Effectiveness of Self-Instructional Module in Knowledge on Diarrhea among Mothers in Selected Play Schools at Chennai

P. Ester Bala
Lecturer, Saveetha Nursing College, Chennai, India

Abstract: In India 1.6 million children are under the age of five years die due to diarrhea. 15% to 20% of deaths among children are related to diarrhea. The present study was undertaken to assess the effectiveness of self-instructional module on knowledge in diarrhea among mothers in selected play schools at Chennai. Objectives 1. To assess the level of knowledge of mothers regarding diarrhea in experimental and control group. 2. To determine the effectiveness of self-instructional module in knowledge on diarrhoea among mothers in the experimental group. 3. To associate the selected demographic variables with knowledge on diarrhea among mothers in both groups. The sample size of the study is 60 mothers of under five children. Results: The average improvement knowledge in experimental group the mean values was 12.03 with standard deviation 1.94. In the control group mean value was 0.13 with standard deviation 1.22. The improvement was statistically tested by paired t value and the results found to be significant at P<0.001 in the experimental group.

Keywords: Diarrhea, self-instructional module, under-five children

1. Introduction

A National health depends upon it's healthy citizen and it applies to all age groups. A healthy adult emerges from the healthy infant. The health of the children has been vital importance to all the society because children are the future mankind. Under-five is the most critical and valuable period during this period there is a high incidence of mortality and morbidity. Diarrheal disease is the first leading cause of morbidity and mortality among fewer than five children in developing countries. According to Indian academy of pediatrics, (2008), on an average 3.3 episodes of diarrhea are experienced per child per year. More than 2 million deaths are estimated to result each year as consequences of diarrheal disease in less than five years of age. In developing countries with poor environmental sanitation has a large cases of acute diarrhea occurs among under five children may prove fatal. The incidence of 1.5 – 4.5 episodes of diarrhea per child, per year. It is estimated that the incidence of diarrhea in malnourished children is five to seven times higher than in healthy children, likewise its severity is 3 to 4 times greater.

2. Statement of the Problem

A study to assess the effectiveness of self-instructional module in knowledge on diarrhea among mothers in selected play schools at Chennai.

2.1 Objectives

- To assess the level of knowledge of mothers regarding diarrhea in experimental and control group.
- To determine the effectiveness of self-instructional module in knowledge on diarrhea among mothers in experimental group.
- To associate the selected demographic variables with knowledge on diarrhea among mothers in both groups.

2.2 Hypothesis

There is a significant increase in level of knowledge in diarrhea among mothers who attended the self-instructional module.

2.3 Methodology

Quasi experimental research design. The study was conducted in Joy Bell play school and K.G Play School at Chennai. 60 mothers of fewer than five children were selected for the sample size. 30 mothers in experimental group and 30 mothers in control group. Purposive sampling technique was used for the study.

2.4 Criteria for Sample Selection

2.4.1 Inclusion criteria
- Mothers who are willing to participate.
- Mothers who are educated.
- Mothers who can read and write English and Tamil.

2.4.2 Exclusion criteria
- Mothers having children above 5 years of age.
- Working mothers who are unable to bring their children to the schools.

3. Data Analysis and Interpretation

Distribution of Level of Knowledge on Diarrhea in Pre Test among Mothers for Experimental and Control Group

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Pre Test Knowledge Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental Group</td>
</tr>
<tr>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Inadequate (&lt; 50)</td>
<td>27</td>
</tr>
<tr>
<td>Moderate (50-75)</td>
<td>3</td>
</tr>
<tr>
<td>Inadequate (&gt; 75)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

Chi square Test value $\chi^2 = 1.071$, D.F. = 1, P = 0.301

Note: N.S. – Not Significant
Effectiveness of Self Instructional Module on Diarrhea among Mothers for Experimental Group

<table>
<thead>
<tr>
<th>Test for Experimental Group</th>
<th>Effective Knowledge Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>Mean 5.87, S.D. 1.76</td>
</tr>
<tr>
<td>Post Test</td>
<td>Mean 17.90, S.D. 1.73</td>
</tr>
<tr>
<td>Knowledge Improvement Score</td>
<td>Mean 12.03, S.D. 1.94</td>
</tr>
<tr>
<td>Paired t Test Value and P value</td>
<td>t = 34.002, P = 0.000 ***</td>
</tr>
</tbody>
</table>

Note: *** - P<0.001 Level of Significance

Distribution of Level of Knowledge on Diarrhea in Post Test among Mothers for Experimental and Control Group

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Post Test Knowledge Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental Group</td>
</tr>
<tr>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Inadequate</td>
<td>0.0</td>
</tr>
<tr>
<td>Moderate</td>
<td>66.7</td>
</tr>
</tbody>
</table>

Figure 1: Mean Knowledge on Diarrhea in Pre and Post Test among Mothers for Experimental and Control Group

4. Major Findings

- The pre test knowledge level in experimental group out of 30 mothers 27(90.0 %) mothers had moderately adequate knowledge none of them had adequate knowledge. The pre test knowledge level in control group out of 30 mothers 29(96.7%) mothers had inadequate knowledge, and none of them had adequate knowledge.
- In post test experimental group out of 30 mothers 2(6.0%) had adequate knowledge, 28(93.3%) had moderate adequate knowledge.
- In control group out of 30 mothers 28(93.3%) had inadequate knowledge, only 2 (6.7%) had moderate adequate knowledge and none of them had adequate knowledge.
- The average improvement knowledge mothers in the experimental group the mean value was 12.03 with standard deviation 1.94. In the control group mean value was 0.13 with standard deviation 1.22. The improvement was statically tested by paired t value and the results found to be significant at – p<0.001 in the experimental group. It indicates that self instructional module was very effective to improve the level of knowledge in the experimental group than control group.
- There was no significant association between the post test knowledge with the demographic variables among mothers in the experimental group.

5. Recommendations

- The same type of study can be conducted in large samples.
- The same type of study can be conducted among under five mothers in the community set up.
- Comparative study can be done in urban and rural settings.
- Pediatric nurse should educate the mothers of under five children regarding the danger signs of diarrhea.
- A study can be done to evaluate the prevalence of diarrheal disease among mothers of under five children.

6. Conclusion

On the basis of the findings the present study was increased the level of knowledge among mothers after the self-instructional module. Therefore it is to be concluded that the present study participants benefited by self-instructional module.

Nursing Implications

Nurses play an important role in the health care system they participate in the preventive, promotive and curative aspects in the health care. “Today’s children are the tomorrow citizens” by promoting the health of children, future of them can be made safe. As Nurses we can plan and implement preventive care and health education regarding the diarrheal diseases among the children which will help them to bring healthy child to our nation.

Nursing Research

The essence of the research is to build up the body of knowledge in nursing as an evolved profession more and more studies would be done in the same topics. The findings can be generalized with large samples to increase the body of knowledge in the nursing field. Continuing research and health education will make the public in general and health professional to understand about diarrhea.

References