Effectiveness of structured teaching programme on level of knowledge regarding under five immunizations among the antenatal mothers

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Abstract
Immunization is defined as the process of inducing the immunity in an individual against an infectious organism or agent, through the vaccination. In May 1974, the WHO officially launched a global immunization programme known as Expanded Programme of Immunization (EPI), to protect all the children of the world against six vaccine preventable diseases namely- Diphtheria, Whooping Cough, Tetanus, Polio, Tuberculosis and Measles by the year 2000. In India, the EPI was launched on January 1978. In 1990, by United Nations Integrated Children’s Emergency Fund (UNICEF), EPI was renamed into Universal Child Immunization and it was launched in India on November 19, 1985 and was dedicated to the memory of Smt. Indira Gandhi. (K. Park) An important contribution of microbiology to medicine has been immunization. By this, many vaccines preventable have been virtually eliminated. A quantitative one group pre-test and post-test research design was conducted among 60 antenatal mothers. Purposive sampling technique was used to select samples. Semi-Structured questionnaire was used to collect demographic data and knowledge regarding immunization. The investigator explained the purpose of the study. Pre-test was performed for all study participants by semi structured questionnaire. Structured teaching program was given to the patients in experimental group. The post test was assessed using the same questionnaire. The data were collected and analyzed. The result clearly infers there is significant improvement in the post test level of knowledge at p< 0.001 level. This reveals there is a need for the structured teaching program among antenatal mothers regarding immunization.

Keywords: Structured teaching program, immunization, antenatal mothers

Introduction
Immunization is defined as the process of inducing the immunity in an individual against an infectious organism or agent, through the vaccination. In May 1974, the WHO officially launched a global immunization programme known as Expanded Programme of Immunization (EPI), to protect all the children of the world against six vaccine preventable diseases namely- Diphtheria, Whooping Cough, Tetanus, Polio, Tuberculosis and Measles by the year 2000. In India, the EPI was launched on January 1978. In 1990, by United Nations Integrated Children’s Emergency Fund (UNICEF), EPI was renamed into Universal Child Immunization and it was launched in India on November 19, 1985 and was dedicated to the memory of Smt. Indira Gandhi. An important contribution of microbiology to medicine has been immunization. By this, many vaccines preventable have been virtually eliminated. Vaccination is very essential part of children health. Vaccination programme is a key step for the preventive services of children. The field of pediatric vaccination is growing and changing as new vaccines are becoming available and previous diseases are being eradicated due to the complicity a devolution of vaccine preventable diseases. A review of immunology and the principles of vaccination provide background knowledge for information pertaining to disease transmission and the current recommended vaccine schedule. The goal of vaccination is to protect the population from disease and decrease the incidence of disease and disease transmission. Immunization is vital; it protects nearly 3/4th of children against major childhood illness. There are several diseases, which can be easily prevented by timely vaccination as a part of routine immunization. Every child has the right to benefit from the appropriate traditional and new life saving vaccinations. All mothers wish good health for their children.
Health workers desire all children immunized against vaccine preventable diseases. The government wants them protected from progressive diseases. But many vaccines do not reach a majority of infants and children. Decreased awareness, patient compliance and cost effectiveness play a major role in limiting the success of vaccine [6]. Indian children aged 1-5 month per 100 000 is between 100 and <300. An estimated 527,000 children aged <5 years die from rotavirus diarrhea each year, with >85% of these death occurring in low income countries of Asia and Africa [7]. The purpose of the study [1] To determine the pretest knowledge regarding under five immunizations among antenatal mothers attending antenatal clinic [3]. To evaluate the effectiveness of structured teaching program on under five immunizations in terms of gain in knowledge in posttest [3]. To find out the association between the posttest knowledge with their selected demographic variable.

Methods and Materials
A quasi experimental study was conducted to study the effectiveness of structured teaching programme on knowledge regarding under-five immunization among antenatal mothers. The formal permission was obtained from the authority. The participants for the main study were selected by purposive sampling technique. The data was collected in the following pattern. Semi-Structured questionnaire was used to collect demographic data and knowledge regarding immunization. The investigator explained the purpose of the study. Pre-test was performed for all study participants by semi structured questionnaire. Structured teaching program was given to the patients in experimental group. The post test was assessed using the same questionnaire. The data were collected and analyzed. The sample characteristics and level of knowledge were described using frequency and percentage. Chi square was used to associate the posttest level of knowledge regarding immunization with the selected demographic variables.

Results and Discussion
Section A: Sample characteristics
The study shows that regarding age out of 60 sample 22(36.66%) samples comes under the age group of 23-27 years, 16(26.66%) were under the age group of 28-30 years, 14(23.33%) were under the age group 18-22 years, 8(13.33%) were under the age group of >30 years. Regarding education out of 60 samples 21(35%) were finished junior and high school education, 19(31.66%) were degree holder, 16(26.66%) were finished elementary school education, 4(6.66%) were none. Regarding occupation out of 60 samples 22(36.66%) were not working, only 20(33.33%) were working in company, 9(15%) were daily workers, around 15% were doing other occupations. Regarding religion 38(63.33%) were Hindu, 16(26.66%) were Christian and 6(10%) were Muslims. Regarding income none is in rs.3000 per month, 8(13.33%) were rs.3001-5000 per month, 28(46.66%) were having income of rs.5001-10000, 24(40%) were having income above 10000 rupees. Regarding nutrition out of 60 samples 7(11.66%) were vegetarian and 53(88.33%) were non vegetarian. Regarding the source of information 5(8.33%) mothers got information through television, 6(10%) mothers got information through radio, 4 (6.66%) got information through newspaper, 10(16.66%) mothers got information through health centers. 5(8.33%) got information through health cards.

Section B: Assessment of level of knowledge regarding immunization among antenatal mother
The findings of the study depict that out of 60 samples 39(65%) had inadequate knowledge, 17(28%) had moderate knowledge and 4(6%) have adequate knowledge in pretest. The study also shows that out of 60 samples 49(81.66%) had adequate knowledge, 11(18.33%) had moderate knowledge and none of them had inadequate knowledge in posttest (Table 1).

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Pre test Frequency</th>
<th>Pre test Percentage</th>
<th>Post test Frequency</th>
<th>Post test Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate knowledge</td>
<td>39</td>
<td>65%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Moderate knowledge</td>
<td>17</td>
<td>28%</td>
<td>11</td>
<td>18.33%</td>
</tr>
<tr>
<td>Adequate knowledge</td>
<td>4</td>
<td>6%</td>
<td>49</td>
<td>81.66%</td>
</tr>
</tbody>
</table>

The present study is supported by Prakash Naregal et al., (2019) conducted a Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding immunization” it is a quasi-experimental study among 6 mothers of under 5 children. The result shows that there was a significant association between knowledge of mothers and Age (χ2 = 4) (p< 0.005) level. The study concludes that structured teaching programme on revised Immunization schedule was Effective in Improving the Level of knowledge among the mothers of under-five children [8].

Section C: The effectiveness of structured teaching program regarding immunization among antenatal mothers
The study findings show that the mean, standard deviation, mean difference paired t test value of pre and posttest. In pretest the mean value is 11.9833 and standard deviation is 3.1756. And in posttest the mean value is 19.2833 and the standard deviation is 2.7376. The mean difference between pre and posttest is 7.30. Through the knowledge on under-five immunization showed significant improvement in mean and standard deviation in posttest than pretest. The paired t test value is 20.5987 and is highly significant.

The present study is supported by Aleena Sunny et al., (2018) had conducted a Study to Assess and Correlate the Knowledge, Attitude and Practices of Vaccination among Mothers with Educational Status in a Teaching Hospital in South India. A total of 143 mothers were enrolled in the study. Even though most of the mothers had satisfactory knowledge, attitude and practice, almost 25% children were identified as unimmunized or partially immunized. Educational status of mothers were identified as an independent factor in the determination of their children’ vaccination status. There is an urgent need to increase the coverage of UIP (Universal Immunization Programme) vaccines and there is a dire need to arrange for health education program sessions for all the parents regarding the importance of complete adherence of vaccination among children. TV, newspaper and other Medias can be also promoted as most important sources which can be used for spreading educational messages regarding vaccination [9].
Section D: To associate the effectiveness of laughter therapy among hypertensive patients in kondancheri village with the selected demographic variables

The study findings shows that the association of demographic variable with knowledge regarding Under-five immunization among antenatal mothers. It shows that the demographic variable of age, occupation, education, religion, family income, and source of information are statistically not significant association with posttest level of knowledge at p< 0.001 level.

Conclusion

The structured teaching programme through flash cards found to be very effective in improving the knowledge and attitude among antenatal mothers on immunization. The knowledge and attitude regarding immunization was improved by health teaching through flash cards. Being as a nurses, our main responsibility is try to make our India, free from communicable disease by providing immunization for all under five children.

We would like to extend our gratitude to the authorities of Saveetha College of Nursing.

Authors contribution

All the authors actively participated in the work of the study. All authors read and approved the final manuscript.

Conflicts of interest

The authors declare no conflicts of interest.

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