

#9JJ09 (133856)

Teaching methods for complex medical topics

Charoen Jaiwong\*, Medical Education Center Chiangrai Prachanukroh Hospital, Chiangrai, Thailand  
Yaowalak Jariyapongpaiboon  
Pradthana Ounchanum

**Background:** Medical students have to study a wide range of the medical topics. Teaching a complex medical topic in a limited of time is challenging for the educators. This study aimed to compare different teaching methods that are suitable for the medical students in learning the complex medical topics.

**Summary of Work:** The 4th year medical students were assigned to study pediatric diarrhea as a complex medical topic. The students were divided into three groups. The first group used self-directed learning (SDL) and small group teaching (n=11). The second group used SDL and bedside teaching (n=8). The third group used SDL and lecture (n=10). Multiple-choice questions post-test were used to evaluate the students' knowledge, and the 10-point rating scale was used to assess the students' satisfaction.

**Summary of Results:** There was no difference in age, sex and grade point average(GPA) between three groups. The highest score was observed in the third group (6.8) following by the first group (4.5) and the second group (4.8) (p= 0.005). The part of knowledge that first group had significant higher score than the other groups was correlation between pathophysiology and treatment. The average satisfaction score was highest in the third group however it was not significantly different comparing to the other groups (p>0.05).

**Discussion:** Even though active learning has been promoted in Thai medical education, this study showed that the conventional lecture-based teaching still needed. However, the short term evaluation cannot be affirmed that which teaching methods are superior.

**Conclusion:** Lecture-based teaching still has had a role in some part of learning complex medical topics for Thai medical students.

**Take Home Messages:** Although active learning is important for medical education, educators should select the proper methods for certain medical topics to enhance the learning of medical students.

#9JJ10 (135105)

Investigating the Effect of Quantum Learning Method on Improving Students Courses Learning

Ideh Dadgaran\*, Medical Education Research Center, Guilan University of Medical Sciences, Rasht, Iran

Nafiseh Dadgaran, Guilan University of Medical Sciences, Rasht, Iran

Ali Khalkhali, Department of Educational Sciences, Islamic Azad University of Tonekabon, Tonekabon, Iran  
Monireh Aghajanasab, Biochemistry Department, Medical School Guilan University of Medical Sciences, Rasht, Iran

**Background:** Learning is an active process, whose recognition helps the instructor to present a more effective education. Quantum learning is an educational model that contains both educational theories and immediate implementation in class. The present study aims to examine the effect of quantum learning on the educational improvement and learning motivation of learning biochemistry in medicine students

**Summary of Work:** This study was quasi-experimental method. The study population included all the students of Basic Sciences in Medical Sciences field at Guilan University in 2015 in Rasht, Iran. After the screening second semester students of medicine in Biochemistry course simple randomly selected and they were divided into two experimental groups (N=26) and control group (N=20) In the experimental group, quantum learning method was applied and the control group were taught under normal (lecture) conditions. Independent T test and Software spss were used to analyze data.

**Summary of Results:** The results showed that quantum learning methods have a positive impact on improving academic achievement and student learning motivation. Given the significant level of result in two independent samples t-test and post-test two experimental and control groups is less than 05/0 intervention was done in the way of improved learning and given that the upper bound and lower bound are both positive, the mean is higher than the control group and experimental groups. Suggests that the level of awareness and motivation to learn in the experimental group were improved with the intervention of the learning method.

**Discussion:** The conclusions demonstrate that this method can increase the students' satisfaction and the students will study and pursue their courses more assiduously.

**Conclusion:** Applying this method by the instructors can lead to creating interest, improving learning motivation and improving educational performance of the students. This method can be used by the students as a modern method.

**Take Home Messages:** The main feature of this method of learning is transfer speed and As well as other special feature of this method compared to other methods is that in this method is used to teach all learning styles simultaneously. This research, according to field of study offered at other universities