



---

Original Research Article

Volume 9 Issue 1

Jan-March 2020

---

**EFFECTIVENESS OF EDUCATIONAL PROGRAMME ON KNOWLEDGE  
REGARDING ORAL ROTAVIRUS VACCINATION AMONG MOTHERS OF  
INFANTS**

**Mr. Alpit Gandhi <sup>1\*</sup>, Dr. J.K.Rajan <sup>2\*</sup>**

1\*- Ph.D. Nursing Research Scholar, 2\*- Guide, Malwanchal University, Indore M.P.

**ABSTRACT**

The purpose of the study was to assess the effectiveness of Educational programme regarding Oral Rota virus vaccination among mothers of infants. A quantitative research approach with pre experimental, one group pre test and post test research design was adopted. Purposive sampling technique was used. The instruments use for data collection was self structured knowledge questionnaire to assess knowledge mothers of infants regarding rota virus vaccination. and demographic variables. The finding of the study indicated that there was a significant association between knowledge and demographic variables at 0.05 levels and after implementation of educational programme knowledge had increased. The finding revealed that the educational programme effective on improving knowledge on mothers of infants, regarding rota virus vaccination.

## **INTRODUCTION**

Children of today are the citizens of tomorrow. According to the world population statistics, over 40% of the population is constituted of the children population.

Parents play a primary role in health of their children. In particular parent's involvement in planning and promoting immunization campaigns is critical to successful efforts. Parents serve as their children's primary educators of health issues.

Among all relationships in this world, a mother and child's relationship is the most beautiful. A child's development encompasses many aspects including the physical social, emotional and cognitive/mental. In order for children to develop in all aspects, they must be supported in all areas and the one person most often responsible for this encouragement is the mother. Mothers tend to be the primary caregiver in both traditional and single parent families and thus are with their children more than anyone else. Mothers, therefore, are in the unique position of influencing their children's growth in all areas of development, beginning with the bonding and attachments that they usually develop with their children.

Babies are born with protection against certain diseases because antibodies from the mother were passed to them through the placenta. After birth, breastfed babies get the continued benefits of additional antibodies in breast milk. But in both cases, the protection is temporary. Immunization (vaccination) is a way of creating immunity to certain diseases by using small amounts of a killed or weakened microorganism that causes the particular disease. Vaccines stimulate the immune system to react as if there were a real infection — it fends off the "infection" and remembers the organism so that it can fight it quickly should it enter the body later. Some parents may hesitate to have their kids vaccinated because they're worried that the children will have serious reactions or may get the illness the vaccine is supposed to prevent. Because the components of vaccines are weakened or killed and in some cases, only parts of the microorganism are used they're unlikely to cause any serious illness. The risks of vaccinations are small compared with the health risks associated with the diseases they're intended to prevent.

**New Delhi, January 24, 2018**—PATH applauds Indian vaccine manufacturer Bharat Biotech for receiving prequalification from the World Health Organization (WHO) for their oral rotavirus vaccine, ROTAVAC. As a partner in the development of ROTAVAC, PATH worked with the Indian Department of Biotechnology, the Society for Applied Studies, and Bharat Biotech on the clinical trials that demonstrated the safety and efficacy of the vaccine. “PATH enthusiastically welcomes Bharat Biotech’s news about reaching this exciting and important milestone for ROTAVAC. As a longstanding partner in the development of the vaccine since 2001, we know that achieving WHO prequalification of ROTAVAC brings us even closer to meeting the critical public health goal of improving the supply of affordable rotavirus vaccines worldwide,” said Dr. Fred Cassels, global head of Enteric and Diarrheal Diseases at PATH’s Center for Vaccine Innovation and Access. Rotavirus is the most common cause of severe diarrheal disease in children worldwide, and vaccination is the best way to prevent severe rotavirus illness. According to a recent study, 37 percent of the 578,000 childhood diarrheal deaths in 2013 were due to rotavirus, for a total of 215,000 rotavirus deaths globally. More than 90 percent of these deaths occurred in low-resource countries.

## **OBJECTIVES**

- To determine the level of knowledge score regarding oral rota virus vaccination among mothers of infants as measured by structured knowledge questionnaire.
- To assess the effectiveness of Educational Programme on knowledge regarding oral rota virus vaccination among mothers of infants
- To find out the association between pre-test knowledge score of mothers of infants regarding oral rota virus vaccination and selected demographic variables.

## **HYPOTHESIS**

The hypotheses will be tested at 0.05 level of significance.

- H<sub>1</sub>: There will be a significant difference in mean pre-test and post test knowledge score of mothers of infants regarding oral rota virus vaccination.
- H<sub>2</sub>: There will be significant association between mean pre -test knowledge score of mothers of infants regarding oral rota virus vaccination and their selected demographic variables.

## **METHODS AND MATERIAL**

An extensive review of literature was undertaken. The conceptual framework based on Pander's health promotion model. An experimental research approach was used to assess the knowledge on mothers of infants regarding rota virus vaccination. A pre-experimental research design was considered appropriate for the study "to assess the effectiveness of Educational programme on rotavirus vaccination. Pre-experimental research design was used in the Study. In order to measure the content validity of the tool, the questionnaire schedule was given to the 9 experts from the field of child health nursing & community health Nursing. The tool was found reliability of tool was calculated with split half method and found 0.89 for knowledge which is statically reliable for the present study.

## **STATICAL ANALYSIS**

For descriptive statistics, frequency and percent were used to describe the mothers of infant's characteristics, as well as the study variables. Means and standard deviations were used to describe knowledge of the mothers of infants regarding rotavirus vaccination test to find effectiveness of educational programme and association between pre test knowledge with selected demographic variables regarding Rotavirus vaccination. Chi square test was used to at p- value <0.05.

## **RESULT**

The data for study was calculated in the month of December 2019 collection was analyzed by using descriptive & inferential statistics. The analysis depicted that majority of the mothers of infants (71%) belonged to the age group of 18-21 years. Regarding the Educational status of majority of the mothers of infants (61%) had pass up to middle school. Majority of the respondent (83%) were Hindu, Majority respondent (62%) monthly family income Rs. 5001-10000/- Regarding the Nutritional status 59% of mothers of infants are non vegetarian.

### **Frequencies and percentage distribution of pre test knowledge score**

S	Post Test Score	F	%
1	Poor (0-10)	91	45.5%
2	Average(11-20)	82	41%

3	Good (21-30)	27	13.5%
Pre test mean score		21.84	
Standard deviation		5.29	

**Frequency and percentage distribution of post test knowledge score**

S	Post Test Score	f	%
1	Poor (0-10)	09	4.5%
2	Average(11-20)	69	34.5%
3	Good (21-30)	122	61%
Post test mean score		27.02	
Standard deviation		7.21	

**The effectiveness of educational programme on rotavirus vaccination**

Educational programme for mothers of infant regarding **rotavirus vaccination t test value ItI=21.03**. Tabulated value of t test at 0.05% level of significance & 5 degree of freedom is **Tabulated t value t=2.015**.

t calculated > t tabulated .that means educational programme was effective.

**Association between pre test knowledge score with selected demographic variable** age, education status, nutritional status and type of family are associated with demographic variables at 0.05 level of significance.

**DISCUSSION**

This study was conducted to examine the mothers of infants knowledge regarding rotavirus vaccination. The current study findings indicates that majority of the mothers of infants need improve their knowledge regarding rotavirus vaccination As the prevention is better than cure rotavirus vaccine can prevent infants for dysentery and diarrhea . that also helpful to reduce infant maternal mortality and morbidity rate.

## **CONCLUSION**

Rotavirus vaccines have been shown to dramatically reduce severe rotavirus disease caused by homotypic and heterotypic vaccine strains in a range of socioeconomic settings the potential impact has not been fully realized as rotavirus vaccines have been universally introduced into national immunization programs Improving and promoting the health & wealthy infant life mothers need to know more about rotavirus vaccination

## **REFERENCES**

1. WHO position paper – January 2013. *Wkly Epidemiol. Rec.* 2013;88(5):49–64.
2. PATH. Country introductions of rotavirus vaccines.
3. WHO. Immunization coverage. [www.who.int/mediacentre/factsheets](http://www.who.int/mediacentre/factsheets).
4. Elam-Evans LD, Yankey D, Singleton JA, Kolasa M Centers for Disease C, Prevention. National, state, and selected local area vaccination coverage among children aged 19–35 months – United States, 2013. *MMWR Morb. Mortal Wkly Rep.* 2014;63(34):741–748.
5. De Oliveira LH, Danovaro-Holliday MC, Matus CR, Andrus JK. Rotavirus vaccine introduction in the Americas: progress and lessons learned. *Expert Rev. Vaccines.* 2008;7(3):345–353.
6. De Oliveira LH, Danovaro-Holliday MC, Sanwogou NJ, Ruiz-Matus C, Tambini G, Andrus JK. Progress in the introduction of the rotavirus vaccine in Latin America and the Caribbean: four years of accumulated experience. *Pediatr. Infect. Dis. J.* 2011;30
7. WHO. Reported Estimate of Coverage. <http://apps.who.int/immunization>.
8. Patel MM, Clark AD, Sanderson CF, Tate J, Parashar UD. Removing the age restrictions for rotavirus vaccination: a benefit–risk modeling analysis. *PLoS Med.* 2012;9(10):e1001330.