KNOWLEDGE ATTITUDE AND PRACTICES ON UNDERGRADUATE STUDENTS REGARDING FIRST AID MEASURES

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ABSTRACT:
**Aim:** To evaluate the effectiveness of structured education on knowledge, attitude and practice on undergraduate students regarding first aid measures. **Participants and setting:** A pre – experimental one group pretest – posttest design was adopted for this study. The study was conducted in chandana nursing students, suryapet, telugana, India. The investigator selected 50 undergraduate students who fulfilled the inclusion criteria were selected by using simple random sampling technique. **Intervention:** Data was collected regarding demographic variable, knowledge, attitude practice of the undergraduate nursing students on frist aid measures. The investigator assessed the level of knowledge, attitude and practice of the nursing students by using structured questionnaire and modified three point Likert Scale and by using checklist through one to one teaching by lecture, demonstration, video clippings and verbalization. Structured teaching programme was conducted on the same day on group wise each group consists of 18members. Data collection was done in English the questionnaire was distributed to each nursing students. At the end of the teaching the doubts were cleared. Then 10 minutes was allotted for discussion. **Measurement and findings:** The analysis finding indicates clearly that 38% of students had inadequate knowledge and 58% of them had negative attitude and 72% of them had poor practice on nursing students regarding first aid measures. A well planned structured teaching programme given to the same group. The effectiveness of programme showed high level of significant at p<0.001 level. It showed that structured teaching programme was an effective method to improve the knowledge, attitude and practice of frist aid measures. **Conclusion:** The study revealed that most of the nurses had high level of knowledge and they had also applied good practice during the emergency of frist aid measures.

**Key Words:** Knowledge, Attitude, Practice, First Aid Measures, Undergraduate Students

INTRODUCTION
First aid as the name suggest in the very first assistance or treatment given to an injured before the arrival of the qualified health personnel. First aid is provided mainly to save life and prevent permanent disabilities. First aid is provided mainly based on the knowledge of simple human anatomy and physiology. The first aider should update his knowledge and skill to prevent any injuries to the victim. Throughout life a human being is faced with all kinds of accidents or injuries internally and externally, which may endanger the life of the individual. If these injuries or accidents are attended by the first aider immediately, then residual effects fatality can be prevented (Angus et al., 2000).

First aid is treatment for the purpose of preserving life and minimizing the consequences of injury and illness until help, from a medical practitioner or nurse, is obtained. Among natural disasters, earthquakes, floods and windsstorms are not uncommon in Pakistan. The northern areas of Pakistan lie in an earthquake zone. An earthquake (October 8, 2005) in the Northwest Frontier Province and Azad Kashmir claimed 50,000 lives and left more than 80,000 injured. Roads were badly damaged after the earthquake and many remote villages were cut off by landslides and consequently medical teams could not reach the village for 3-4 days. First aid provided by the local people could have reduced the death toll drastically. In a study in Italy it was concluded that 25% to 50% of earthquake victims who were injured and died slowly could have been saved if first aid had been rendered immediately (Safar, 1986).

First aid has been practiced ever since the beginning of humanity. Learning first aid is the civic responsibility of every citizen. Some of the organizations which were fore runner in specializing first aid were the knights Hospitaller, the first to specialize in battle field care for the wounded. St. John Ambulance was founded in 1877 to teach first aid. Where first aid is one of the major activities of Red Cross. However the idea of “First Treatment” was first conceived by general as much a famous German Surgeon in 1978 which represented a combination of “First aid” and “National” (Engelnd et al., 2002).

According to global burden of disease study, deaths from injuries are projected to rise and road traffic accidents are expected to account for most of this increase currently motor vehicles accidents to rank ninth in order of disease burden and are projected to be ranked third in the year 2020. Road traffic injuries account for 2.2% of all deaths and involve people of all ages. These lives could be saved and disability is minimized if the general public are aware, of
how to give first aid the people of self help group who involve in various activities of community may effectively work in the first aid management (Park, 2009).

At some point in a medical curriculum students are taught how to handle emergencies in a hospital emergency setting where drugs and other necessities are available. But the adequate knowledge required for handling an emergency without hospital setting at the site of the accident or emergency may not be sufficient. The main objective of this study is to find out the level of knowledge of undergraduate students in providing first aid care and to find out the number of students who have received formal first aid training. We also assessed the preferred responses of the students to various emergency situations. Another important aspect of this study is to find if students of medical colleges are any better at providing first aid than students of other undergraduate colleges. This study also aims to assess the need for further training in first aid for medical students and whether they feel that their knowledge is sufficient in this regard or not. Our hypothesis was that undergraduate students of Karachi do not have sufficient knowledge in providing first aid care and very few will have had any formal first aid training. We expect the students of medical colleges to have a better understanding of first aid care than those of other colleges (Metin & Mutlu, 2010).

MATERIALS AND METHODS

The formal permission was obtained from the college principal. A pre – experimental one group pretest – posttest design was adopted for this study. The study was conducted in Chandana nursing students, suryapet, telugana, India. The investigator selected 50 nursing students who fulfilled the inclusion criteria were selected by using simple random sampling technique. Data was collected regarding demographic variable, knowledge, attitude practice of the students on first aid measure. The investigator assessed the level of knowledge, attitude and practice of the nursing students by using structured questionnaire and modified three point Likert Scale and by using checklist through one to one teaching by lecture, demonstration, video clippings and verbalization. Structured teaching programme was conducted on the same day on group wise each group consists of 18 members. Data collection was done in English the questionnaire was distributed to each student. At the end of the teaching the doubts were cleared. Then 10 minutes was allotted for discussion. An oral consent was obtained from the students and confidentiality of the responses assured. All the students were participated with great interest. They were co-operative and attentive. After seven days of structured teaching programme, post test was conducted with the same questionnaire for the same students. Ethical consideration was handled throughout the study. Mean and standard deviation was used to complete the knowledge, attitude and practice of first aid measures of students. Paired"t" test was used to analyze the effectiveness between the pre and posttest.

Description of Research Tool

It consists of four sections.

Section A
It consists of demographic a variable which includes age of the individual, religion, education, type of family, previous exposure to knowledge.

Section B
Multiple choice questions to assess the knowledge of first aid measures.

Part I: Questions related to first aid measures.

Section C
Modified three point Likert scale to assess the attitude regarding first aid measures. This section includes 10 items with choices as agree, uncertain and disagree.

Section D
It comprised of questions related to practice regarding first aid measures.

Scoring Procedure

Section B
The total number of knowledge questions was 20. All the questions had four alternatives with one right answers. A score of “one” was given for every correct answer and score of “zero” was given for every wrong answers. The total score was converted into percentage and interpreted as follows,

- Adequate knowledge ->75%
- Moderate knowledge -50 – 75%
- Inadequate knowledge <-50%

Section C
To interpret the level of attitude the score was classified as,

- Positive attitude->75%
Favorable attitude - 50 – 75%
Negative attitude - <50%
Attitude questions consist of both positive and negative statements. The score given for positive questions were as follows,
- Agree: 2
- Uncertain: 1
- Disagree: 0
Similar for attitude negative question scored as follows,
- Agree: 0
- Uncertain: 1
- Disagree: 2

Section D
To interpret the student’s questionnaire was given to collect information regarding practice on first aid measures. It consists of 20 questions. The maximum score was 20 and minimum score was zero.

To interpret the level of practice the score was classified as,
- Poor practice: < 50%
- Fair practice: 50 – 75%
- Good practice: > 75%

RESULTS
Table 1 denotes the mean and standard deviation of knowledge, attitude and practice of undergraduate students regarding first aid measures. Observing the pretest level of mean knowledge score was 8.75 with S.D 1.182 and posttest level of mean knowledge score was 15.25 with S.D 1.02 and the ‘t’ value of 29.43 showed high level of significance. With respect to the pretest mean attitude score was 8.58 with S.D 1.88 and posttest mean attitude score was 12.39 with S.D 1.748 and the ‘t’ value of 10.49 showed high level of significance.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Pretest Mean</th>
<th>S.D</th>
<th>Posttest Mean</th>
<th>S.D</th>
<th>‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>8.75</td>
<td>1.182</td>
<td>15.25</td>
<td>1.02</td>
<td>29.43*** (S)</td>
</tr>
<tr>
<td>Attitude</td>
<td>8.58</td>
<td>1.88</td>
<td>12.39</td>
<td>1.748</td>
<td>10.49*** (S)</td>
</tr>
<tr>
<td>Practice</td>
<td>8.42</td>
<td>1.79</td>
<td>15.18</td>
<td>1.65</td>
<td>19.63*** (S)</td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01, ***p<0.001, S – Significant

It clearly indicates that the pretest mean practice score was 8.42 with S.D 1.79 and posttest mean practice score was 15.18 with S.D 1.65 and the ‘t’ value of 19.63 showed high level of significance of undergraduate students regarding first aid measures.

Table 2 shows the correlation of pre and posttest level of knowledge and attitude on undergraduate students regarding first aid measures. The analysis reveals that the pretest level of knowledge mean score was 8.75 with S.D 1.182, the attitude mean 8.58 with S.D 1.88 and overall ‘r’ value was 0.26 which significant at p<0.05 level. The posttest level of knowledge mean score was 15.25 with S.D 1.02 the attitude mean 12.39 with S.D 1.748 clearly indicates a positive correlation between knowledge and attitude (r = 0.71) which is significant at p<0.001 level.

<table>
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<tr>
<th>Domain</th>
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<th>S.D</th>
<th>Attitude Mean</th>
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<tbody>
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<td>Pretest</td>
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<td>0.26*</td>
</tr>
<tr>
<td>Posttest</td>
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<td>12.39</td>
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<td>0.71***</td>
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</tbody>
</table>

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Table 3: Correlation of pre and posttest level of knowledge and practice on undergraduate students regarding first aid measures.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Knowledge</th>
<th>Practice</th>
<th>‘r’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D</td>
<td>Mean</td>
</tr>
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</tr>
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<td>15.18</td>
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*p<0.05

Table 3 illustrates the correlation of pre and posttest level of knowledge and practice on undergraduate students regarding first aid measures. The analysis reveals that the pretest level of knowledge mean score was 8.75 with S.D 1.182, the practice mean score was 8.42 with S.D 1.79 and Overall ‘r’ value was 0.1 significant at p<0.05 level. The posttest level of knowledge mean score was 15.25 with S.D 1.02 and practice means score was 15.18 with S.D 1.65 clearly indicates a positive correlation between knowledge and practice (r = 0.12) which is significant at p<0.05 level.

DISCUSSION

The analysis finding indicates clearly that 38% of students had inadequate knowledge and 58% of them had negative attitude and 72% of them had poor practice on nursing students regarding first aid measures. A well planned structured teaching programme given to the same group. The effectiveness of programme showed high level of significant at p<0.001 level. It showed that structured teaching programme was an effective method to improve the knowledge, attitude and practice of first aid measures.

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CONCLUSION

The findings of this study indicated the need for educating the self help group members about first aid practices. They must be motivated to adopt safety measures and practice first aid. There is a need of proper and regular educational programs to make awareness in the community about the importance of first aid practices. There is a need for health personnel to take active part in education of the people regarding first aid. Many educational programs are successful in upgrading knowledge of layman during emergencies.

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