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## **Cross-Year Peer Tutoring- A Self-Assessment Tool in Medical Education**

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#### Introduction

People of comparable social groupings who aren't skilled lecturers serving to one another and learning themselves by teaching" is termed as Peer aided learning (PAL)<sup>[1]</sup>. Peer tutoringis a way to assist students for his or her own active learning and significant thinking skills. Peer tutoring is the method between 2 or a lot of students in an exceedingly cluster wherever one among the scholars acts as an instructor for the opposite group-mate(s). Peer tutoring is applied among students of identical age or students belonging to different age groups. Peer-tutoring programs enhance the core learning in tutors relating to note-taking skills, textbook reading ways, or time management.

There are two kinds of peer tutoring, (a) incidental and (b) structured peer tutoring. Incidental peer tutoring typically takes place, either faculty {at College, in Class, in School} or where students are socializing with each other through different activity. Structured peer tutoring refers to look tutoring enforced in specific cases and for specific subjects, following a well-structured set up ready by the teacher. Peer tutoring inside the framework of mixed age teams, taking advantage of the psychological feature maturity of older students whose psychological feature standing remains on the point of that of their younger colleagues. In mixed age teams, older students will efficiently play the role of tutors for his or her younger cluster mates if their lecturers support them. This notion of PAL within the medical student's context resulted from the informal exchange of shared interests inside peer teams<sup>[2]</sup>. Peer-tutoring programs incorporate both theoretical medical knowledge, together with case-based discussion, examinations clinical and student grand rounds $^{[3,4]}$ . More recently, analysis has targeted on systematization of peer-to-peer tutoring inside medical programs<sup>[5]</sup>. The benefits of scholars acting as peer tutors are wide reported, and embrace metacognitive gains, augmented student responsibility, and development of expertise skills<sup>[6]</sup>. Since the Nineteen Nineties there has been growing recognition of the importance of

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developing medical students' teaching and assessment competencies, with peer teaching and assessment ability currently more and more documented internationally as a needed graduate attribute of medical students<sup>[7]</sup>.

## Method

This study was carried out at Department of Physiology Mahatma Gandhi Memorial Medical College in the academic year 2018. Total 15 second year medical students took part in this study. Participation was voluntary. They were invited to participate as tutor for PAL for first year students. Every tutor was allocated with a group of ten students / tutees for the entire year. Tutors were given information on the objectives and organization of the program, and the format of the tutorials.

It was informed that minimal tutorials to be held fortnightly and if required in between. Upto 45 min-60 min were given for the tutorials to cover all the scientific aspects of each topic with clinically correlated examples for better understanding. Tutees were encouraged to discuss and identify the topic which they informed to the tutors earlier allowing them adequate time to prepare. The topic delivery by tutors was not intended to be didactic, but interactive, with tutorial of theoretical content, clinical application of the content through the examination of a patient on the wards or review of laboratory results or for discussion of the case. Assessing tutors' perceptions of the program was carried out by a questionnaire regarding their experience as a tutor. All participating tutors (n = 15) were asked to complete and report their feedback regarding their involvement & experiences in the program. The questionnaire consisted of 12 closed items relating to their prior teaching experience and program outcomes.

Descriptive statistics were used to analyze the data. Ethics approval was obtained from The Institutional Ethics Committee of MGM medical college, Indore.

#### Result

 Table no-1 Questionnaire Based Response from Tutors on Peer- Tutoring

Sr No	Questions	%
1	Did it help you to develop confidence?	100
2	Did you learn how to convert an elaborative topic into concise form	100
3	Did you learn how to be ready in any kind of situation?	87
4	Did it sharpen your decision making?	87
5	Did you learn organization skills?	100
6	Did you learn time management skills?	93
7	Did you develop sense of helping junior students to succeed?	100
8	Did it improve senior-junior relationship?	100
9	During residency cases in wards are discussed with UG students so did this	75
	program help you for your future teaching preparedness?	
10	The study done by you to mentor students was not exam oriented. So will it	100
	last always and will it be beneficial to you as well?	
11	Communication is a very important personality trait for a doctor. Learning	100
	to communicate well with the peers at such an early stage will help you to	
	communicate well with patients?	
12	Do you think it will benefit juniors as you are sharing the problems you	100
	faced during a particular topic and already making them aware of it?	

Out of 12 questions 8 questions answered 100% "yes" by the tutees. Readiness at every stage and decision making falls in 87 % while time management gets 93% score. Teaching preparedness gets 75% scoring.

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#### SELF-ASSESSMENT ABOUT TEACHING SKILLS 120 100 100 100 100 100 100 100 100 91 100 83 83 75 80 60 40 20 0 Impore relationship Problem oliented teaching Decisionmaking Concisingskill Organizationa skills Teaching pleasedness confidence Enhancemen Last always communication skill readiness Tine Managemen

## Discussion

This study was carried out to explore students' perceptions of taking part in the peer tutoring program. Peer tutoring program is an opportunity given to the student to explore their skills in teaching and to access for future requirement as it was not otherwise available within the curriculum. This will be helpful in improving their medical knowledge and professionalism skills in teaching and communication. Also tutees get opportunity and learning experience from other than their traditional teaching by faculty.

Tutors self-perceived benefits in peer tutoring encompass skills in professionalism and development in the understanding of knowledge of respective subject. By participating in PAL, tutors are driven to engage, analyse and verbalise what they know, and to realise and address their own knowledge gaps.<sup>[1,8]</sup> promoting a deeper engagement with learning and it provides an important education tool in developing professional competencies.<sup>[9]</sup>

There are many aspects related to the benefits gained by student tutors such as preparing to teach, teaching, assessing, providing feedback to peers and reflecting offer both cognitive and non-cognitive benefits to tutors.<sup>[10]</sup> As found in present study around overall tutor reported that they gain confidence through this Peer tutoring program, confidence in part of subject knowledge, delivering a lecture, stage daring, etc.

Important findings of present study were tutors develop knowledge to concise elaborative topic, organisations skills were improved altogether in tutors. Many tutors reported improvement in decision making, management skills and readiness for any situations. Many other aspects of personality development such as learning to communicate well, development in sense of helping and bonding with juniors were upgraded during these sessions. The enhancement in trust and care in senior junior relationship was also noticed.

## Conclusion

Peer tutoring is an effective way to upgrade knowledge in tutors as in depth study was carried out by tutors regarding particular topic for taking the class. Tutees also get benefited as this practice will help in improving senior junior relationship, also they can ask their problem more freely and get answers with similar perceptive many times.

## References

- Topping K. The effectiveness of peer tutoring in further and higher education: a typology and review of the literature. J High Educ. 1996;32(3):321–345.
- 2. Hill E, Liuzzi F, Giles J. Peer-assisted learning from three perspectives: student,

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tutor and co-ordinator. Clin Teach. 2010;7:244–246

- Burgess A, Nestel D. Developing professional identity through PAL in medical education. Adv Med EducPract. 2014;5:403–406.
- Kam J, Tai J, Mitchell RD, Halley E, Vance S. A vertical study programme for medical students: peer-assisted learning in practice. Med Teach. 2013;35(2):e943– e945
- 5. Kommelage M, Thabrew H. Student-led peer-assisted learning: the Kuppi experience at the medical school of the university of Ruhuna in Sri Lanka. Educ Health. 2011;24(2):12
- 6. Topping K. Trends in peer learning. J EducPscyhol. 2005;25(6):631–645
- Yu T, Wison NC, Singh PP, Lemanu DP, Hawken SJ, Hill AG. Medical students-asteachers: a systematic review of peerassisted teaching during medical school. Adv Med EducPract. 2011;2:157–172.
- Cohen PA, Kulik JA, Kulik CC: Educational outcomes of tutoring: a metaanalysis of findings. Am Educ Res J. 1982, 19 (2): 237-248.
- Sluijsman D, Brand-Gruwel S, Van Merriënboer G: Peer assessment training in teacher education: effects on performance and perceptions. Assess Eval High Educ. 2002, 27 (5): 443-454.
- Krych AJ, March CN, Bryan RE, Peake BJ, Pawlina W, Carmichael SW: Reciprocal peer teaching: students teaching students in the gross anatomy laboratory. Clin Anat. 2005, 18: 296-301. 10.