A study to assess the effectiveness of planned teaching programme regarding disaster and disaster preparedness in terms of knowledge among school going children in selected school of Mullana, Ambala

Sanasam Bankimchandra Singh, Sarungbam Sarju Devi, Simranjit kaur, Rashmita and Ramandeep kaur

Abstract
The current study aimed to evaluate the effectiveness of planned teaching programme regarding disaster and disaster preparedness in terms of knowledge among school going children in selected school of Mullana, Ambala. To assess and compare knowledge regarding disaster and disaster preparedness before and after administration of structured teaching programme. To determine the association of knowledge selected variables. A quantitative research approach using quasi experimental research design (one group pre test–post test) was adapted for the study. A study was carried out with 187 school going children at selected school, Mullana, Ambala. Structured knowledge questionnaire were used to collect the data. The study observed that the mean post-test knowledge score (21.66) was significantly higher than the mean pre-test knowledge score (10.06). The knowledge of School going children regarding disaster and disaster preparedness was partially significantly (p≤0.05) associated with age (0.043), class and source of previous information. Therefore, it is concluded that planned teaching programme was effective in enhancing the knowledge regarding disaster and disaster preparedness.

Keywords: Effectiveness, planned teaching programme regarding disaster and disaster preparedness, Knowledge, School going children

1. Introduction
“Wherever disaster calls there I shall go. I ask not for whom, but only where I am needed.”
–American Red Cross

The word disaster derived from the Greek words Dis means ‘bad’ and aster mean ‘star’ [1]. Disaster is a sudden, calamitous, event bringing great loss and destruction and devastation to life and property. According to WHO, a disaster is defined as “a situation which implies unforeseen and serious immediate threat to public health” [2]. Disasters can classify in two different forms, Natural and Man-made forms. Disaster like earthquake and tsunami are the most destructive type of disasters along with flood and drought [1]. In 2010 According to CRED (Centre for Research on the epidemiology of Disasters) reported that a total 385 natural disaster killed more than 297,000 people worldwide [2]. According to UNICEF and disaster Risk reduction (DRR) estimates that number of people affected globally by disaster has been increasing by an estimate 50,000 to 60,000 per decade [4]. In 2013, India state Uttarkand and adjoining areas killed 5,748 people due to heavy rainfall and about 4200 villages were affected. In India, level of knowledge for preparedness for disaster management is uneven in both central and states and need to strengthen it [3]. The Vulnerability of mankind to disaster has increased considerably all over the region. The damage was due to lack of disaster preparedness among people [5]. Educating students regarding disaster and its awareness is most important element for disaster. So knowledge about disaster preparedness is very much important to prevent the human suffering and loss. Therefore, the study was conducted to evaluate the effectiveness of planned teaching programme regarding disaster and disaster preparedness in terms of knowledge among school going children in selected school of Mullana, Ambala.
2. Methodology
A quantitative approach with quasi (one group pre-test - post-test design) was adapted. The study was conducted on selected schools of Mullana, Ambala. 187 students were selected by using convenience sampling techniques. The data were collected using demographic Performa. Pre-test Knowledge score was taken on first day and planned teaching programme related to disaster and disaster preparedness by group teaching (lecture method) was given on same day. Post-test knowledge was collected after 7 days. The information of knowledge was collected by paper and pencil techniques. Demographic Performa consisting of 11 items: age, class, gender, religion, education of father, education of mother, type of house, Type of family, total monthly income (in rupees), do you have previous knowledge about disaster preparedness, have you ever experienced earthquake in your life. Structured knowledge questionnaire regarding disaster and disaster preparedness consisting of 30 items covering the following 3 areas: Knowledge regarding definition and types of disaster, effects and impact of disaster, disaster preparedness management. Content validity of the tools was established by the suggestion of expert in the field. Internal consistency of the questionnaire was computed by using kuder Richardson and found to be reliable (0.67). Ethical consideration: Formal administrative approval was obtained from the Principal of Govt High school, Gangapur village, Shree Vishwakarma High school, MM public School Mullana, Ambala. Informed written Consent was taken from the participants.

3. Results

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Range of score</th>
<th>Pre-test f (%)</th>
<th>Post-test f (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>0-10</td>
<td>99(52.9)</td>
<td>0</td>
</tr>
<tr>
<td>Good</td>
<td>11-20</td>
<td>88(47)</td>
<td>63(33.6)</td>
</tr>
<tr>
<td>Very Good</td>
<td>21-30</td>
<td>20</td>
<td>124(66.3)</td>
</tr>
</tbody>
</table>

Minimum, score=0, Maximum score=30

Table 2: Mean, mean difference, standard deviation and t value of pre-test and post-test knowledge score of school going children regarding disaster and disaster preparedness

<table>
<thead>
<tr>
<th>Knowledge score</th>
<th>Mean Pre test</th>
<th>Mean Post test</th>
<th>Mean D</th>
<th>SDD</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test</td>
<td>10.16</td>
<td>21.66</td>
<td>11.50</td>
<td>4.22</td>
<td>37.22</td>
</tr>
<tr>
<td>Post test</td>
<td>10.16</td>
<td>21.66</td>
<td>11.50</td>
<td>4.22</td>
<td>37.22</td>
</tr>
</tbody>
</table>

Table 2: The study observed that the mean post-test knowledge score (21.66) was significantly higher than the mean pre-test knowledge score (10.06) after administration of planned teaching programme. Similar findings were reported by Kiran H kulkarni et al evaluated the effectiveness of planned teaching programme on disaster and disaster preparedness in terms of level of knowledge of students. Findings revealed that the knowledge enhanced after providing planned teaching programme. Another similar findings are consistent conducted by Wignyo Adiyoso et al that planned teaching programme is effective in improving knowledge regarding disaster and disaster preparedness

4. Discussion
The results of the present study reveals study observed that the mean post-test knowledge score (21.66) was significantly higher than the mean pre-test knowledge score (10.06) after administration of planned teaching programme. Similar findings were reported by Kiran H kulkarni et al evaluated the effectiveness of planned teaching programme on disaster and disaster preparedness in terms of level of knowledge of students. Findings revealed that the knowledge enhanced after providing planned teaching programme. Another similar findings are consistent conducted by Wignyo Adiyoso et al that planned teaching programme is effective in improving knowledge regarding disaster and disaster preparedness

5. Conclusion
The study concluded that school going children had good knowledge regarding disaster and disaster preparedness and improved after planned teaching programme. The knowledge of School going children regarding disaster and disaster preparedness was partially significantly (p≤0.05) associated with age (22.02), class (51.87) and source of previous information (10.86).

6. Recommendations
The study can be replicated on a larger sample in different setting for making broad generalization. A comparative study can be conducted to assess the knowledge and practices of Scholl going children of private school and government school. A study can be conducted by using other teaching strategies like role play and mock drills

7. Acknowledgement
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8. Reference
1. Dorn t, Yzermans CJ, Kerssens JJ, Spreeuwenberg PM, van der Zee J. Disaster and subsequent healthcare utilization: a longitudinal study among victims, their family members, and control subjects. med Care. 2017; 45(8):80.