Effectiveness of Planned Teaching Programme on Knowledge Related to Otitis Media among the Mothers of Admitted Infants in Pediatric Wards

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Abstract: A Pre-experimental study was conducted to assess the effectiveness of planned teaching programme on knowledge related to otitis media among the mothers of infants in paediatric ward in Bharti Hospital of Sangli, India. The research design used was descriptive research design. 55 mothers of infants admitted in Hospital were chosen for study using non probability purposive sampling technique. The structured questionnaires were prepared with Demographic characteristics and Structured questionnaires. The content validity was determined by 18 experts and the reliability of the tool was done by test retest method. Karl Pearson’s correlation coefficient formula was used for estimation of reliability. The reliability coefficient r of the questionnaire was 0.91, which is more than 0.7, hence it was found to be reliable. In pilot study t value was -2.28 and p value was 0.39 which is less than 0.05 hence the tool was found feasible, and gave better insight to the investigator. As per the study findings, existing mean knowledge score was 8.70 and after administering the planned teaching the mean knowledge score was raised to 13.50 which reveal significant increase in knowledge about otitis media after conducting planned teaching programme as mother have gained knowledge regarding otitis media.

Keywords: Effectiveness Planned Teaching Programme, Knowledge, Otitis Media, Mothers

1. Introduction

Good health is fundamental rights of every human being internal and external growth of person is not possible without good health. Good health is essential to lead both a quality and successful life. Beyond being personal responsibility health is nation and international responsibility and also a worldwide social goal. [1]

Acute otitis media is a acute infection of the middle ear, usually lasting less than 6 weeks. The primary cause of otitis media is usually streptococcus pneumonia, haemophilus influenza, and Moraxellacatarrhalis, which enter the middle ear after Eustachian tube dysfunction caused by obstruction related to upper respiratory infection, inflammation of surrounding structures (sinusitis, adenoid hypertrophy), or allergic reactions (allergic rhinitis). Bacteria can enter the Eustachian tube from contaminated secretion in the nasopharynx and the middle ear from a tympanic membrane perforation. Purulentexudates are usually present in the middle ear, resulting in a conductive hearing loss. [2]

Antibiotics have been traditionally advised in treating patients with otitis media and acute supportive otitis media, where as it is not indicated in managing children with otitis media with effusion. There is always the associated never ending controversy of whether to use antibiotics in these patients or not, with scholarly opinion equally divided. [3]

Antibiotics are often recommended in those with severe disease or under two years old in those with less severe disease they may only recommended in those who do not improve after two or three days. [4]

The children with otitis media antibiotics may increase resolution of symptoms, but may cause diarrhea, vomiting and skin rash. [5]

2. Literature Survey

Otitis media is one of the commonest forms of hearing disorder observed in the early ages of children. This middle ear infection is associated with some potential pathogens and this leads to pus development and effusion making a serious condition of inflammation. [6]

Global prevalence of otitis media suggesting highest risk in India with other associated developing countries as reported by the world health organization. The main cause behind otitis media is the blockage of the Eustachian tube (a tube connecting the mouth cavity and middle ear cavity for maintain air pressure) with viral upper respiratory infection or by allergies. The future impact of this disease can lead to hearing loss at the early age of six years old. India was reported to be associated with the highest prevalence of otitis media with more than 6% experiencing the disorder. The WHO had reported and categorized otitis media as one of the neglected tropical disease. The questions lie whether the commonest form of this hearing disorder is being neglected? Most of the school children in India have been reported to associate with at least one episode of otitis media varying from 10% to 20% of the children. Among these, there is more impact of disease in slums rather than in well sanitized urban cities. The development of disease depends largely on education and prevention. The question does arise as to why otitis media holds and immense importance of medical research towards its large prevalence in India. The most important factor to consider is that the outcome of otitis media is total hearing loss if it remains untreated.[7]

3. Methods / Approach

Research Approach: Quantitative research approach
Research Design: Pre-experimental, one group pre-test, post-test design
Setting: Bharti hospital, Sangli, Maharashtra, India.
**Sampling Technique:** Non probability, purposive sampling technique.

**Sample Size:** The present study consisted of 55 samples. The sample size was calculated by using power analysis.

**Validity:** 18 experts did the content validity of the tool.

**Ethical Considerations**
Research proposal with data collection tool was presented in front of the ethical committee. After approval of the ethical committee pilot study and final study were conducted, where it was promised that there will be no discomfort or risk to the participants and the received information will be kept confidential. The participation was voluntary. Participants can skip the study in any period. The prior permission from concerned authority was taken and informed written consent from each participant was taken.

**Procedure for Data Collection**
A prior permission was taken from concerned authority’s hospital. Researcher visited the hospital and selected the samples as per criteria. Informed consent was taken from sample after explaining purpose and objectives of the study. Pretest was taken first then planned teaching programme done after seven days of planned teaching programme post-test was taken.

**Plan for Data Analysis**
Based on the objectives of the study, Mean, SD was calculated to get the pretest and post-test knowledge score. Paired t-test will be used to compare Pre and Post-test knowledge score.

**Reliability**
The reliability of the tool was determined by administering the structured questionnaire to 6 samples by test retest method with interval of 4 days. Karl Pearson’s correlation coefficient formula was used for estimation of reliability. The reliability coefficient “r” of the questionnaire was 0.91, which is more than 0.7, hence it was found to be reliable.

**4. Results and Discussion**
The analysis of data is organized and presented under the following headings:

**Section I:** Description of sample according to demographic characteristics by frequency and percentage.

**Section II:** Analysis of data related to assessing the effectiveness of planned teaching programme on knowledge related to otitis media among the mothers of infants in pediatric ward in selected hospitals of sangli, miraj and kupwad corporation area.

**Section I:** Description of sample according to demographic characteristics by frequency and percentage.

**Table 1, n=55**

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) 18 to 22</td>
<td>19</td>
<td>35</td>
</tr>
<tr>
<td>b) 23 to 28</td>
<td>27</td>
<td>49</td>
</tr>
<tr>
<td>c) 29 to 32</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>2) Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Primary</td>
<td>16</td>
<td>29</td>
</tr>
</tbody>
</table>

Table no 1 describes the frequency based on age group, 35% were from 18-22 years, and found more samples with 49% were from 23-28 years and 16% were from 29-32 years of age. The frequency based on education, 29% were from primary, as we have found more samples with 42% were from secondary, 22% were graduated and 7% were post graduated. The frequency based on occupational group, 33% were working mothers and as we have found more housewife with 67%. The frequency based on previous knowledge, 24% mothers were having knowledge and 76% mothers were not having knowledge regarding otitis media.

**Table 2, n=55**

<table>
<thead>
<tr>
<th>Test</th>
<th>Mean</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>8.70</td>
<td>-19.4253</td>
<td>0.00001</td>
</tr>
<tr>
<td>Post Test</td>
<td>13.50</td>
<td></td>
<td></td>
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</tbody>
</table>

The table describes, mean knowledge evaluated in pre-test and post-test conducted on 55 samples and it showed significant increase in knowledge about otitis media after conducting planned teaching programme. And the mothers of infant’s have gained knowledge regarding otitis media.

**5. Conclusion**
The analysis and interpretation of the data collected from 55 individual samples regarding the knowledge of otitis media. Data analysis was done based on the objectives of the study, frequency and percentage score were used for finding knowledge. Study suggested that there were 49 % samples from the age group of 23 – 28, whereas 35 % were from age group 18 – 22 and only 16% were from the age group of 29–32. From overall sample 7 % were post graduated, 22 % were graduated, 42 % had secondary education and 29 % were having primary education. Only 24 % were having the previous knowledge regarding otitis media knowledge and 76 % were not having knowledge regarding otitis media. The findings also suggests that the planned teaching programme was effective.

**6. Future Scope**
1) Study can be conducted on other ENT diseases, except otitis media.
2) The study to be conducted for the complications regarding otitis media.
3) Study can be conducted on parents of less than 5 year’s children.
4) Study can be conducted in community setting.

References


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