- 13. http://vikaspedia.in/health/child-health/immunization.
- 14. World Health Organisation. Epidemiology of the Unimmunized Child: 2009. (67) From http://www.Who.int/immunization/sage/.
- 15. Kalaivani K, Mathiyazhagan T, Patro BC. Editorial. News Lett Nat Inst Hlth Fam Welfare.2006;8:1-2.
- 16. WHO. State of the world's vaccine and immunization. 3rd edition, Geneva: 2009.