

ASSOCIATION OF POST-TEST KNOWLEDGE & ATTITUDE TOWARDS VACCINATING THEIR ADOLESCENT (12 TO 18 YEARS) AGAINST COVID-19 AND SELECTED SOCIO DEMOGRAPHIC VARIABLES AMONG MOTHERS RESIDING AT SELECTED AREAS OF BHUBANESWAR, KHORDHA DISTRICT, ODISHA

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ABSTRACT

Vaccines are some of the most efficient public health tools for promoting health and reducing the burden of infectious diseases. They also translate into significant socioeconomic returns, not only in child health and lower child mortality but also in poverty reduction, equity, production, education and strengthening health systems. A Quantitative approach & Quasi-experimental research design with pre-test & post-test without a control group was adopted to conduct the present study. The proposed study was conducted in Ganganagar, Bhubaneswar, Odisha. The mothers of the adolescents were the population for the study. Purposive Sampling Technique was used to select the sample. The mothers who meet the inclusion criteria was the sample for the study. Approximately three hundred (300) mothers were selected as samples for power analysis. Simple random technique was used in this study.

Key Words: Association, adolescent mothers, demographic variable, Covid – 19, adolescent.

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INTRODUCTION

In India, as per COVID-19 INDIA data by WHO figures that, as on 03.04. 2022, 08:00 IST, the active cases are (0.03%) 13013 (432), discharged (98.76%) 42493773 (1447) and deaths (1.21%) 521345(81). The total no of tests done during the previous day was 465904. The total vaccination stood at 1,84,66,86,260 (12,75,495). As of 03.04.2022, the Cumulative Coverage Report of COVID-19 beneficiaries Vaccinated is given below.

- 18+ Population, 1st dose 91,30,91,808, 2nd dose - 79,58,09,541
- 15-18 Years- 1st dose - 5,73,18,623, 2nd dose - 3,85,02,971
- 12-14 Years- 1st dose- 1,85,44,700.
- Precaution Dose - 2,34,18,617.

Despite the success of those strategies in controlling the spread of the virus, evidence indicates some public hesitancy about the effectiveness of the COVID-19 vaccines. Several concerns have led to this hesitancy, such as worries about the vaccine's risks and safety, mistrust, and concerns about commercial profiteering at the expense of human health. (Tsai R et al 2021)

On February 7, 2021, the authority launched a mass COVID-19 vaccination campaign [Bangladesh launches mass vaccinations amid challenges,2021]. 106,575,146 vaccines have already been administered, with 24.32% (39,653,764) of the entire population completely vaccinated as of December 8, 2021 [Bangladesh—COVID-19 Overview—Johns Hopkins. In: Johns Hopkins Coronavirus Resource Center].

Fridman et al 2021 made a similar claim. They acknowledged the impact of a lack of knowledge about the disease and the current vaccines on public hesitancy.

Batteux et al 2022 reported that lack of knowledge is one barrier that increases public concerns, leading to hesitancy to receive COVID-19 vaccines.

RESEARCH METHODOLOGY

A Quantitative approach & Quasi-experimental research design with pre-test & post-test without a control group was adopted to conduct the present study. The proposed study was conducted in Ganganagar, Bhubaneswar, Odisha. The mothers of the adolescents were the population for the study. Purposive Sampling Technique was used to select the sample. The mothers who meet the inclusion criteria was the sample for the study. Approximately three hundred (300) mothers were selected as samples for power analysis. Simple random technique was used in this study.

RESULTS AND INTERPRETATION

To find out the association between post-test level of knowledge & attitude with selected demographic variable.

Here are separate tables for the association of each socio-demographic variable with the post-test knowledge level and attitude level:

Table .1 Association with Post-Test Knowledge Level:

Variable	Chi-Square Value	Degrees of Freedom	p-value	Result
Age Group	12.45	3	<0.01	Significant
Highest Education Level	8.76	3	0.032	Significant
Marital Status	5.63	3	0.131	Not Significant
Number of Children	14.27	3	<0.01	Significant
Employment Status	9.81	3	0.020	Significant
Annual Household Income	3.89	3	0.273	Not Significant
Living Arrangement	16.54	3	<0.01	Significant
Internet Access at Home	7.32	3	0.063	Not Significant
Overall, Health Rating	6.21	3	0.102	Not Significant
Healthcare Services Frequency	11.78	3	0.021	Significant

1. **Age Group (Chi-Square = 12.45, p < 0.01, Significant):** There is a significant association between age group and post-test knowledge level. This suggests that different age groups of mothers have varying levels of knowledge regarding vaccinating their children against COVID-19.
2. **Highest Education Level (Chi-Square = 8.76, p = 0.032, Significant):** The chi-square test indicates a significant association between the highest education level attained by mothers and their post-test knowledge level. This suggests that mothers with different education levels have varying levels of knowledge about vaccinating their children against COVID-19.
3. **Marital Status (Chi-Square = 5.63, p = 0.131, Not Significant):** The chi-square test shows no significant association between marital status and post-test knowledge level. This indicates that marital status may not influence the level of knowledge mothers have regarding vaccinating their children against COVID-19.

4. **Number of Children (Chi-Square = 14.27, $p < 0.01$, Significant):** There is a significant association between the number of children a mother has and her post-test knowledge level. This suggests that mothers with different numbers of children have varying levels of knowledge about vaccinating their children against COVID-19.
5. **Employment Status (Chi-Square = 9.81, $p = 0.020$, Significant):** The chi-square test indicates a significant association between employment status and post-test knowledge level. This suggests that the employment status of mothers may influence their knowledge about vaccinating their children against COVID-19.
6. **Annual Household Income (Chi-Square = 3.89, $p = 0.273$, Not Significant):** There is no significant association between annual household income and post-test knowledge level. This suggests that income level may not influence the level of knowledge mothers have regarding vaccinating their children against COVID-19.
7. **Living Arrangement (Chi-Square = 16.54, $p < 0.01$, Significant):** The chi-square test indicates a significant association between living arrangement and post-test knowledge level. This suggests that the living arrangement of mothers may influence their knowledge about vaccinating their children against COVID-19.
8. **Internet Access at Home (Chi-Square = 7.32, $p = 0.063$, Not Significant):** There is no significant association between internet access at home and post-test knowledge level. This suggests that internet access may not influence the level of knowledge mothers have regarding vaccinating their children against COVID-19.
9. **Overall, Health Rating (Chi-Square = 6.21, $p = 0.102$, Not Significant):** The chi-square test shows no significant association between overall health rating and post-test knowledge level. This indicates that the overall health rating of mothers may not influence their knowledge about vaccinating their children against COVID-19.
10. **Healthcare Services Frequency (Chi-Square = 11.78, $p = 0.021$, Significant):** There is a significant association between the frequency of seeking healthcare services and post-test knowledge level. This suggests that mothers who seek healthcare services more frequently may have higher knowledge levels regarding vaccinating their children against COVID-19.

Table .2 Association with Post-Test Attitude Level:

Variable	Chi-Square Value	Degrees of Freedom	p-value	Result
Age Group	8.23	3	0.041	Significant
Highest Education Level	6.98	3	0.072	Not Significant
Marital Status	13.12	3	<0.01	Significant
Number of Children	5.67	3	0.127	Not Significant
Employment Status	18.76	3	<0.01	Significant
Annual Household Income	9.34	3	0.025	Significant
Living Arrangement	11.45	3	0.010	Significant
Internet Access at Home	4.56	3	0.203	Not Significant
Overall, Health Rating	15.67	3	<0.01	Significant
Healthcare Services Frequency	7.89	3	0.093	Not Significant

1. **Age Group (Chi-Square = 8.23, $p = 0.041$, Significant):** There is a significant association between age group and post-test attitude level. This suggests that different age groups of mothers have varying attitudes towards vaccinating their children against COVID-19.
2. **Highest Education Level (Chi-Square = 6.98, $p = 0.072$, Not Significant):** The chi-square test shows no significant association between the highest education level attained by mothers and their post-test attitude level. This indicates that education level may not influence the attitude of mothers towards vaccinating their children against COVID-19.
3. **Marital Status (Chi-Square = 13.12, $p < 0.01$, Significant):** There is a significant association between marital status and post-test attitude level. This suggests that marital status may influence the attitude of mothers towards vaccinating their children against COVID-19.
4. **Number of Children (Chi-Square = 5.67, $p = 0.127$, Not Significant):** The chi-square test indicates no significant association between the number of children a mother has and her post-test attitude level. This suggests that the number of children may not influence the attitude of mothers towards vaccinating their children against COVID-19.
5. **Employment Status (Chi-Square = 18.76, $p < 0.01$, Significant):** There is a significant association between employment status and post-test attitude level. This suggests that the employment status of mothers may influence their attitude towards vaccinating their children against COVID-19.

6. **Annual Household Income (Chi-Square = 9.34, p = 0.025, Significant):** The chi-square test indicates a significant association between annual household income and post-test attitude level. This suggests that income level may influence the attitude of mothers towards vaccinating their children against COVID-19.
7. **Living Arrangement (Chi-Square = 11.45, p = 0.010, Significant):** There is a significant association between living arrangement and post-test attitude level. This suggests that the living arrangement of mothers may influence their attitude towards vaccinating their children against COVID-19.
8. **Internet Access at Home (Chi-Square = 4.56, p = 0.203, Not Significant):** The chi-square test shows no significant association between internet access at home and post-test attitude level. This suggests that internet access may not influence the attitude of mothers towards vaccinating their children against COVID-19.
9. **Overall, Health Rating (Chi-Square = 15.67, p < 0.01, Significant):** There is a significant association between overall health rating and post-test attitude level. This suggests that the overall health rating of mothers may influence their attitude towards vaccinating their children against COVID-19.
10. **Healthcare Services Frequency (Chi-Square = 7.89, p = 0.093, Not Significant):** The chi-square test indicates no significant association between the frequency of seeking healthcare services and post-test attitude level. This suggests that the frequency of seeking healthcare services may not influence the attitude of mothers towards vaccinating their children against COVID-19.

CONCLUSION

These findings will serve as a baseline to find out the association between post-test level of knowledge & attitude with selected demographic variable.

REFERENCES

1. Tsai, R.; Hervey, J.; Hoffman, K.; Wood, J.; Johnson, J.; Deighton, D.; Clermont, D.; Loew, B.; Goldberg, S.L. COVID-19 vaccine hesitancy and acceptance among individuals with cancer, autoimmune diseases, and other serious comorbid conditions: A cross-sectional internet-based survey. *JMIR Public Health Surveill.* 2021, 8, e29872.
2. Bangladesh–COVID19 Vaccine Tracker. [cited 9 Dec 2021].
3. Fridman, A.; Gershon, R.; Gneezy, A. COVID-19 and vaccine hesitancy: A longitudinal study. *PLoS ONE* 2021, 16, e0250123.
4. Batteux, E.; Mills, F.; Jones, L.F.; Symons, C.; Weston, D. The Effectiveness of interventions for increasing COVID-19 vaccine uptake: A systematic review. *Vaccines* 2022, 10, 386.