A study to assess the effect of structured teaching programme on knowledge, attitude and practice regarding national immunization schedule among mothers of under-five children in selected area

Pritimala A Bankar and Dr. Khurshid Jamadar

Abstract

Introduction: The effect of structured teaching programme on knowledge, attitude and practice regarding national immunization schedule among mothers of under-five children in selected area. The conceptual frame work of the present study is based on the General System Theory by ludwig von betalanffy (1968).

Material and Methodology: The research approach used was evaluative, design used was Pre experimental one group pretest post-test research design, and purposive sampling technique was used for sample selection. The samples were selected from the selected area of pimpri pune. The samples consisted of 50 mothers of under-five children who fulfilled criteria set by the investigator. The tool consisted of 4 sections: Section-I consist of demographic data of mothers of under-five children Section-II consist of a structured questionnaire Section-III consist of 5 point likert scale to assess the attitude Section-IV consist of observational checklist to assess the practices. The content validity was determined by the experts. The reliability of the tool was done by using spearman’s rank correlation coefficient and split half method and was found to be 0.98

Result: Analysis of data related to knowledge. In pretest, 64% and in post-test 6(12%) had poor knowledge, In pre-test 26% and in post test13(26%) had had average knowledge, In pre-test 10% and in post test 19(38%) had good knowledge and none but in post test 12(24%) had excellent knowledge score.

Conclusion: The result of the present study shows that there is a difference between pre-test and post-test level of knowledge, attitude and practice score which was found to be significant and positive in correlation after implementation of health teaching on national immunization schedule. This result shows that health teaching is effective for improving knowledge, attitude and practice of mother of under-five children.

Keywords: effect, structured teaching programme, attitude, practice, immunization, under five children

Introduction

Immunization is a proven tool for controlling and even eradicating disease. The child needs to be protected from six infectious and vaccine preventable diseases. These diseases include tuberculosis, tetanus, diphtheria, whooping cough and poliomyelitis. The under-five children can be saved from deaths by immunizing them at the right age and right time and by completing the full course of immunization. According to UNICEF, immunization is currently preventing an estimated two million deaths among children under five every year. India has one of the highest under five mortality rates in the world with an estimate of 85/1000 live births in 2006, the under-five mortality rate in the Karnataka state was 88/1000 live births in 2006. One of the factors contributing to under-five mortality is the ignorance of child care. Global immunization coverage has greatly increased since WHO’s expanded programme on immunization began in 1974. In 2003, global DPT3 (three doses of the diphtheria, pertussis, tetanus combination vaccine) coverage was 78% up from 20% in 1980. However, 27 million children worldwide were not reached by DPT3 in 2003, including 9.9million on south Asia and 9.6 million in sub-Saharan Africa. A child mother is not the only key player, each mother should be aware about safe guard the health of their children as
wealth of their family, society and the community. Physical health of a child is important because it is associated with mental and social development of children. Mother’s knowledge regarding the stages of growth and development, child care, and about immunization schedules etc. is important for saving the life of their children.

Methodology
Research approach
Evaluative Research approach

Research Design
Pre-experimental one-group pre-test post-test

Variables under study
Dependent variable
Knowledge, attitude and practice regarding national immunization schedule of under-five mothers.

Independent variable
In this study independent variable is Health Teaching.

Research Setting
The setting for this study was Phulenagar slum area Pimpri, Pune.

Population
The population of the present study comprises mothers of under-five children in selected slum area i.e. Phulenagar of Pimpri, Pune.

Sample Selection criteria (Inclusion and Exclusion)
Inclusion criteria
Mothers who were having under-five children. Mothers of under-five who were willing to participate in the study and Mother who understood Marathi and Hindi language.

Exclusion criteria
Mothers those who were not available at the time of data collection.

Sample
The sample of the present study is the mothers of under-five children from Phulenagar, Pimpri, Pune.

Sample Size: 50
Sampling technique
Non-Probability Convenience Purposive Technique

Development of tool
Opinions and suggestions were taken from the experts, which helped in determining the important areas to be included.

Description of the tool
It includes four sections:

Section-I: Consist of demographic data of mothers of under-five children which include Age, Education of mother, Education of father, Mothers occupation, Income of family, total member in family, Do you have previous information about immunization schedule, If yes what is the source of information.

Section-II: Consist of a structured questionnaire to assess the effect of health teaching on national immunization schedule.

Section-III: Consist of 5 point likert scale to assess the attitude of mothers.

Section-IV: Consist of observational checklist to assess the practices followed by mother of under-five children regarding immunization.

Validity
The data collection tool was sent to experts along with a scoring sheet for content validity. Tool was sent to 20 experts out of whom, 15 were received back with their valuable suggestions and guidance for the perfection. The validity of the tool was established by experts from the different departments i.e. Community Medicine, Community Health Nursing, Paediatric Nursing, Medical surgical Nursing. The valuable suggestions from the experts were used to receive a positive direction for the study. Certain items were modified as per their suggestions. After validation, the tool was translated from English to Marathi.

Ethical consideration
- Researcher had obtained approval from appropriate review boards to conduct the study.
- Researcher had taken formal permission from the Cooperator of the area to conduct study.
- Only the samples who had signed the consent form are included in the study.
- Confidentiality of the data is maintained strictly.

Reliability
Reliability was checked by using Split Half Method and Spearman’s Rank Correlation Coefficient Formula I.e.

\[ R = \frac{1-6 \sum d_i^2}{n (n-1)} \]

Reliability for knowledge, attitude and practice was assessed using test-retest method. Reliability for tool was 0.98. Hence the tool is found to be reliable for the study.

Pilot study
After doing pilot study investigator found that it is feasible to carry out actual study

Plan for data collection
- A formal permission was obtained from authorized person of the select area of PCMC, Pune.
- Actual data collection was done on 50 mothers of under-five children meeting the criteria for the study.
- The investigator approached the selected samples, informed them regarding the objectives of the study and obtained their consent after assuring the confidentiality of the data.
- The investigator had done pre-test, then provide health teaching on National Immunization Schedule and then on the 7th day post-test has been done to assess the effect of health teaching regarding knowledge, attitude and practice regarding national immunization schedule among mothers of under-five children in selected area.
• The duration of the data collection for each sample was 25 to 30 minutes.

Data analysis and interpretation
The data analysis was planned to include descriptive and inferential statistics. The following plan for analysis was made with the opinion of experts. The analysis would be done based on the objectives to be tested.
• Items related to the background variables would be analyzed in terms of frequency and percentages.
• Scores would be graded in 3 categories i.e. Poor, Average and Good
• Frequency distribution would be plotted to represent the final score.
• Mean, standard deviation of the test would be computed.
• The findings would be documented in tables, graphs and diagrams.

3. Result
The major findings of the study were based on the objective of the study.

Section I- Finding related to demographic data
Majority around 17(34%) mothers of under-five children were from age group of 25-30 years. Around 20(40%) of mothers of under-five children had secondary education. Around 19(38%) fathers of under-five children had primary education. Maximum that is 70% of mothers of under-five children were house wife. Around 18(36%) of family had income up to 10,000. About 18(36%) of family had total 4 members in their family. Maximum that is 41(82%) of mothers were having Knowledge about Vaccination. Around 24(48%) of mothers had knowledge about national immunization schedule from Health center.

Section II- Analysis of data related to knowledge regarding national immunization schedule among the mother of Under-five children before and after health teaching.
In pretest, 32(64%) of mothers of under-five children were having poor knowledge score, 13(26%) of mothers were having average knowledge score, 5(10%) of them were having good knowledge score and none of them were having an excellent knowledge score.
In post-test, 6(12%) of mothers of under-five children were having poor knowledge score, 13(26%) of mothers were having average knowledge score, 19(38%) of them were having good knowledge score and 12(24%) of them were having an excellent knowledge score.

Section III- Analysis of pre-test and post-test knowledge, attitude and practice scores among the mothers of under-five children.
In pre-test 12(24%) of mothers of under-five children were strongly agree, 29(58%) of mothers were agree, 9(18%) of them were having uncertain opinion, and none of them were having disagree and strongly disagree opinion.
In post-test 0(0%) of mothers of under-five children were strongly agree, 18(36%) of mothers were agree, 32(64%) of them were having uncertain opinion, and none of them were having disagree and strongly disagree opinion.

Section IV- Analysis of association of knowledge and correlation of attitude and practices with selected demographic variables.
In post-test of knowledge the x2-value of age is 0.087 and x2 of education is 0.99 the alpha (α) value is greater than or equal to 0.05 so, the demographic variables was found significant were as on observation researcher predicts that there will be no significant with other demographic variables.
In post-test of attitude, the r value of education is 0.19 and no. of family is 0.021. As the standard limits of r is (-1, +1). Thus the selected demographic variable shows positive correlation were as on observation researcher predicts that there will be negative correlation with other demographic variables.
In post-test of practice the r value of education is 0.21 were as r value of occupation of mother is 0.26 and income of family is 0.68. As the standard limits of r is(-1,+1) Thus, the selected demographic variable shows positive correlation were as on observation researcher predicts that there will be negative correlation with other demographic variables.
Hence, after the findings gained in pre-test and post-test researcher accept H1 hypothesis.

Discussion
The findings of the study have been discussed with reference to the objectives and hypothesis stated in chapter - 1 and with the findings of the other studies.
This study involved one group pre-test and post-test using pre experimental design. Non-Probability Purposive Sampling Technique to draw samples. The size of the sample was 50 mothers of under-five children was done according to inclusion and exclusion criteria.
Pre-test was conducted by providing Structured Questionnaire used to assess the existing knowledge, Likert Scale was provided to know attitude and Observation Check to assess the practice followed by mothers and Planned Teaching was given on the same day there after post-test was taken on 7th day to assess the effectiveness of planned teaching on knowledge, attitude and practices regarding national immunization schedule.
A similar study was conducted in a City of North India to determine the knowledge, attitude and practices about immunization among respondents of children aged 12-23 months. A total of 510 respondents were interviewed in the urban slums of Lucknow district of India, using 30 cluster sampling technique from January 2005 to April 2005. A pre-tested Structured Questionnaire was used to elicit the information about the knowledge, attitude and practices of the respondents regarding immunization. Result of knowledge regarding the disease prevented, number of doses and correct age of administration of BCG was highest among all the categories of respondents. The paramedical worker was the main source of information to the respondents of completely (52.0%) and partially immunized (48.5%) children while community leaders for unimmunized children. Those availing private facilities were more completely immunized, as compared to the government facilities. 55.8% of those who took 20 minutes to reach the immunization site were completely immunized as compared to 64.1% of those who took more than 20minutes.
Research was concluded with considering the incomplete knowledge, and inappropriate practices of the people, the policy makers and medical professionals require Herculean efforts to raise
the knowledge through awareness and health teaching to break the old beliefs of the people. In the present study, in post-test the knowledge score showed a marked increase and attitude and practices scores shows positive correlation, which indicates that the health teaching was effective in increasing the knowledge, attitude and practices regarding national immunization schedule on mothers of under-five children.

Conclusion
The overall experience of conducting this study was a satisfying one, as there was good co-operation from mothers who having children under-five years at the selected areas. The study was a new learning experience for the Investigator. The result of the present study shows that there is a difference between pre-test and post-test level of knowledge, attitude and practice score which was found to be significant and positive in correlation after implementation of health teaching on national immunization schedule. This result shows that health teaching is effective for improving knowledge, attitude and practice of mother of under-five children.

Limitations of the study
- This study was limited only to 50 samples. Hence the findings cannot be generalized.
- This study was limited to those who were willing to participate.
- This study was limited to mothers residing in selected areas.
- Data collection period was limited.

Recommendations
Keeping in view the findings of the study, the following recommendations are made:
- A similar study may be replicated on large samples; there by findings can be generalized for a large population.
- A comparative study may be conducted using urban and rural mothers of under-five children regarding knowledge, attitude and practices of national immunization schedule.
- An experimental study may be conducted to assess the knowledge, attitude and of mothers regarding national immunization schedule.
- A study may be conducted to evaluate the effectiveness of planned health teaching versus other methods of health teaching on the similar problem.
- A similar kind of study can be undertaken in different settings and different target population.

Acknowledgement
With profound joy and deep sense of gratitude, I thank God Almighty for his able providence, throughout the course of this project. It is because of the Almighty that the Investigator has been able to drive all strength to complete this study. No words can express my heartfelt gratitude to my research Guide Dr. (Mrs) Khurshid Jamadar, Principal, Dr. D. Y. Patil College of Nursing, and Research Co-ordinator Ms. Sucheta Yangad, Associate Professor for the expert and supportive guidance. During my darkest, stressful moment, you were like the rising sun casting brightness and bringing life to the gloomiest areas. Their humor, wisdom and expertise in projecting the positive aspects of any situation was the propelling force which has culminated in this dissertation the crowning glory of all my endeavors. I am thankful to her, for her inspiration constant guidance, sustained patience, valuable suggestion and support and moreover encouragement right from the inception until the completion of this study. I am deeply indebted to Mrs. Rupali Salvi, Class Co-ordinator for her expert guidance, sustained patience and valuable suggestions. I am grateful to, Dr. (Mrs) Khurshid Jamadar, Principal, Dr. D. Y. Patil guidance and support for the study. College of Nursing, for her continuous I take this opportunity to express my sincere gratitude towards the entire faculty of Dr. D. Y. Patil College of Nursing, Pimpri, Pune-18 as well as the administrative staff for their support and assistance throughout the study period. I would like to take this opportunity to thank all experts in the field of community health, preventive and social medicine as well as child health departments, medicine department for their valuable suggestions and validation of the data collection instrument and plan. I would also like to convey my sincere thanks to statistician Mrs. Vidya Bathlavande who supported me to conduct this study as well as rendered her valuable time for my study. My sincere thanks to Mrs. Archana Rathod, MA. Mphil (English) for editing the manuscript. And Ms. Ladhe MA (Marathi) for editing. I would like to thank all the participants who made this study possible. Lastly, my sincere thanks to all my colleagues, friends and well-wishers for their good wishes for this study. Above all owe my efforts and success to almighty God for his abiding grace, which made this possible. The proverb that one can never make alone could never be truer than in this situation. I had so many well-wishers that I find it impossible to name them all however, deep down in my heart, I will always remember each and every one for their contribution.

References
15. Anjum Q, Omair A, Inam SN. Department of Community Health Sciences, Ziauuddin Medical University, Karachi. PMID.1610447.
16. Department of Epidemiology and Public Health and General Clinical Research Center, Yale University School of Medicine, New Haven, Connecticut.
17. Department of Pediatrics, School of Medicine, Columbia University, New York, New York
18. American Board of Internal Medicine, Philadelphia, Pennsylvania.
23. Evers, Deborah B. American journal of maternal and child health.2001.Lippincott Williams & Wilkins, Inc.
31. Park K. Preventive and social Medicine, Bhanot, 21st edition, Pg369.
32. Neelam Kumari, Community Health Nursing- I, Pee Vee, 3rd edition, Pg422.
33. Mahajan BK. Textbook of Preventive & Social Medicine, 2nd edition, Jaypee, Pg88.
34. Gulani K. Community Health Nursing, 1st edition, Kumar publication, Pg249.
35. Ghai OP. Essential Preventive Medicine, Vikas Publication, Pg 104
36. Basvantappa BT. Community Health Nursing, Jaypee, Pg72.