International Journal of Basic and Applied Medical Sciences ISSN: 2277-2103 (Online) An Open Access, Online International Journal Available at http://www.cibtech.org/jms.htm 2016 Vol. 6 (2) May-August, pp. 57-59/Shyamal et al.

Research Article

A NOVEL APPROACH FOR LEARNING ANATOMY – PEER TEACHING

Anup Shyamal ¹, Ruchi Kothari ², Vijay Gujar ², *Pradeep Bokariya², Suranjana Sur Mukherjee¹, Shibani Majumdar S³ Akhtar Uzzaman¹

¹Calcutta National Medical College, Kolkata
²Mahatma Gandhi Institute of Medical Sciences, Wardha
³NRS Medical College, Kolkata
*Author for Correspondence: pradeepbokariya@mgims.ac.in

ABSTRACT

Innovations in teaching medical subjects has become need of hour. First year students find it quite difficult to grasp the subject of Anatomy. So, newer teaching modalities should be introduced from time to time. When students were asked to teach their fellow colleagues then they find it very enjoyable. Same concept of peer teaching was introduced for medical students of first year. This concept in which students teach their classmates is termed as peer teaching. We introduced this approach amongst forty of our students. They were asked to participate in this programme and results obtained on the basis of their performance were outstanding.

Keywords: Anatomy, Peer Teaching, Medical Students

INTRODUCTION

Undergraduate syllabus of Anatomy is too vast for the shortened duration now. To build a knowledgeable and skilled doctor for society we, the Anatomists are the most responsible teachers. Class XII passed students are supposed to learn the Anatomy which seems a herculean task for them. To create interest among students on this difficult subject there are a lot many ways sought after nowadays. Particularly, in some places students look for private coaching, keep wasting valuable time by searching on internet and remain deviated from their main aim.

Peer teaching, a form of co-operative study is an upcoming way of teaching and learning Anatomy. The use of peer teaching has been an integral part of human learning for centuries by now and in its literal sense incorporates participants of a more or less similar age. Within Anatomy, this modality has been widely accepted and recognized as a valuable tool for understanding and learning in a much better way than ever (Nnodim, 1998; Youdas *et al.*, 2008; Brueckner *et al.*, 2004).

Conceptual and complete idea on the human body is acquired by reading books together with friends, asking questions among groups, making models or diagrams. Togetherness owing to group dynamics leads to a firm and close bonding between student teacher. This brings young buds to blossom properly in the light of Anatomy.

Aim of Study

The study aimed at assessing the Part completion marks of viva-practical before and after peer teaching of a same batch of students after analysis.

MATERIALS AND METHODS

40 students were recruited as per roll number from first year MBBS course making a batch. One part was taught by conventional classes. Next part was taught by using peer teaching method.

Peer Teaching

Students were selected by their roll number to brief the previous class taught by the teacher in first 10 minutes. The rest of the students also asked questions to the peer teacher in front of the class teacher. The peer teacher answered and took help from class teacher if needed. These things were repeated for each of the students in batch.

International Journal of Basic and Applied Medical Sciences ISSN: 2277-2103 (Online) An Open Access, Online International Journal Available at http://www.cibtech.org/jms.htm 2016 Vol. 6 (2) May-August, pp. 57-59/Shyamal et al.

Research Article

Ethics Consideration

Prior approval of Institutional Ethics Committee was taken before commencing the study.

RESULTS AND DISCUSSION

Results

After completion of each of the part, viva and practical examination was conducted and the marks obtained were recorded, compared and analyzed. On comparison of the marks, the scores of students who were subjected to peer teaching were high after the exercise with exception of three cases.

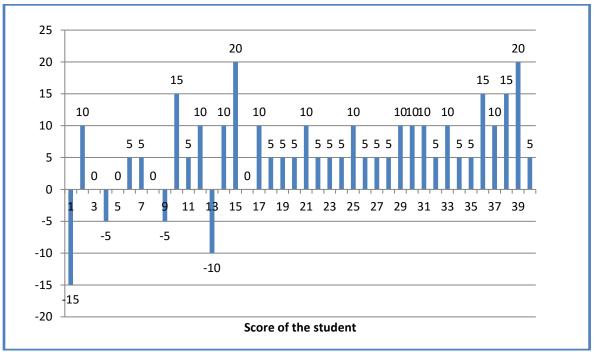


Figure 1: Graphical Representation of Performance of Students who were Subjected to the Concept of Peer Teaching

It was found that only a few students were not participating peer teaching due to their chronic absence. Most of the students enjoyed the peer teaching and yielded good scores in examination. The students who had participated in all of the peer teaching classes scored the highest marks. Lower scoring students were either ill or absent most of the time in the classes.

Discussion

The instructional strategies commonly used to teach gross Anatomy are lecture, inquiry based learning and co-operative learning. Previously the 1st MBBS course duration was of one and half years, since 1998 medical council of India has reduced it to one year (Guidelines from Medical Council of India, 1997). Hence, need of the hour is to bring some change in our traditional teacher oriented teaching system (Krych *et al.*, 2005).

The formal didactic lectures and similar teacher driven learning activities which do not guarantee learning for every student are the hallmarks of local education culture (Nnodim,1998; Armstrong 1991). General Professional Education of the Physician (GPEP) Report (1984) of Association of American Medical Colleges pointed out that lectures are grossly passive activities for the students (Johnson, 2002).

In the present study, upon implementation of the novel technique of peer teaching in Anatomy, we were successful in inculcating the spirit of team work, boosting up confidence in timid students and augmenting communication skills. The students reported to have retained and understand a volatile subject like Anatomy in much better way.

International Journal of Basic and Applied Medical Sciences ISSN: 2277-2103 (Online) An Open Access, Online International Journal Available at http://www.cibtech.org/jms.htm 2016 Vol. 6 (2) May-August, pp. 57-59/Shyamal et al.

Research Article

It was also observed that talking in English by students from rural background in front of the teacher and other students helped the peer teacher to be fluent and fearless. Every day study by self or in group to present in the class made them confident on the subject.

A study similar to ours was conducted by Waghmare *et al.*, (2010), where they had introduced reciprocal peer teaching (RPT) during dissection hours and reported that majority of students agreed the RPT exercise increased their understanding of the topics they taught.

Conclusion

In a nutshell, this study examined the impact of implementing peer teaching in a small scale and showed that it is an effort to learn anatomy among students in a cheerful way yielding better outcome.

REFERENCES

Armstrong EG (1991). A Hybrid Model of Problem Based Learning. In: *The Challenge of Problem Based Learning*. D. Boud, G. Feletti (edition) (UK, London: Kogan) 137-149.

Brueckner JK and MacPherson BR(2004). Benefits from peer-teaching in the dentalgross anatomy laboratory. *European Journal of Dental Education***8** 72–77.

Johnson JH (2002). Importance of Dissection in Learning Anatomy: Personal Dissection Verses Peer Teaching. *Clinical Anatomy* **15**(1)38-44.

Krych AJ, March CN and Bryan RE (2005). Reciprocal Peer Teaching: Students Teaching Students in the Gross Anatomy Laboratory. *Clinical Anatomy* 18(4) 296-301.

Medical Council of India: Regulations on Graduate Medical Education (1997). In: Gazette of India 3(4)1701-1726.

Nnodim JO(1988). Learning Human Anatomy: Does Learning Occur During a Lecture? *Journal of Medical Education* **22** 88-93.

Waghmare JE, Sontakke BR, Tarnekar AM, Bokariya P, Wankhede V and Shende MR (2010). Reciprocal Peer Teaching: An Innovative Method to Learn Gross Anatomy. *Journal of Mahatma Gandhi Institute of Medical Sciences* **15**(ii) 40-43.

Youdas JW, Hoffarth BL, Kohlwey SR, Kramer CM and Petro JL (2008). Peerteaching among physical therapy students during human gross anatomy: Perceptions of peer teachers and students. *Anatomical Sciences Education* 1 199–206.