DOI Number: 10.5958/0974-9357.2019.00013.8

Engaging Nursing Students with Small Group Learning in Midwifery Education

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ABSTRACT

Teaching has become very much learner oriented in the past few decades, and educators use a number of teaching learning strategies to engage and motivate the learner. The study aimed to assess the feasibility and experience of SGL in undergraduate nursing students. SGL was implemented for final year undergraduate nursing students (n=92) to teach obstetric skills and immediate management of sick newborn using standard treatment protocols (STPs) in a nursing institution with total students' strength of 450, attached to a 3000 bedded tertiary level teaching hospital in India. Students were assessed using objective structured clinical examination (OSCE) after the teaching. A self developed structured feedback on their experience of SGL was taken from the students, along with open ended questions for additional comments if any. Majority of the students scored above 75% in the OSCE stations. Students also gave positive feedback about the teaching-learning experience. This study suggests that SGL is a highly acceptable method of teaching among nursing students. Educators need to use methods of teaching like SGL that will result in meaningful learning.

Keywords- *small group learning, teaching, feedback, Objective structured clinical examination*

INTRODUCTION

Teaching has become very much learner oriented in the past few decades, and educators use a number of teaching learning strategies to engage and motivate the learner. Small group learning(SGL) is one of the strategies that have been shown to facilitate active learning,[(1)] better retention[(2,3)] and higher satisfaction with learning.[(4,5)] Students also prefer SGL as compared to didactic teaching methods.[(5)] Educators too enjoy facilitating SGL and have positive experience towards SGL.[(6)] However, with increasing intake of students in a batch it is challenging for educators to implement SGL in routine teaching, especially in places where faculty strength is less. Studies show that students' engagement and faculty involvement play vital role in successful implementation of SGL[(7–10)]. To the best of researchers' knowledge, reports on implementation of SGL in nursing education in India are scarce, although there are a number of studies on medical students. The use of strategies like SGL for teaching, and objective structured clinical evaluation (OSCE) for assessments are exceptions and not the norm. In this paper we report an implementation of SGL for final year undergraduate nursing students (n=92) followed by OSCE, in a nursing institution with total students' strength of 450, attached to a 3000 bedded tertiary level teaching hospital in India. A structured feedback on their experience of SGL was taken using a Likert scale from the students.

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METHOD AND MATERIALS

All students promoted to final year undergraduate nursing participated in the teaching-learning activity. Administrative approval was taken for the program. The students had just entered into their final year and had no prior teachings on the topic that were being taught to them using SGL. We assumed that pre knowledge assessment would not yield any significant findings. Students were divided into small groups (n=9). Obstetric

skills and immediate management of sick newborn using standard treatment protocols (STPs) were taught to the students over 2 days. Obstetric skills were demonstrated on manikins using checklist, namely, active management of third stage of labour (AMTSL), postpartum Insertion of intrauterine device (PPIUD), and insertion of interval intrauterine device. Each student practiced under supervision of the facilitator and in the presence of her group members. Group members were encouraged to give constructive feedback during practice. Students were taught about management of sick newborn at small hospitals using standard treatment protocols (STPs) developed by department of paediatrics, World Health Organisation Collaborating Centre (WHO CC) All India Institute of Medical Sciences, New Delhi, using job aids, case scenarios, and manikins which can elicit vital signs like heart rate and respiration (Neonatalie-Laerdal). They were informed to download and refer the app on sick newborn (WHO CC STPs), available for free on Google play, a day prior to the teaching session for self directed learning. Students were assessed using OSCE on the third day. The OSCE consisted of 4 stations- insertion of PPIUD, performing AMTSL, Recognising shock in a newborn, recognition of neonatal hypothermia and its management. Checklists for OSCE were developed from latest relevant literature available in public domain on the topic. Each station was timed for two minutes and four students were assessed at a time. Performance of students in OSCE were classified as "good" if scoring is above 75 percent, "average "for scoring between 50 to 75 percent, and "poor" for scoring below 50 percent. Feedback on their experience of SGL was taken using 5 point likert scale ranging from "strongly agree" to "strongly disagree". The instrument had ten items and two open ended questions asking them about which elements of the session contributed most to their learning, and additional comments if any. The feedback form was developed by the researchers and validated by 3 nursing experts. Feedback was taken a day after the SGL session.

RESULTS

Most of the students had good performance in the OSCE. Majority of them (96.7%) scored above 75% at the station on recognition and management of neonatal hypothermia [Table.1]. Students also gave positive feedback about the teaching-learning experience. They strongly agreed that SGL helped them understand the subject (67.4%). Majority of them strongly agreed that the sessions were engaging (57.6%) and they could actively involve themselves in learning (58.7%). Most of them were able to interact with group members during the learning sessions (63%). They clearly prefer SGL over traditional methods (80%) and felt that SGL helped them appreciate the importance of the topic being taught (66.3%). The students also reported that SGL stimulated them for self learning in the future (63%). They strongly agreed that SGL should become a regular feature of routine teaching (72.8%) [Table.2]. The open ended questions were analysed and major themes were extracted. Majority of the students mentioned that they learnt most from one to one interaction with the teacher and group members. Hands on practice were also reported to be a major contributing factor for learning. Many of them suggested that SGL should become a regular feature in routine teaching [Box.1].

Table 1: Students' performance in OSCE stations (n=92)

Skill observed	Maximum Score	Performance		
		Good (> 75%) f(%)	Average (50-75%) f (%)	Poor (<50%) f(%)
Performing AMTSL	**8**	57 (61.9)	33 (35.9)	2 (2.2)
Insertion of PPIUD	**7**	59 (64.1)	19 (20.7)	14 (15.2)
Recognition and management of neonatal Hypothermia	**10**	89 (96.7)	3 (3.3)	0
Recognition and management of shock in newborns	**10**	43 (46.7)	33 (35.9)	16 (17.4)

Table 2: Students' self reported experience of Small Group Learning (n=92)

S.No	Statements	Strongly Agree f(%)	Agree f(%)	Uncertain f (%)	Disagree f(%)	Strongly Disagree f(%)
	The teaching method helped my understanding of the subject	62 (67.4)	28 (30.4)	2 (2.2)	0	0
	The teaching sessions were engaging, with use of multiple resources	53 (57.6)	36 (39.1)	3 (3.3)	0	0
	I was able to involve myself actively in learning	54 (58.7)	37 (40.2)	1 (1.1)	0	0
	I felt comfortable asking questions in this course	51 (55.4)	37 (40.2)	4 (4.3)	0	0
	I was able to interact with my group members during learning	58 (63)	29 (31.5)	3 (3.3)	2 (2.2)	0
	I prefer small group learning (SGL) over traditional methods like lecture	74 (80.4)	14 (15.2)	2 (2.2)	0	0
	This course helped me to appreciate the importance of the subject matter	61 (66.3)	31 (33.7)	0	0	0
	The sessions have stimulated me for self learning in the future	58 (63)	31 (33.7)	3 (3.3)	0	0
	The practice sessions have built my confidence to perform the skills in actual clinical setting	60 (65.2)	30 (32.6)	1 (1.1)	1 (1.1)	0
	SGL should become a regular feature of routine teaching	67 (72.8)	24 (26.1)	1 (1.1)	0	0

Box.1: Factors contributing to students' learning

1	One to one interaction with teacher
2	Hands on skill practice
3	Interaction with group members
4	Use of multiple resources- apps, manikins, checklists, jobaids
5	Opportunity to clarify doubts from teacher
6	Teachers' effort to make them learn

DISCUSSION

The use of SGL seems to have helped the students perform well in OSCE though no conclusions can be made due to lack of comparative data. The findings of this study support previous literature on advantages of SGL like better comprehension and retention, active learning, group interaction and students 'engagement in learning.[1,2,4,5,11] Students also preferred SGL over didactic teaching methods, which is similar to previous findings[12,13] but the preference of students may be context dependent.[14] The open ended comments of the students convey that they heavily rely on teacher's involvement and validation in teaching, which is supported by previous literature.[7–9] Hands on practice was also reported as a major contributor to learning, and most of them strongly agreed that it made them feel confident to perform skills in actual clinical setting (65.2%). The relationship between skill practice and confidence have been studied and well documented.

[15–17] Most of them also suggested that SGL be used for regular teaching. Though we cannot completely do away with traditional teaching methods but educators can incorporate elements of SGL even in large groups in order to actively engage the students and make the lectures enjoyable.[18,19]

Many educators tend to hesitate from using teaching methods that are not conventional, perhaps in fear of the sheer size of the classroom or perceived lack of adequate manpower and time. But the facilitators in this study found the exercise to be highly satisfying and enjoyable, in spite these shortcomings. The findings of other studies are similar, even where infrastructure was not satisfactory. [6,17]

This study is limited by its post test only methodology and cannot be generalised. We could assess only limited number of skills in OSCE because of factors like time and human resource. However, we found the implementation of SGL feasible, while creating a positive learning experience for the students. Future experimental study is recommended to determine the effectiveness of SGL as a teaching strategy in similar settings.

CONCLUSION

This study suggests that SGL is a highly acceptable method of teaching among nursing students. Every teacher aims to make the students learn, and enjoy the learning process too. Educators need to use methods of teaching that result in meaningful learning. We conclude that SGL is a feasible method of teaching for skills as well as theoretical learning, even in resource limited settings.

To whom it may concern

The authors declare that there is no **Conflict of Interest** whatsoever from any person or organisation pertaining to this paper titled "**engaging nursing students with small group learning in midwifery education".** We further declare that no grant was received for conducting this study from funding agencies in the public, commercial, or not-for-profit sectors. Administrative approval was taken from the head of department for implementing the program. Ethical approval is not applicable for implementation of educational strategies, as per institutional protocol.

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