Effectiveness of active learning in Nursing Education

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Abstract- Active learning is the process of education where students become extensively engaged in learning directly rather than learning things passively. It encourages the students to take an active role in learning. It is not only concerned to class room theory, but it also facilitates nursing students to practice their skills in the real world.

Objectives: to determine the effectiveness of active learning by comparing it with passive learning.

Method: The study design used for the study was cross sectional comparative study design. 62 BScN students of semester 1 and semester 3 were selected through probability sampling techniques. The participants were exposed to both active learning and passive learning technique and then their results were compared based on posttest. Frequencies and percentages were calculated through MS Excel 2013.

Result: The result shows that the different teaching methods yields different in results. The most effective methods was tutorial with highest post-test mean score (mean 75.2 ±11.3), the second method was written assignment with Mean score 70.48 ±15.2, whereas the mean score on PPT Lecture was 65.7 ±14.7.

Conclusion: It is concluded that nursing students should be engage in active learning to gain plenty of knowledge in theory and to bring the theory in practice in clinical side. The active learning environment should be supported in all Nursing institutes that student become self-centered not teacher centered.

I. INTRODUCTION

Active learning is the process of education where students become extensively engaged in learning directly rather than learning things passively. It encourages the students to take an active role in learning and enhance critical thinking, self-directed learning and problem solving ability by using different types of active learning methodologies and hence it is called Student Centered Approach towards learning. Several methodologies are used to engage the students in different activities such as reading, writing, discussion or problem solving that promote analysis, synthesis and evaluation of class content. Active learning enables the nursing students to apply theory which they learn in the class into clinical practice as well. According to Johnston and Tinning (2001) problem-based learning which is a part of active learning is widely used in nursing education for assessing the students to integrate nursing theory into practice.

Active learning also provides many opportunities for nursing students to ask questions where they are unclear. It is not only concerned to class room theory, but it also facilitates nursing students to practice their skills in the real world. According to Leong and Clutter (2015) students are always encouraged to perform their skills in clinical even if they are not fully expert and are encouraged to ask relevant questions where they are doubtful and have weakness.

In active learning, the students are not totally dependent on teacher, rather the student are more active than teacher. Tezer and Besgul (2014) states the active role of teacher and passive role of students is removed in active learning and teacher only guides the students where they need. In this approach, the students act as a critical thinker, researcher, producer and decision maker; and they are in touch with other students as well as teacher; although, they are neither dependent on teacher nor students. Different learning theories are also related to active learning. According to Acikgoz (2007) the active learning is based on two main theories in the field of education which are constructivism and cognitivism. It is not the good way that student only engage in passive learning and step in the screen full of slides and don't involve in any other activity which can lead them lack of confidence skills and knowledge. According to Fahlberg (2014) the teacher must move out the student from screen slides and involve them to use knowledge in practical life and participate actively to change the situation.

In active learning environment, students are always train to think critically and reflectively which help them to become self-directed learners (Justice et al., 2007). It means that the students in active learning are involved cognitively and constructively with empowerment and they learn independently by reflecting their past knowledge. Active learning also enhance the performance of nursing student in clinical practices as well as in theory classes. According to Leong & Clutter (2015) if the active learning model is encourage in the clinical setup as well as in class room, the nursing student might improve their performance which will increase their ability to learn and practice their expertise with willingness and interest.

II. MATERIAL AND METHODS

The study was conducted in a private nursing college of Peshawar KP. Pakistan. The target population the students of BScN students of the college. The study design used for the study was descriptive cross sectional comparative study design. The sampling techniques used was Probability systemic sampling. The sample size was 62 BScN students of semester 1 and semester 3. The inclusion criteria was all semester 1 and semester 3 students of BScN, while the exclusion criteria was students on medical leaves.

The participants were both male and female of diverse culture and language aged between 17 to 23 years old. The majority of the participants came from rural areas especially...
from Chitral and Swat. There was no significance difference between the participants in terms of age and years of education as all participants were passed intermediate science subjects. The study tool used for the project was post test. To maintain respect their autonomy and confidentiality a well explained informed consent was presented to the participants. Data analysis was done through MS Excel 2013, frequencies and percentages were calculated.

The effectiveness of active learning strategy was determined by comparing it with passive learning, a session on NCP was arranged for all students, a group of students were taught through traditional lecture method while two groups were involved in active learning through tutorial and written assignment.

### III. Result

Means and SDs were calculated for each category to examine the most effective learning strategy. The result shows that the different teaching methods yields different in results. The most effective methods was tutorial with highest post-test mean score (mean 75.2 ± 11.3), the second method was written assignment with Mean score 70.48 ± 15.2, whereas the mean score on PPT Lecture was 65.7 ± 14.7. Chart 1 and table 1 illustrate the comparison and results of the three different strategies

![Chart 1: Mean score and standard deviation](image)

<table>
<thead>
<tr>
<th>Sno.</th>
<th>Methodology</th>
<th>Mean Score</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PPT Lecture</td>
<td>65.7</td>
<td>14.7</td>
</tr>
<tr>
<td>2</td>
<td>Tutorials</td>
<td>75.2</td>
<td>11.3</td>
</tr>
<tr>
<td>3</td>
<td>written Assignment</td>
<td>70.48</td>
<td>15.2</td>
</tr>
</tbody>
</table>

**Table1: Mean and SD of Score achieved on three different teaching Methods**

### IV. Discussion

The result obtained from the above study showed that active learning strategy is more effective than passive learning especially in nursing education. In active learning, the students are always participate actively and the study is always student centered. Tezer & Besgul (2015) said that the active role of teacher and passive role of students are minimized in active learning and teacher only involve when student need their guidance. In this method instead of teacher the students act as a critical thinker, researcher, producer and decision maker and they are in touch with other students as well as teacher but not depend on them. Active learning not only limited to theory classes but it also improve the clinical performance. The study conducted by Leong and Clutter (2015) showed that all the nursing student got high score when they are supported by active learning model in clinical side. They suggested that if the active learning model is encourage in the clinical setup as well as in class room, the nursing student will ultimately improve their performance which will increase their learning ability and practice their expertise with interest.

### V. Conclusion

From the above study it is concluded that nursing students should be engage in active learning to gain plenty of knowledge in theory and to bring the theory in practice in clinical side. The active learning environment should be supported in all Nursing institutes that student become self-centered not teacher centered. Active learning environment also necessary because it enhance critical thinking, decision making power, self-directed learning and problem solving ability of the students.
VI. RECOMMENDATIONS

The recommendation for future is proposed. Firstly, training should be given to all faculty to apply active learning strategies during the class as well as in clinical side. Secondly, there should be more study on other active learning strategies beyond tutorial and assignment. For this, it was suggested to train all the present faculty to apply active learning strategies and also to do research on other active learning strategies to check their effectiveness as well. Finally, it was recommended that there should be active learning environment in both classes as well as in clinical in near future.

REFERENCES


AUTHORS

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