Introduction and Aim: MET guideline is a compulsory directive of MCI which has to be implemented in medical education training program in all medical colleges in the country. Idea for research was originated by better university result of last year in which group dynamics, PBL, SDL, group discussion was implemented. The present study was conducted to improve the performance of poor scoring medical students utilizing MET guidelines.

Materials and Methods: 24 Students were selected out of 150 students on the basis of poor score between September to March from 1st year M.B.B.S. batch (2017-2018), T.S.M. Medical College and Hospital, Amausi, Lucknow. They were exposed to MET guidelines like group dynamics, PBL, SDL, group discussion etc. Their performance was observed in successive examinations.

Results: 92% students of study group showed improvement. But desired goal was achieved by 83% students.

Conclusion: Small group teaching and newer methods of teaching are helpful in improving performance (increase percentage of marks) of students.

Keywords: MET guidelines; poor performing students; problem-based learning; self-directed learning.

INTRODUCTION

Undergraduate medical education, as with any other educational program, needs ongoing improvement to meet the changing demands of medical practice. There is growing concern among medical educators that conventional modes of teaching medical students (lecture-based curriculum) neither encourage the right qualities in students nor imparts a life-long respect for learning (1). To improve the quality of medical education, the medical council of India has set different guidelines like problem-based learning, self-directed learning, group discussion etc. to be implemented in day-to-day teaching.

Studies have shown that problem-based learning curriculum students place more emphasis on understanding rather than only reproduction of content compared from students from the traditional curriculum (2, 3). Students of the problem-based learning curriculum found learning to be “more stimulating and more humane” and “engaging, difficult, and useful”, whereas students of the conventional curriculum found learning to be “non-relevant, passive, and boring” (4).

Keeping in view of above facts the present study has been designed to assess the utility of newer methods of teaching using same student in different time frame as case and control study group.

MATERIALS AND METHODS

Type of study: Prospective

24 Students were selected out of 150 students on the basis of poor score in first terminal exam of 1st year M.B.B.S. batch (2017-2018) of T.S.M. Medical College and Hospital, Lucknow. In this study, the students were divided into four groups; naming Omega, Achiever, Creative and Omex. Each group contained six students. They were exposed to MET guidelines like group dynamics, PBL, SDL and group discussion. Group wise performance of students was observed in successive examinations.

Statistical Application: Analysis and calculation by Parametric Test with percentile.

RESULTS

The performance of students was observed in successive examinations and compared from performance of previous examination (Table 1).
Table 1: Comparison of performance of Omega group students as pre-exposure and post exposure to PBL, SDL and small group discussion

| Roll No. | Pre exposure | Post exposure | University Results | Performance of students |
|----------|--------------|---------------|--------------------|------------------------|
|          | Marks obtained in first term in % (Total Marks =100) | Marks obtained in % in 2nd term (Total Marks =100) | Marks obtained in % in Pre-University (Total Marks =100) |                      |
| 07       | 42           | 48.5          | 56                 | Pass                   | Improved              |
| 08       | 47           | 33            | 41                 | Fail                   | Not improved          |
| 10       | 47           | 47            | 54.5               | Pass                   | Improved              |
| 23       | 44           | 47            | 58                 | Pass                   | Improved              |
| 25       | 42           | 43            | 44                 | Pass                   | Improved              |
| 27       | 49           | 50            | 43                 | Pass                   | Improved              |

Table 2: Comparison of performance of Achiever group students as pre-exposure and post exposure to PBL, SDL and small group discussion

| Roll No. | Pre exposure | Post exposure | University Result | Performance of students |
|----------|--------------|---------------|-------------------|------------------------|
|          | Marks obtained in first term in % (Total Marks =100) | Marks obtained in % in 2nd term (Total Marks =100) | Marks obtained in % in Pre university (Total Marks =100) |                      |
| 28       | 38           | 44.5          | 39                 | Pass                   | Improved              |
| 32       | 39           | 49.5          | 44                 | Pass                   | Improved              |
| 35       | 43           | 44            | 45                 | Pass                   | Improved              |
| 36       | 42           | 50            | 45                 | Pass                   | Improved              |
| 38       | 49           | 58            | 45                 | Pass                   | Improved              |
| 44       | 44           | 46            | 52                 | Fail                   | Improved              |

Table 3: Comparison of performance of Creative group students as pre-exposure and post exposure to PBL, SDL and small group discussion

| Roll No. | Pre exposure | Post exposure | University Result | Performance of students |
|----------|--------------|---------------|-------------------|------------------------|
|          | Marks obtained in first term in % (Total Marks =100) | Marks obtained in % in 2nd term (Total Marks =100) | Marks obtained in % in Pre university (Total Marks =100) |                      |
| 73       | 37           | 25            | 36                 | Fail                   | Not Improved          |
| 83       | 37           | 38            | 48                 | Pass                   | Improved              |
| 106      | 46           | 51.5          | 56                 | Pass                   | Improved              |
| 107      | 41           | 45            | 43                 | Pass                   | Improved              |
| 115      | 34           | 40            | 44                 | Pass                   | Improved              |
| 126      | 33           | 34.5          | 48                 | Pass                   | Improved              |

Table 4: Comparison of performance of Omex group students as pre-exposure and post exposure to PBL, SDL and small group discussion

| Roll No. | Pre exposure | Post exposure | University Result | Performance of students |
|----------|--------------|---------------|-------------------|------------------------|
|          | Marks obtained in first term in % (Total Marks =100) | Marks obtained in % in 2nd term (Total Marks =100) | Marks obtained in % in Pre university (Total Marks =100) |                      |
| 131      | 42           | 39            | 53                 | Pass                   | Improved              |
| 136      | 46           | 39.5          | 56                 | Pass                   | Improved              |
| 143      | 49           | 45            | 63                 | Pass                   | Improved              |
| 145      | 36           | 37.5          | 55                 | Pass                   | Improved              |
| 149      | 41           | 35            | 53                 | Fail                   | Improved              |
| 150      | 38           | 39            | 48                 | Pass                   | Improved              |

In present study is 92% (22) students showed improvement (increase percentage of marks) after implementation of MET guideline in teaching methodology. The desired result to get pass in the University examination was achieved by 83% (20) students.
DISCUSSION

Teaching in medical sciences is always a challenging task reason being rapidly changing needs of health care services, upcoming researches and continuously adding latest trends in medicine. To make the teaching more effective, there is change from traditional lecture pattern teaching to small group teaching.

Moore et al., found in their study that students who were enrolled at Harvard Medical School, United States, in problem-based learning curriculum learned in a more reflective way, memorized less than their peers, and preferred active learning (5). Compared with conventional students, PBLC students place more emphasis on meaning than on memorizing, use journals and on-line databases as sources of information, use self-selected reading materials. They also show better interpersonal skills, psychosocial knowledge, and attitudes toward patients (4).

In present study we tested problem-based learning, self-directed learning and group discussion like teaching method on the students who were poorly performing and found them effective to improve the performance of students.

Merits of the study

MET guidelines implementation improved the performance of medical students in comparison to traditional teaching methods of teaching. It has also been observed that for better implementation of MET guidelines, a greater number of faculty and staff members are required.

Limitations of the study

Present study is implemented in a smaller number of students of one session only. Authors are continuing the same in successive batches for further enforcement of study results.

CONCLUSION

The implementation of MET guidelines is effectively helpful in the improvement of performance of students who were performing poorly earlier.

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CONFLICT OF INTEREST

Authors declare that there is no conflict of interest in the present study.

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