

## PROGRAMME REPORT

### Medical students as teachers in clinical skills training

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#### Context

Clinical skills are taught by the faculty during the clinical ward postings to the students. However, due to adverse student-teacher ratio even in small groups, all students do not get to demonstrate clinical signs and get feedback.

#### Reason for the idea

We noticed students were apprehensive in demonstrating clinical skills during practical examination as they were not sufficiently trained to demonstrate the same. According to the learning pyramid learners retain more than 90% of what they learn when they teach someone else compared to 30% of what they learn when they see a demonstration. The teaching activities require students to deal intensively with the material and master it. They can thus reach a much deeper level of understanding and knowledge of the subject and an increase of their practical experience in the taught subjects. [1] Studies in developing countries are however lacking. Hence the present study was done to explore the benefits of medical students as teachers in improving their own skills and the acceptance of the innovation by students.

#### Methods

The Project was approved by the college research committee. Fourth year volunteer medical students were trained by faculty to teach clinical skill of antenatal obstetric examination of third trimester normal antenatal women to second year students emphasizing the “must know/do” elements. Two training sessions were carried out each lasting for two hours at weekly intervals. The clinical skill was demonstrated by the faculty in a step wise manner and the students practiced the skills repeatedly under supervision. Forty- four of total 94 fourth year students volunteered to teach 134 second years in the presence of faculty in groups of four to six students per student-teacher. Following a step-by-step demonstration by the student-teachers, the second year students were given the

opportunity to practice the skills under supervision with continuous feedback. A five point Likert-scale was used to measure second year students’ perceptions of the intervention using a web based survey. Questions included their perceptions on the knowledge and skills of the student teacher and if this model can be incorporated to other clinical skills. An observational checklist was used to assess improvement in skill if any among fourth year students before and after the intervention. Scores were compared among volunteer and non-volunteers using t-test for statistical significance.

#### Evaluation

Average scores on the pre- and post test improved significantly in the volunteer teacher group (from 12.18 to 22.7), compared with the non volunteer group (9.81 to 16.35). The number of students willing to volunteer to teach increased over a period of one year. Many second year students mentioned that they felt less inhibited in asking questions to their student tutors than to faculty members and 91% were willing to volunteer for teaching when they reach fourth year as it would improve their clinical skills. Faculty members felt that student teaching volunteers asked more doubts during their training sessions. Given the demands of future physicians to serve as educators for both junior physicians and patients, teaching by students during medical school appears to be an effective strategy for imparting clinical skills.

#### References

1. Buckley S, Zamora J. Effects of participation in a cross year peer tutoring programme in clinical examination skills on volunteer tutor’s skills and attitudes towards teachers and teaching. *BMC Med Educ.* 2007;7:20. <http://dx.doi.org/10.1186/1472-6920-7-20>

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