A STUDY TO COMPARE PRE AND POST-TEST ATTITUDE REGARDING IMMUNIZATION AMONG THE MOTHERS OF UNDER FIVE CHILDREN IN A SELECTED AREA AT BAGALKOT

Mr. Ramesh Kamalappanawar*| Dr. Bimla Rani| Dr. Susheel Kumar V Ronad*****

**Research Scholar, Himalayan University, Itanagar, Arunachal Pradesh, India.*
***Research Supervisor, Himalayan University, Itanagar, Arunachal Pradesh, India.*
****Co-Supervisor, Himalayan University, Itanagar, Arunachal Pradesh, India.*

DOI: http://doi.org/10.47211/idcij.2022.v09i04.015

ABSTRACT

Vaccination is the administration of a vaccine to help the body produce immunity against a disease. Most vaccine hesitancy research has been conducted in high-income countries. Still, the prevalence of factors related to vaccine hesitancy can be understood only if surveys are conducted irrespective of the country's level of economic development. The SAGE working group has also mentioned that the scope of vaccine hesitancy will not consider external factors like vaccine accessibility (lack of public health policies and finances), vaccine stock-out issues, and cold chain readiness. A quantitative, research strategy was used for the current study. A pre-experimental research design, a specific type of quasi-experimental design was used. The study was conducted in a selected area at Bagalkot. In this study, the sample will be selected through the Convenience sampling technique. The sample size selected was 100. The calculated chi-square value (188.842) is greater than the critical chi-square value (9.488). Therefore, we reject the null hypothesis and conclude that there is a significant association between pre and post-test attitudes among the mothers of children under five regarding immunization. This indicates that the educational intervention or program had an impact on changing the attitudes of the participants towards immunization. The shift in attitudes can be attributed to the intervention, suggesting its effectiveness in influencing positive changes in attitude.

KEYWORDS: *Vaccination, immunity, hesitancy.*

ABOUT AUTHORS:

Author Mr. Ramesh Kamalappanawar is a Research Scholar in Himalayan University at Itanagar in Arunachal Pradesh, India.

Author Dr. Bimla Rani is a Research Supervisor at Himalayan University in Itanagar, Arunachal Pradesh, India. She has presented papers in various conferences and also has many publications to her name.

Author Dr. Susheel Kumar V Ronad is Co-Supervisor, Himalayan University, Itanagar, Arunachal Pradesh, India. He has published articles in various national and International Journals. He has organized and participated in webinars, seminars and conferences.

INTRODUCTION

Immunization is unquestionably one of the most indispensable public health interventions to reduce major illnesses that lead to child mortality and morbidity. (Mahalingam S et al 2014). The extermination, elimination, and considerable minimization of childhood vaccine- preventable diseases (VPDs), as well as the extension of life expectancy in many countries, are important outputs of immunization achievement. (Yu H, et al 2016)

Globally, it is estimated that around 22.6 million infants were partially protected. In 2016,routine immunization services such as the DTP3 vaccine did not reach about 19.5 million children under 1 year of age worldwide. About 70% of these children live in 10 countries, and more than 50% live in Africa including Ethiopia, Kenya, and South Africa. (Yenit MK et al 2015)

Previous studies carried out worldwide showed that the death of children is more common in underdeveloped countries. Among 9 million deaths of children worldwide as a result of VPDs, a higher proportion happened in sub-Saharan Africa, which was 4.4 million, from this about 472,000 children passed away every year before their fifth birthday largely from VPDs in Ethiopia. (Berhane Y 2008), (WHO2009) Various reports revealed that VPDs are still responsible for about one-fourth of deaths occurring annually among children less than 5 years of age. Thus, VPDs put a significant economic and social crisis among individuals, families, and communities as a whole. Children who are exposed to these preventable diseases usually suffer from numerous growth and developmental squeals. (Sharma S et al 2016)

Vaccinating the children is a cost-effective method to prevent communicable diseases and improve the survival of children. Government is implementing different strategies for full coverage of immunization. In Chandigarh, the status of immunization coverage among children of the nonmigratory population showed that most of the children (73%) were partially immunized, 23% were fully immunized, and only 3% were not immunized, whereas among the migratory population, most of the children (91%) were partially immunized, only 3% were fully immunized, and 6% were unimmunized.[.Sharma V et al 2015] To improve immunization coverage, it is important to study the knowledge and attitude of people regarding vaccination. Hence, the present study was conducted with the objective to assess knowledge, attitude, and practices regarding vaccination among women having under-5 children.

TITLE

A STUDY TO COMPARE PRE AND POST-TEST ATTITUDE REGARDING IMMUNIZATION AMONG THE MOTHERS OF UNDER FIVE CHILDREN IN A SELECTED AREA.

OBJECTIVE

To compare pre and post-test attitude regarding immunization among the mothers of under five children.

REVIEW OF LITERATURE

Rubleen Kaur et al, 2021conducted a study on Knowledge, attitude, and practice of mothers regarding immunization. The result shows that women in the age range of 21–35 years with a mean age of 25.95 ± 10.29 years. Nearly half of them studied up to middle (22.5%) or high school (27.5%). Most of them (85.3%) were homemakers and their monthly per capita income ranged from Rs. 3000 to 6000 with a mean of Rs. 4375 ± 2224.71. Male children (54.3%) outnumbered females (45 7%). Age of children ranged from 0 to 1 year (20.8%), 1–2 years (21%–4%), 2–3 years (21.9%), 3–4 years (21.9%), and 4–5 years (9.9%).

Vikas Sharma et al conducted a study on Provider's and User's Perspective on Immunization Coverage among Migratory and Non-migratory Populations in Slums and Construction Sites of Chandigarh. Among children, 23 % were fully immunized, 73 % were partially immunized and 3 % were unimmunized in the non-migratory population whereas 3 % were fully immunized, 91 % were partially immunized and 6 % were unimmunized in the migratory population. Among mothers, 43 and 39 % were fully immunized, 13 and 15 % were partially immunized and 43 and 46 % were unimmunized in non-migratory and migratory populations, respectively.

Matta, P *et al. 2020 conducted a study on* Parents' knowledge, attitude, and practice towards children's vaccination in Lebanon: role of the parent-physician communication The response rate was 79.5%. The results of the multivariable analysis showed that better patient-physician communication was significantly associated with higher knowledge, better attitude, and practice. Better knowledge was significantly associated with a better attitude, whereas better knowledge and attitude were significantly associated with better practice.

Ali AHM et al 2020 conducted a study on Immunisation of children under 5 years: mothers' knowledge, attitude and practice in Alseir locality, Northern State, Sudan The result shows that the mean knowledge score about the names of vaccines/diseases prevented was 3.47 out of 10. The most correctly named vaccines by the mothers were measles (87.4%) and polio (86.6%), whereas the least ones were hepatitis (7.1%) and diphtheria (8.7%). The majority (99.2%) of the mothers had a positive attitude. The mean knowledge score about the timing of doses was 4.12 out of 5. The most correctly timed dose by the mothers was the dose at 6 weeks 'dose 1' (96.1%) and the least one was the dose at birth 'dose 0' (60.6%). About half (48.7%) of the children were completely immunised, 46% were only missing their 'dose 0', mostly because of closed vaccination units on the day of birth

(73.6%), and 5.3% were incompletely immunised. Hospital delivery, availability of vaccination card and good socioeconomic status were associated with complete immunisation status, with *p*-values equal to 0.00, 0.00 and 0.03, respectively.

METHODOLOGY

A quantitative, research strategy was used for the current study. A pre-experimental research design, a specific type of quasi-experimental design was used. The study was conducted in a selected area at Bagalkot. In this study, the sample will be selected through the Convenience sampling technique. The sample size selected was 100.

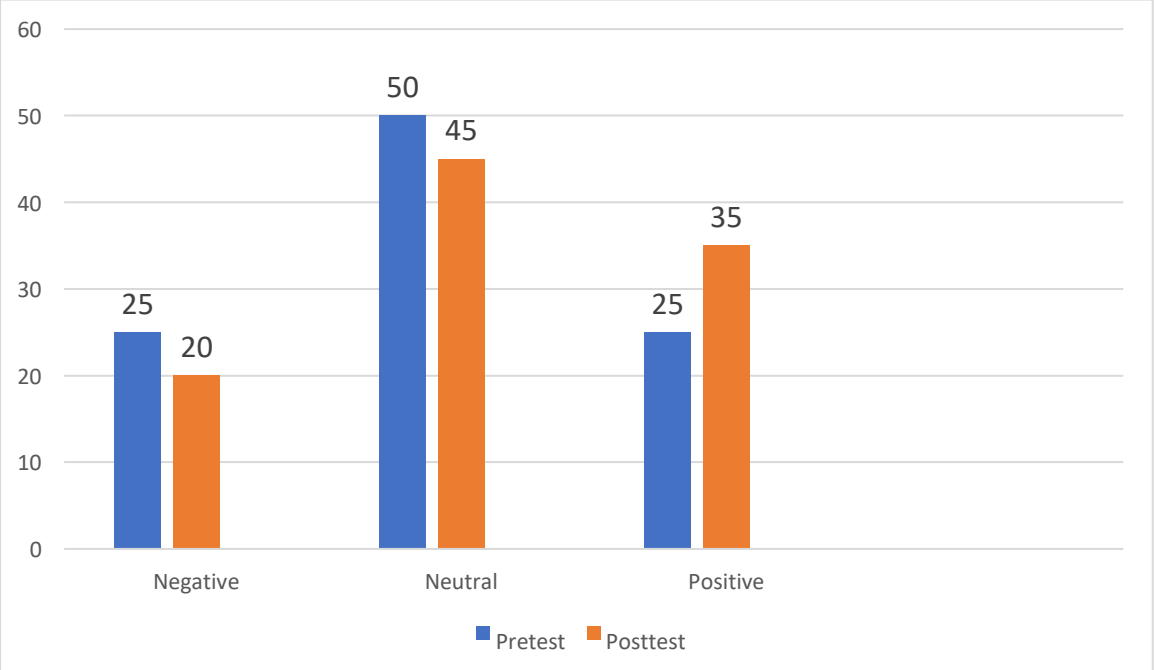
RESULTS

The calculated chi-square value (188.842) is greater than the critical chi-square value (9.488). Therefore, we reject the null hypothesis and conclude that there is a significant association between pre and post-test attitudes among the mothers of children under five regarding immunization. This indicates that the educational intervention or program had an impact on changing the attitudes of the participants towards immunization. The shift in attitudes can be attributed to the intervention, suggesting its effectiveness in influencing positive changes in attitude.

Table representing the contingency table for pre and post-test attitudes:

	Pre-test	Post-test
Negative	25	20
Neutral	50	45
Positive	25	35

Graph representing the contingency for pre and post-test attitudes:



REFERENCES

1. Mahalingam S, Soori A, Ram P, Achappa B, Chowta M, Madi D. Knowledge, attitude and perceptions of mothers with children under five years of age about vaccination in Mangalore, India. *Asian J Med Sci*. 2014;5(4):52–57. doi:10.3126/ajms.v5i4.10306
2. Yu H, Luo S, Lou L, Zhang B, Li Q. Knowledge, attitude and practice on immunization among migrant mothers: a questionnaire development and field application. *Int J Vaccine Immunization*. 2016;2(1). doi:10.16966/2470-9948.106
3. Yenit MK, Assegid S, Abrha H. Factors associated with incomplete childhood vaccination among children 12–23 months of age in Machakel Woreda, East Gojjam Zone: a case-control Study. *J Pregnancy and Child Health*. 2015;2(4). doi:10.4172/2376-127X.1000180
4. Berhane Y. Universal childhood immunization: a realistic yet not achieved goal. *Ethiop J Health Dev*. 2008;22(2):146–147.
5. Sharma S, Kohli C, Sharma N, Mehra D. Incomplete immunization coverage in Delhi: reasons and Solutions. *Prim Health Care*. 2016;6(4). doi:10.4172/2167-1079.1000240
6. Kaur R, Jassal D, Sharma N, Kaur K, Kaur S, Thakur M, Saini SK, Gupta M, Sharma A. Knowledge, attitude, and practice of mothers regarding immunization. Indian J Pharmacol. 2021 Jul-Aug;53(4):336-338. doi: 10.4103/ijp.IJP_486_18. PMID: 34414916; PMCID: PMC8411957.
7. Sharma V, Singh A, Sharma V. Provider's and user's perspective about immunization coverage among migratory and non-migratory population in slums and construction sites of Chandigarh. J Urban Health. 2015 Apr;92(2):304-12. doi: 10.1007/s11524-015- 9939-2. PMID: 25690459; PMCID: PMC4411318.
8. Matta, P., El Mouallem, R., Akel, M. *et al.* Parents' knowledge, attitude and practice towards children's vaccination in Lebanon: role of the parent-physician communication. *BMC Public Health* 20, 1439 (2020). https://doi.org/10.1186/s12889-020-09526-3.
9. Ali AHM, Abdullah MA, Saad FM, Mohamed HAA. Immunisation of children under 5 years: mothers' knowledge, attitude and practice in Alseir locality, Northern State, Sudan. Sudan J Pediatric. 2020;20(2):152-162. doi: 10.24911/SJP.106-1586870453. PMID: 32817736; PMCID: PMC7423313.