

A Study To Assess The Knowledge Regarding Optional Vaccines And Its Purpose Among Mothers Of Under Five Children In Selected Community Area At Hassan

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Abstract

Background: Even thinking about your infant receiving so many painful shots may make you anxious as a mother. Your baby will have a healthy future with just a little discomfort and recovery. Keeping the child healthy and free from infections is the mother's responsibility. In addition to the ones that are required, there are optional vaccines that are now considered essential in the modern world².

Objective: To assess the knowledge regarding optional vaccines and its purpose among mothers of under five children in selected community area at Hassan.

Place and duration: Hassan, Karnataka.

Methodology: Quantitative, non experimental cross sectional design was used for the present study. This study was conducted in Santhigrama village, Hassan, Karnataka, India. Mothers of under children coming to under 5 clinic coming to vaccination centre were selected by using convenient sampling technique. Total sample size was 50 as calculated by sample size formula.

Result: subjects in relation to their age group which reveals that 8(16%) subjects were below 25 years of age, 40(80%) subjects were 26-30 years old, 2(4%) subjects were 31-35 years old. The distribution of subjects in relation to education in which 21(42%) subjects were secondary education and 27(54%) subjects were higher secondary. The distribution of subjects in relation to Religion. Findings indicate that 100% of the subjects were Hindu. The distribution of subjects in relation to their income. The findings show that 12% were below Rs.5000, 74% were Rs.5001-10000, 14% were Rs.10001-20000.

Conclusion: There is paucity of knowledge regarding optional vaccines and its purpose among mothers of under five children in selected community area at Hassan.

Index Terms— Optional Vaccines, Mothers Of Under Five Children

INTRODUCTION

Children are the most important resource in the world and the greatest source of future hope. Children's growth and development represent a long-term investment from the nation. Preventive principles are crucial to achieving the objective of health for all primary health care. The vaccine for every infectious disease is among the most economical health interventions.¹

Even thinking about your infant receiving so many painful shots may make you anxious as a mother. Your baby will have a healthy future with just a little discomfort and recovery. Keeping the child healthy and free from infections is the mother's responsibility. In addition to the ones that are required, there are optional vaccines that are now considered essential in the modern world²

Millions of children die each year from vaccine preventable diseases such as measles, diphtheria, tetanus and pneumonia. Children are at an increased risk for contracting infections and diseases like mumps, rubella, typhoid and hepatitis B. Vaccines are meant to protect the child against a variety of preventable diseases and hence it is every child's right to be vaccinated. 4 vaccination at present.³

Optional vaccines are those which are not included in the routine immunisation programme and given on an optional basis. These include the typhoid HiB, varicella and Hepatitis.⁴

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Future generations are protected through immunization. Many diseases that killed or seriously incapacitated people just a few generations ago have been reduced and, in some cases, eliminated because to vaccinations. One such example is the global eradication of smallpox through vaccination. Parents in the future might be able to trust that some diseases of today won't be around to afflict their children in the future if we continue immunizing now and completely.⁷

Around the world, an estimated 18.6 million newborns missed out on standard immunization services in 2018. The Democratic Republic of the Congo, Ethiopia, India, Indonesia, Iraq, Nigeria, Pakistan, the Philippines, Uganda, and South Africa are the 10 nations where more than 60% of these children reside. Strengthening regular vaccinations should be a utmost priority around the world, especially in those countries with the greatest rates of unvaccinated children.⁸

METHODOLOGY

Quantitative, non experimental cross sectional design was used for the present study. This study was conducted in Santhigrama village, Hassan, Karnataka, India. Mothers of under children coming to under 5 clinic coming to vaccination centre were selected by using convenient sampling technique. Total sample size was 50 as calculated by sample size formula. The tool used for the data collection was self structured knowledge questionnaire. The validity of the tool was done by expert's opinion and reliability was calculated to be 0.76 which is strong reliability. Ethical permission was obtained and informed written consent was taken from the mothers of children under 5 years of age.

RESULTS

Table 1: Distribution of subjects according to demographic variables

n=50

Demographic variable		Frequency	Percentage
Age	25 years & Below	8	16%
	26-30 years	40	80%
	31-35 years	2	4%
	above 35 years	0	0%
Education	Primary school	0	0%
	Secondary school	21	42%
	Higher secondary	27	54%
	Graduate	0	0%
Religion	Diploma	2	4%
	Hindu	50	100%
	Muslim	0	0 %
	Christian	0	0 %
Family income	Any other (specify)	0	0%
	Below Rs. 5000	6	12%
	Rs.5001-10000	37	74%
	Rs. 10001-20000	7	14 %
Type of family	Above Rs. 20000	0	0%
	Joint family	12	24 %
Number of children	Nuclear family	38	76 %
	1	12	24%

	2	34	68%
	3	4	8%
Number of children	4 and more	0	0%
	1	12	24%
Previous information on optional vaccines and its purpose	2	34	68%
	Health personnel	6	12 %
	Family & friends	21	42%
	Books & magazines	3	6 %
	Mass media	20	40%

Table 1 represents distribution of subjects in relation to their age group which reveals that 8(16%) subjects were below 25 years of age, 40(80%) subjects were 26-30 years old, 2(4%) subjects were 31-35 years old. The distribution of subjects in relation to education in which 21(42%) subjects were secondary education and 27(54%) subjects were higher secondary. The distribution of subjects in relation to Religion. Findings indicate that 100% of the subjects were Hindu. The distribution of subjects in relation to their income. The findings show that 12% were below Rs.5000, 74% were Rs.5001-10000, 14% were Rs.10001-20000.

The percentage distribution of subjects according to their type of family reveals that 12(24%) were secondary school, 38(76%) were higher secondary and 2 (4%) were graduate. The Distribution of subject according to number of children. Findings indicate that 24% subjects have 1 child, 68% have 2 children and 8% have 3 children. The Distribution of subject according to their place of childbirth. Findings indicate that place of childbirth of 100% subjects were hospital. The project the Distribution of subject according to their source of

Information on optional vaccines and its purpose. Findings indicate that 6(12%) subjects got information from health personnel and 21(42%) from family & friends, 3(6%) from books and journals and 20(40%) from mass media.

Table 2: Distribution of subject according to the pretest knowledge score
n=50

Level of knowledge	No .of subjects	Mean %
Inadequate knowledge	40	80%
Moderate knowledge	10	20%
Adequate knowledge	0	0%
Total	50	100%

The level of knowledge among subjects regarding optional vaccines and its purpose. 80% subject had inadequate knowledge, 20% of subjects had moderate knowledge and none of them had adequate knowledge.

Table 3: Pre-test knowledge score of mothers of under five children on different aspects of optional vaccines and its purpose.
n=50

Area of knowledge	No of questions	Max score	Knowledge score		
			mean	SD	Mean%
General knowledge on optional vaccines	5	5	0.88	0.96	17.6%
Vaccines which prevent bacterial diseases	8	8	1.88	1.15	23.5%
vaccines which prevent viral diseases	17	17	4.42	3.24	26%
Total	30	30	7.18	2.76	23.9%

The knowledge score on general knowledge on optional vaccines reveals that 17.6% correct responses were given by the subjects and their mean score was 0.88 with SD value of 0.96. The knowledge score on Vaccines which prevent bacterial diseases reveals that 23.5% correct responses were given by the subjects and their mean score was 1.88 with SD value of 1.15. The knowledge score on vaccines which prevent viral diseases reveals that 26% correct responses were given by the subjects and their mean score was 4.42 with SD value of 3.24. The overall knowledge score reveals that 23.9% correct responses were given by subjects and their mean score was 7.18 with SD value of 2.76.

DISCUSSION

The knowledge score reveals that 23.9% correct responses were given by subjects and their mean score was 7.18 with SD value of 2.76. 80% subject had inadequate knowledge, 20% of subjects had moderate knowledge and none of them had adequate knowledge. The findings of the first object were supported by a descriptive study was conducted on Knowledge and Attitude Regarding Vaccines among Mothers of Under Five Children attending Pediatric OPD in a Selected Hospital at Mangalore showed Immunization has saved the lives of more children than any other medical intervention in the last 50 years. Results revealed that, majority, 289 (96.33%) mothers knew that BCG vaccine prevents Tuberculosis. Only 26(8.66%) mothers were knowledgeable about the measures that can be done if the child has not given DPT. 11 (3.66%) mothers knew that chicken pox can be prevented by varicella vaccine. The study concluded that even though the mothers had good attitude regarding vaccines, but they were unaware of Hib vaccine and rotavirus vaccine³⁴

CONCLUSION

This study suggest about responsibility of the nurse is to identify the level of knowledge, creates awareness and giving health education by various methods like pictures, mass, education, support groups etc. Therefore nurses must require adequate knowledge that would help to impart and improve the level of knowledge of the subjects and other community regarding optional vaccines. Research is needed to find out best therapeutic practices to ensure evidence base management of diseases. The findings of the present study is helpful for the nursing professionals to conduct further studies to find out the effectiveness of various methods of providing education on improving the knowledge regarding optional vaccines and its purpose. The present study is helpful for the nursing professionals to conduct further studies to assess the knowledge on optional vaccines and its purpose.

Ethical Approval

The ethical approval was obtained from the principal of Nisarga College of Nursing, Karnataka and Medical Officer of Santhigrana Primary health centre, Karnataka.

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Conflicts of interest

There are no conflicts of interest.

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