

Pentavalent Vaccine among Mothers of Under Five Children

Pooja Gubare

Datta Meghe Institute of Medical Sciences Deemed to be University

Abstract: To assess the effectiveness of self - instructional module on knowledge regarding pentavalent vaccine among mothers of under five children was carried out for the partial fulfillment of the requirement for the award of Master of Nursing at Datta Meghe Institute of Medical Science, Nagpur.

Keywords: pentavalent vaccine, mothers' knowledge, under - five children, self - instructional module, nursing education

1. Introduction

“Knowing is not enough; we must apply, willing is not enough; we must do.”

- Bruce Lee

A pentavalent vaccine is a combined vaccine with five individual vaccines conjugated into one, intended to actively protect people from 5 potentially deadly diseases. The main example is a vaccine that protects against Haemophilus Influenza type B (a bacterium that cause meningitis, pneumonia and otitis), whooping cough, tetanus, hepatitis B, and diphtheria.¹

The Government of India has decided to introduce pentavalent vaccine in the national immunization programme in selected states. Pentavalent vaccine provides protection to a child from 5 life - threatening diseases – Diphtheria, Pertussis, Tetanus, Hepatitis B and Hib. DPT (Diphtheria+Pertussis+Tetanus) and Hep B are already part of routine immunization in India; Hib vaccine is a new addition. Together, the combination is called Pentavalent. Hib vaccine can prevent serious diseases caused by Haemophilus influenzae type b like pneumonia, meningitis, bacteremia, epiglottitis, septic arthritis etc. Giving pentavalent vaccine reduces the number of pricks to a child, and provides protection from all five diseases.²

2. Need of the Study

Today child health is viewed as a holistic and positive component for total development, and health is essential for high quality of life for children. Children's physical size and developmental level results in unique responses to illness and technological challenges. It is a challenging task for medical and nursing team involved in the care of children.³

Immunization is one of the most successful and effective health intervention. The development and administration of immunizations are among greatest achievements of the 20th century and their positive impact on disease prevention. Hundreds of millions of case of illness and deaths have been prevented to provide this protection, the current centres for disease control and prevention schedule recommends immunization.⁴

3. Review of Literature

A descriptive study was conducted to explore the maternal response to addition of Hib vaccine to primary schedule.23 mothers of babies aged 1 - 2 years were interviewed. Acceptability of vaccine was principally attributable to maternal perception. Barriers to the uptakes of the vaccine include suspicion regarding newness of the vaccine a fear of vaccine overload in such young babies and the distress of injections.⁵

A descriptive study was conducted in England to explore the parental decision - making about the 'five in one' vaccine. Semi - structured interviews were conducted with 22 parents if babies aged between 4 and 13 weeks old. Although parents had concerns, most of them complained with the recommended programme rather than making an informed decision. This study implies there is need for more clear information regarding the combined vaccinations.⁶

Objectives

- 1) To assess the existing knowledge regarding pentavalent vaccine among mothers of under five children.
- 2) To evaluate the effectiveness of self - instructional module on knowledge regarding pentavalent vaccine among mothers of under five children.
- 3) To find out the association between knowledge score with selected demographic variables of mothers of under five children.

4. Material and Methods

- 1) **Research Approach:** Interventional approach
- 2) **Research Design:** The research design is One Group Pre Test Post Test Design
- 3) **Setting of the Study:** This study was conducted in selected area of Wardha.
- 4) **Sample:** Mothers of under five children.
- 5) **Sampling Technique:** Samples will be selected by Non - probability convenient sampling technique.
- 6) **Sample Size:** Sample size for this study is 60.
- 7) **Tool:** Structured knowledge questionnaires including demographic variables and self- instructional module was used for the study.

Sampling Criteria**Inclusion Criteria:**

- Mothers who are present during the time of data collection.
- Those who are able to read, write and understand Marathi or English

Exclusion Criteria:

- Mothers who are not willing to participate in the study.
- Mothers who have attended similar type of programme within 3 years

5. Result

This section deals with the Percentage wise distribution of mothers of under five children according to their demographic variables

- Distribution of sample according to their age in years shows that 13 (21.66%) of them were belonging to the age of 20 - 24 years, 23 (38.33%) in the age group of 25 - 29 years, 20 (33.33%) belonging to the age group of 30 - 34 years and remaining 04 (6.67%) in the age group of 35 and above years respectively.
- Distribution of the sample with regards to their Number of children reveals that 18 (30%) of them have one child, 40 (66.67%) have two children, 02 (3.33%) have three children and remaining 00 (0%) in the more than three objectives respectively.
- Distribution of sample with regards to their religion of mother reveals that 28 (46.67%) of them were hindu, 17 (28.33%) were muslim, 00 (00%) of them were Christian, 13 (21.67%) of them were buddhisht, 01 (1.67%) of them were sikh, 01 (1.67%) of them were others respectively.
- Distribution of sample with regards to their type of family reveals that 26 (43.33%) were having nuclear family, 22 (36.67%) were have joint family and 12 (20%) of them were extended family respectively.
- Distribution of sample with regards to their educational status reveals that 11 (18.33%) of them were educated up to primary education, 21 (35%) were up to secondary education, 22 (36.67%) were up to higher secondary education and 06 (10%) were graduates.
- Distribution of sample with regards to their mother's occupational status shows that 22 (36.67%) of them were house wives, 26 (43.33%) were on daily wages, 01 (1.67%) of them were government employee, 03 (5%) of them were private employee, 08 (13.33%) of them were self - employee respectively.
- Distribution of sample according to their income of family shows that 08 (13.33%) were having Rs. <5000, 34 (56.67%) were having Rs.5001 - 10000, 13 (21.67%) were having Rs.10001 - 15000 and 05 (8.33%) were having Rs.15000 – above respectively.
- Distribution of sample according to their sources of information shows that 07 (11.67%) were have information from mass media, 29 (48.33%) were having information from health workers, 08 (13.33%) were having information from books and 16 (26.67%) had knowledge from books.
- The pretest reveals that (20%) of sample were had poor level of knowledge score, (60%) of them had average

level of knowledge score, (18.33%) is good level of knowledge score, (1.67%) had very good level of knowledge score and 0 (0%) is excellent level of knowledge. The minimum score was 0 and the maximum score was 13, the mean score was 6.25 ± 2.634 with a mean percentage score of 31.25%.

- The post test score reveals that (5%) of sample were had poor level of knowledge score, (26.67%) of them had Average level of knowledge score, (45%) of them had good level of knowledge score, (10%) of them had very good level of knowledge score and (13.33%) of them had excellent level of knowledge. The minimum score was 2 and the maximum score was 20, the mean score was 10.43 ± 4.362 with a mean percentage score of 52.15%.

6. Conclusion

In this study from detail analysis, it shows that of post test mean score is 10.43 and pretest mean score is 6.25. The hypothesis is tested statistically with distribution of pre test and post test mean, standard deviation and mean difference. There is no significant association difference between demographic variables.

References

- [1] "Immunisation and Pentavalent Vaccine". UNICEF.
- [2] www.searo.who.int/immunization/Pentavalent_vaccine_Guide_for_HWs_with_ans
- [3] Studies show swift impact of rotavirus. [online]. Available from: URL: <http://www.e/biruniblogspot.com/blogspot.com/2011/01/>
- [4] Banker DD. Rotavirus infection among children in Bombay. Indian J Med Sci 1993 Feb; 47 (2): 27 - 33.
- [5] Harrington. P. M, Woodma. C, Shannon. W. F; "Vaccine, Yes: Injection, No: Maternal responses to introduction of Hib vaccine". British Journal of general practice; Nov.49 (448); 1999. Pp: 401 - 2.
- [6] Sultana. A, Jahan. s, Ahmad. I; "Knowledge attitude and practice of Immunization"; Pak Armed Forces Med J; Dec.51 (2); 2001. Pp: 177