“A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING SELECTED PEDIATRIC EMERGENCIES AMONG MOTHERS OF UNDER FIVE CHILDREN IN A SELECTED COMMUNITY AREA AT BANGALORE.”

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Abstract: The researcher conducted a study to assess the effectiveness of video assisted teaching programme on knowledge regarding selected paediatric emergencies among mothers of under five children in a selected community area at Bangalore. The objectives of the study was to assess the effectiveness of video assisted teaching programme on knowledge regarding selected paediatric emergencies among mothers of under five children in a selected community area at Bangalore. The objectives of the study was to assess the level of knowledge of mothers of under five children regarding paediatric emergencies before and after video assisted teaching programme, to evaluate the effectiveness of video assisted teaching programme on knowledge regarding selected paediatric emergencies among mothers of under five children, to find out the association between pre-test level of knowledge of mothers, with selected demographic variables. A pre-experimental one group pre-test post-test design study was conducted with 60 under five mothers in selected community area Bangalore. Convenient sampling technique was used for the study. Results showed in the pre-test that knowledge score majority 45 (75%) was having inadequate knowledge and 15 (25%) was having moderate knowledge and nobody had adequate knowledge about pediatric emergency. Overall post-test knowledge score, none of the under five mothers had inadequate knowledge, within 60 under five mothers 43 (71.7%) was having adequate level of knowledge and 17 (28.3%) was having moderate level of knowledge regarding selected pediatric emergencies. The overall mean pretest score 11.33(37.8%), SD 3.52 (11.7%). Post-test mean score 24.52 (81.7%), SD 2.34 (7.8%) which is higher than pre test mean score. The video assisted teaching programme was effective in improving knowledge of under five mothers.

Keywords: Effectiveness, Video assisted teaching program, Selected pediatric emergencies, Under five mothers.

INTRODUCTION:
A child’s development is the process of growth of a child to teenage times, from reliance to increased independence. The early times of a child’s life is essential for cognitive, social and emotional developments. thus, it's important that parents take every step necessary to insure that children grow up in surroundings...
where their social, emotional and educational requirements are met. The development of a child most frequently occurs in changeable stages.

Children constitute one of the most different and grueling case populations. While comprising nearly 30 of exigency department cases, critical illness and injury are present in only roughly 5. The maturity of paediatric exigency visits are estimated not in paediatric hospitals, but community exigency departments. Beforehand recognition and aggressive operation of ails and injuries effecting paediatric cases is of utmost significance. The epidemiology of paediatric exigency drug in the exigency department, the most common complaints are fever, trauma, injury, respiratory torture, puking, diarrhoea, or upper respiratory tract infection. Knowledge of the child's growth and development is frequently needed for the opinion, operation, and disposition of the paediatric case. inflexibility of acute paediatric illness and injury is frequently delicate to discern. As an illustration, further than 2400 life- hanging paediatric extremities per time were reported in a telephone check. In a separate check of pediatricians, 73 reported one or further extremities per week.

The four most common reasons of paediatric cases are admitted to the sanitarium are related to the respiratory system pneumonia, asthma, acute bronchitis and upper respiratory infections. Road business injury is a growing public health problem among grown-ups and children in India. In 2013, the rate of road business crashes, injuries and deaths per 100 000 population in India was 39, 40 and 11, independently. The number of registered motor vehicles in India is adding by 12 each time. And is projected to increase from 112 million in 2010 to 500 – 600 million by 2014. The adding motorisation is likely to have huge counteraccusations for air quality, road business injuries and physical exertion. Road business deaths are prognosticated to further than double by 2020.

Hyderabad is one of the fastest growing urban areas in India. Nearly 1 in 14 people report a non-fatal road injury annually, requiring a recovery period of over 7 days. Disability due to road injury in Hyderabad is estimated to be 35 per 100 000 people. The annual rate of overall road injury among children in 2009 was 11% for boys and 6% for girls, yet little is known about children's injury during the school commute in Hyderabad.

Although it is true paediatric patient may appear to be just a smaller version of the adult patient, a paediatric patient should not be handled the same way we handle an adult. They need special attention and care, so it is important to take care immature child physically and psychologically.

NEED FOR THE STUDY:

Thousands of babies, children, adolescents, and youthful grown-ups are watched for every day in exigency departments. exigency care is delivered by a variety of providers in different sanitarium settings, with and without the vacuity of the full diapason of paediatric-applicable medical outfit. But despite these challenges, important progress has passed in the care of paediatric exigency department cases over the last 20 times, as the thing of exigency drug and subspecialty of paediatric exigency drug have evolved.

About 23 million of paediatric cases are treated annually in exigency departments, and further than 90 of these departments have applicable paediatric outfit, and that further than 1000 subspecialty- trained paediatric exigency drug providers are presently rehearsing. Accidents, injuries, and poisonings are important, but potentially avoidable causes of mortality and morbidity in children. Unintentional injuries similar as those caused by becks, drowning, falls, poisoning and road business accidents are the leading cause of morbidity and mortality among children in the United States. Each time, among those 0 to 19 times of age, further than 12,000 people die from unintentional injuries and further than 9.2 million are treated in exigency departments for nonfatal injuries.

According to the WHO Global Burden of Disease design, in 2004 nearly 1.3 million people of all periods were killed in road business crashes around the world and up to 50 million further were injured or impaired. The South- East Asia and the Western Pacific Regions of WHO together reckoned for two thirds of all road business deaths. still, the loftiest rates of road business death were in the African and Eastern Mediterranean Regions. Encyclopedically, 21 of road business deaths were among in children. By the time 2030, road business injuries are prognosticated to be the fifth leading cause of death world wide, and the seventh leading cause of disability- acclimated life times lost.
In Bangalore a aggregate of 128 cases of paediatric poisoning cases were analysed and all cases were registered as croaker -legal cases and informed to police. Prevalence of poisoning was seen more in the age group of 0 to 5 times(38.28).

Across-sectional, population- grounded study was conducted in Malabar region, Kerala. A aggregate of 8433 scholars were screened, of which a aggregate of 342 children(4.06) had a history of drowning, and they were tête-à-tête canvassed . Drowning rates were loftiest in the age group of 10 – 12 times(40.6) followed by 5 – 9 times(32.2). Males reckoned for73.1 of the total number of cases and ladies reckoned for26.6. Maximum frequentness of drowning were in ponds(37.7), followed by gutters(24.3) and swimming pools(17.3). Frequentness of drowning in wells were only0.6 in this region.

Children are the most vulnerable group of facing emergencies due to accidents, poisoning, bites, drowning etc. due to their exploratory nature. Most of the children are injured between the first & second year than any other year. Lack of the knowledge of mothers may lead to an increasing rate of mortality and lifelong disabilities. So the researcher is interested to undertake the study and there is a need for video assisted teaching programme on paediatric emergency among mothers of under five children to improve the growth and development of the under five children in all aspects.

OPERATIONAL DEFINITIONS:
Assess: In this study, it refers to identification of the level of knowledge of mothers of under five children regarding pediatric emergencies and its management as measured by using structured knowledge questionnaire.

Effectiveness: In this study, it refers to determining the extent to which the video assisted teaching programme has achieved the desired result in measuring the level of knowledge regarding pediatric emergencies and its management among mothers of under five children.

Video assisted teaching programme: In this study, it is a systematic and planned intervention through video assisted on knowledge regarding pediatric emergencies and its management among mothers of under five children.

Knowledge: In this study, it refers to the cognitive ability and extent to which mothers of under five children are aware about pediatric emergencies and its management to the structured knowledge questionnaire on measured.

HYPOTHESIS:-
H01- There is no significant improvement in the knowledge of mothers of under five children regarding pediatric emergencies after the video assisted teaching programme.

H02- There is no significant association between pre-test level of knowledge of mothers of under five children with their selected socio demographic variables.

ASSUMPTIONS:-
1. It is assumed that mothers of under five children may have some knowledge regarding paediatric emergencies.
2. It is assumed that video assisted teaching programme may enhance the knowledge regarding paediatric emergencies among mothers of under five children.

DELIMITATIONS:-
Knowledge of mothers of under five children will be assessed only through structured knowledge questionnaire.
• This study is delimited to the mothers of under five children who are residing in selected community area at Bangalore.
• Sample consists of mothers of under five children in selected community area.
• Data collection period is 4 weeks.
REVIEW OF LITERATURE:
A literature review is discussed under three sections which are: Section-I: Studies related to incidence and prevalence of paediatric emergencies, Section-II: Studies related to knowledge, attitude and practice of mothers on paediatric emergencies, Section-III: Studies related to effectiveness of teaching programme on knowledge and practice on paediatric emergencies among mothers of under five children.

METHODOLOGY:
The schematic representation of the study design adopted for the research design is given below:

![Fig. 1: Schematic presentation of research plan](image-url)
VARIABLES UNDER STUDY:

Variables are concepts at various levels of abstractions that are measured, manipulated or controlled in the study. The variables mainly included in the study are independent variable, dependent variable and demographic variables.

INDEPENDENT VARIABLE: An independent variable is that which is believed to cause or influence the dependent variable. In the present study independent variable refers to video assisted teaching programme to increase the knowledge regarding pediatric emergencies among mothers of under five children.

DEPENDENT VARIABLE: Dependent variable is a response, behaviour or outcome that the researcher wants to predict. Changes in the dependent variable are presumed to be caused by the independent variable. It is otherwise called as effect variable or a criterion measure.

In the present study it refers to level of knowledge among mothers of under five children.

DEMOGRAPHIC VARIABLES: An uncontrolled variable that greatly influences the result of the study is called as attributed variable. Such as age, religion, dietary pattern, type of family, education of mother, occupation of mother, family monthly income, and supporting system.

CRITERIA FOR SAMPLE SELECTION:

Inclusion criteria:
- Able to understand either Kannada or English.
- Willing to participate in the study.
- Mothers who are having children under five years of age.
- Mothers who are present at the time of data collection.

Exclusion criteria: the mother who are,
- Mothers who have undergone any kind of teaching or awareness programme regarding paediatric emergencies.

SELECTION AND DEVELOPMENT OF THE TOOL:

Based on research problem and objectives of the study the following steps were undertaken to select and develop the data collection tool.

SELECTION OF THE TOOL:

Tools are the instruments used by the researcher to collect the data. A structured knowledge questionnaire was selected on the basis of the objectives of the study as it was considered to be the most appropriate instrument to elicit response from the subjects for this study.

DEVELOPMENT OF THE TOOL:

The tool was divided into two sections.

SECTION A- Socio demographic data: It consist of age, religion, dietary pattern, type of family, education of mother, occupation of mother, family monthly income, supporting system of pediatric emergencies.

SECTION B- Structured knowledge questionnaire: It is a positivist research method. It includes the low level of involvement of the researcher and high number of respondents.

VALIDITY OF THE TOOL:

It refers to the degree to which an instrument measures what it is intended to measure. To prepare the tool along with the problem statement, objectives and criteria check list were submitted to 2 pediatricians, and the 6 experts from the field of Child Health Nursing for establishing content validity. After validation from experts, corrections were made. Eight experts validated the tool used the tool used for the study. The tool was evaluated for appropriateness, adequacy, relevance, and completeness. Comments and suggestions were invited and appropriate modification was made accordingly.
EThical Considerations:
- The study was accepted by the research committee of Sarvodaya College Of Nursing.
- Formal permission was obtained from the concerned authority of Laggere Primary Health Centre, Bangalore.
- Written informed consent was obtained from the study samples. There was no ethical issue aroused during the study period.
- The subjects were informed that their participation was purely on voluntary basis. They had the freedom to withdraw from the study if needed at any time and the confidentiality of the data will be maintained.

Reliability of the Tool:
The tool was administered to 6 mothers of under-five children, Rajiv Gandhi Nagar community, Bangalore. In this study to obtain reliability of the tool split half method was used and the value obtained is r = 1. Hence the tool is considered to be highly reliable to carry out the main study.

Method of Data Collection:
A formal permission was obtained from the Medical officer of Laggere PHC. The investigator explained the nature of the study to the authority; formal permission was taken from the Laggere PHC. The main study was conducted from 4th February 2020 to 4th March 2020, according to the convenience of the mothers of under five children between 9.30 A.M to 4.30 P.M. Investigator given self-introduction, explained the purpose of data collection to the subjects and the subject willingness to participate in the study ascertained. The subject was assumed the anonymity and confidentiality of the information provided by them. The selected subjects were requested to assemble near to the PHC for the purpose of administering Video assisted teaching programme. The structured knowledge questionnaire was administered to the selected sample with required information prior to the intervention from the 7th day after the intervention post test was conducted by using the same structured knowledge questionnaire.

Plan for the Data Analysis:
The data obtained was analyzed by using both descriptive and inferential statistics, mean percentage; standard deviation will be used to describe the knowledge of mothers of under five children regarding pediatric emergencies.

Further statistical significance of the effectiveness of the Video assisted teaching programme (VATP) will analyzed by ‘t’ test, chi-square test will be used to find out the association. Analyzed data will be presented in Tables, Diagrams and Graphs.

Results:
This chapter deals with the analysis and interpretation of data obtained from 60 mothers of under five children to assess the knowledge of mothers of selected pediatric emergencies. The data was collected before and after video assisted teaching programme was organized, tabulated, analyzed, and interpreted by using descriptive and inferential statistics. The data collection was done based on the objectives of the study.

Organization of Findings:
SECTION-I: Overall and aspect wise pretest and posttest knowledge scores on selected pediatric emergencies. SECTION-II: Association between Demographic variables and pretest knowledge level on selected pediatric emergencies.

Section-I: Over all Pre test and Post test Mean Knowledge scores on Selected pediatric emergencies:
N=60

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Max. Score</th>
<th>Knowledge Scores</th>
<th>Paired ‘t’ Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Pre test</td>
<td>30</td>
<td>11.33</td>
<td>3.52</td>
</tr>
<tr>
<td>Post test</td>
<td>30</td>
<td>24.52</td>
<td>2.34</td>
</tr>
<tr>
<td>Enhancement</td>
<td>30</td>
<td>13.18</td>
<td>3.50</td>
</tr>
</tbody>
</table>

* Significant at 5% level, \( t(0.05,59df) = 1.96 \)
It is observed from the above table no.1 pretest mean score 11.33 (37.8%), SD 3.52 (11.7%). Posttest mean score 24.52 (81.7%), SD 2.34 (7.8%). So the enhancement mean score 13.18 (43.9%), and SD 3.50 (11.7%).

![Figure-2](image)

Figure-2: Over all Pre test and Post test Mean Knowledge scores on Selected pediatric emergencies. It shows that pretest mean score is 37.8%, post test mean score is 81.7, and the enhancement is 43.9%.

The mean pretest score was 37.8%, SD 11.7, posttest mean and SD was 81.7 and 7.8. and the enhancement mean and SD score is 43.9 and 11.7. and the paired ‘t’ test value is 29.06.

So it is evident that mean post test score of participants is significantly higher than the pretest score. And paired ‘t’ test value is 29.06 which is highly significant at 0.05 level p<0.05. Hence the research hypothesis is accepted.

Hence the research hypothesis H₁ which was stated that there will be a significant improvement of level of knowledge among mothers of under five children in selected pediatric emergencies after video assisted teaching programme. So it was concluded that video assisted teaching programme was affective in improving knowledge of the respondents.

**Section-II : Association between Demographic variables and Pre test Knowledge level on Selected pediatric emergencies :**

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Category</th>
<th>Sample Size</th>
<th>Knowledge Level</th>
<th>χ² Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Age group (years)</td>
<td>19-22</td>
<td>19</td>
<td>13</td>
<td>68.4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>23-26</td>
<td>24</td>
<td>18</td>
<td>75.0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>27-32</td>
<td>17</td>
<td>11</td>
<td>64.7</td>
<td>6</td>
</tr>
<tr>
<td>Educational qualification</td>
<td>Upto SSLC</td>
<td>26</td>
<td>16</td>
<td>61.5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>PUC</td>
<td>29</td>
<td>23</td>
<td>79.3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>5</td>
<td>3</td>
<td>60.0</td>
<td>2</td>
</tr>
<tr>
<td>Occupational status</td>
<td>Unemployed</td>
<td>43</td>
<td>27</td>
<td>62.8</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Semi skilled worker</td>
<td>17</td>
<td>15</td>
<td>88.2</td>
<td>2</td>
</tr>
<tr>
<td>Religion</td>
<td>Hindu</td>
<td>26</td>
<td>14</td>
<td>53.9</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>18</td>
<td>13</td>
<td>72.2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Christian</td>
<td>16</td>
<td>15</td>
<td>93.8</td>
<td>1</td>
</tr>
</tbody>
</table>
Table no. 2 shows association between demographic variables and pretest knowledge level selected pediatric emergencies.

The association between knowledge level and age group reveals that the chi square value 0.54 which is less than the table value. This infers that there is no association between age group and knowledge level at 0.05 level of significance.

In the type of education level, chi square value 2.32 which is less than table value. This infers that there is no association between type of education level and knowledge level at 0.05 level of significance.

With regard to occupational status chi square value is 3.86 which is greater than the table value. This infers that there is significant association between occupational status and knowledge level at 0.05 level of significance.

In relation to religion chi square value is 7.57 which is greater than the table value. This infers that there is significant association between level of knowledge with religion at 0.05 level of significance.

In relation to family income/month chi square value is 0.39 which is less than the table value. It infers that there is no association between level of knowledge with family income/month at 0.05 level of significance.

In relation to type of family chi square level is 0.76 which is less than the table value. Which reveals that there is no association between level of knowledge with type of family at 0.05 level of significance.

In relation to dietary pattern chi square is 4.35 which is greater than the table value. Which reveals that there is significant association between level of knowledge with dietary pattern at 0.05 level of significance.

Hence the hypothesis $H_1$ which was stated that there will be significant association between occupational status, Religion, Dietary pattern, and knows about pediatric emergency was accepted. And hypothesis $H_2$ was rejected for age group, educational level, family income/month, type of family, and source of information.

**CONCLUSION:**

The following were the conclusions drawn from the study:

The video assisted teaching programme was effective to improve the knowledge of the under five mothers. The overall mean knowledge level obtained by the community menopausal women following video assisted teaching program was 24.52 (81.7%) in post-test which was found to be higher than the overall knowledge level 11.33 (37.8%), in the pre-test with an enhancement of 13.18 (43.9%). It was found to be statistically significant at the level of $P<0.05$. Hence the research hypothesis $H_1$ stated that There will be significant improvement in the level of knowledge on selected pediatric emergencies among mothers of under five children after the video assisted teaching programme then before video assisted teaching programme at $p<0.05$ level was accepted.
Hence the hypothesis $H_1$ which was stated that there will be significant association between occupational status, Religion, Dietary pattern, and knows about pediatric emergency was accepted. And hypothesis $H_2$ was rejected for age group, educational level, family income/ month, type of family, and source of information.

**IMPLICATIONS OF THE STUDY :**

**Nursing Practice:**
Nursing practice is an ongoing process of assistance which aims the all round development of mankind. The main focus of nursing practice is to reduce the morbidity and mortality rate and to improve quality of life. Regular health education programs should be carried out for mothers of under five children by nursing personnel’s at all level regarding preventive measures of pediatric home accidents. Help the mothers of under five children to learn their role in controlling pediatric home accidents and prevention of accidents.

**Nursing Education:**
Nurse educators should give more prominence on nurses role on prevention of accidents, poisoning, bites and educating regarding preventive measures of pediatric emergencies. Nurse educates initiate and insist on health education programs for mothers of under five children.

**Nursing Research:**
This study investigated the viability to maintain standardized nursing education and practice thus similar research can be conducted in different specialties and setting and thereby professional can be achieved.

Moreover, it is important to assess what are the necessary steps to be taken prevention of accidents and improving close supervision for the children. A research study can make remarkable changes in their knowledge, attitude, potentials and thereby improving the quality of living.

**Nursing Administration:**
Nursing administrator should make public awareness regarding pediatric emergencies. Nursing administrator can use evidenced based nursing approach within the nursing practice.

- Appropriate teaching learning material needs to be prepared and made available for health education program.
- An administrator must be responsible to co-ordinate all health education and public awareness program.
- An administrator is a motivator to all other nursing personnel to contribute their maximum potential to build up safe and healthy children.
- Nurse Manager can conduct periodical health education programme for the mothers and care givers.

Nursing leaders are challenge to take the health needs of vulnerable groups especially, by effective organization and management of health services.

**LIMITATIONS :**
- The sample size is limited to 60 menopausal women in selected community areas, Banglore. Hence generalization is possible only to the selected setting.
- Duration of data collection is limited to 4 weeks.
- Due to time constraint and the sample availability a convenience sampling was used in the present study.
- Randomization was not done. So the sample may not be the true representative of the population.

**RECOMMENDATIONS :**
- A similar study can be replicated by using larger sample size.
- A similar study can be conducted in different setting.
- A similar study can be conducted to assess knowledge among mothers of under five children.
- A study to evaluate effectiveness of health education module on prevention of accidents, poisoning, and bites.
- Follow up study can be done to evaluate the effectiveness in terms of retention of knowledge among mothers of under five children.
BIBLIOGRAPHY: