Effectiveness of Case-Based Learning During Small Groups Sessions at Army Medical College

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ABSTRACT

A pragmatic and sequential mixed method study was conducted at Army Medical College, from October to December 2014 to determine medical students' perceptions regarding effectiveness of small groups during the CBL (case-based learning) sessions. Tutorial Group Effectiveness Instrument (TGEI) was used after written and informed consent. Free text comments about CBL were invited from the respondents and common ones, and were tabulated. The mean scores were calculated and compared among different subgroups of respondents using appropriate independent sample t-test. Content analysis of qualitative segment was done. A p-value of less than 0.05 was taken as statistically significant. The analysis of qualitative and quantitative variables was integrated in the final interpretation phase to draw conclusion. The average age of the participants was 19.33 ±0.657 years. The difference in scores was statistically insignificant for cognitive (p = 0.537), motivational (p = 0.868), and demotivational (p = 0.125) effectiveness between males and females. Insignificant difference was also observed for qualification of the overall group productivity among male and female students (p = 0.162), and exposed and non-exposed groups (p = 0.272). The perceptions of overwhelming number of participants were in favour of small group discussion as a component of CBL.

Key Words: Case based learning. Traditional methods. Small group discussion.
The difference in scores was insignificant between males and females. Scores were also compared with respect to previous exposure to CBL as shown in Table II. Cognitive score was significantly higher among non-exposed group as compared to exposed group (p=0.008), while insignificant difference was observed for motivational (p=0.231) and demotivational (p=0.088) scores. Insignificant difference was observed for qualification of the overall group productivity among male and female students (p=0.162), and exposed and non-exposed groups (p=0.272). Content analysis of open-ended questions resulted in emergence of 3 themes participants. Small group discussion promoted clinical relevance, integration, active student participation, group collaboration, and a positive group environment.

Students should criticise each other, help each other to understand a concept or a problem, guide each other to the resources, and provide references and materials. Improper discussion, caused by students being less motivated, inhibits student learning. A recent study that examined the verbal interactions of one group of PBL students during an entire PBL cycle concluded that 53.3% of episodes were collaborative, 27.2% were self-directed, while 15.7% were constructive. Student perception about small group effectiveness was positive. It involves integration and practical application of the knowledge of basic science, increasing the cognitive and motivational aspects of the learning. The cognitive and motivational scores were increased and demotivational scores decreased after the interactive small group discussion during the case-base learning sessions. The impact on small group dynamics during future case-base sessions should be implemented for incorporating appropriate behavior in students and team-building in the curriculum at institutional level.

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REFERENCES