Review article

Perception of the medical students in Bangladesh regarding quality of education

DOI: https://doi.org/10.47648/zhswmcj.2023.v0502.10

*Tarafdar MA1

Abstract

Low quality of medical education has been a longstanding issue and needs to be addressed by medical teaching professionals. Like any other educational stream, teaching-learning in medicine also aims at affordable, student centered and quality education. It is possible to derive information about the efficacy of medical education in a variety of ways. Of them, perception-based assessment of the education quality is a proven method and thus this method was used in drawing the views of undergraduate medical students in many studies. These show that content-based teaching affects negatively the students' learning process. Student's educational attainment depends on the quality of teaching and learning. Satisfaction with learning and the educational achievement of medical students is directly dependent on the learning environment; the support system, course content and factual learning – all are creating communication barrier for the students. The traditional mode of teaching-learning as per the undergraduate MBBS curriculum is still predominantly followed in Bangladesh with a teacher centered, discipline-oriented, information gathering and hospital-based approach. Students' perception become negative because of delayed feedback from teachers, unavailable or poorly arranged technical support, limited self-regulation and self- motivation, the intense sense of isolation and deprivation, monotonous one-way instructional methods, and poorly-designed traditional course content. A curriculum that includes problem-based learning may be of value to provide students with stimulating learning; structured clinical teaching with specific curricular objectives, as well as mentoring of students by faculty in a student-centered environment might improve the learning environment of the medical students.

Key words: Medical education, learning, perception, achievement

Received on: 12.03.23 Accepted on: 15.04.23

Introduction

Low quality of medical education has been a longstanding issue and is being addressed in various ways by the government and those involved in teaching profession. Like any other educational stream, teaching-learning in medicine also aims at affordable, people centered and quality education. It is possible to derive information about the efficacy of medical education in a variety of ways. Of them, perception-based assessment of the education quality is a proven method and thus this method was used in drawing the views of undergraduate medical students.

Different aspects of existing quality of medical education was discussed with the undergraduate medical students in Bangladesh through a perception-based literature review to derive their opinions about educational quality. As the students are affected directly by the teaching-learning process, they have the first-hand experience and are a good source of information that can feed into the designing of courses and provide practical education eventually. Perceptions about education quality however have associations with the students' own understanding and their socio-economic background.

It is believed that in teaching and learning, the process of acquiring scientific knowledge through inquiry-based method encourages students to understand the nature of science than knowledge taught.¹ It is obvious that content-based involvement effects minimally the student's learning process.²

The perception survey shows that the achievement and educational gratification of medical students are highly dependent upon their learning environment. Teaching method and teacher's quality are central in medical education- they enhance the perception in a positive way as they obtain better educational outcomes. Student's attainment depends on the quality of learning and teaching.³ Training on teaching methodology of the teachers is paramount in building the quality of medical teachers with essential skills.⁴

Although the purpose of teaching science is to learn scientifically, like other disciplines of science, one of the major weaknesses of medical education in Bangladesh is teachers' main focus on examination. The present practice of science learning and teaching is mostly teacher centered, which is both didactic and theoretical.⁵

Present scenario

Satisfaction and the educational achievement of medical students is directly dependent on the learning environment. So, recognized evaluation process of educational environment is deemed as a strategic tool for the delivery of high quality education.⁶

Authors affiliation

1. Monowar Ahmad Tarafdar, Professor and Head, Department of Community Medicine, Z H Sikder Women's Medical College, Dhaka.

*Address of correspondence: Prof. Dr. Monowar Ahmad Tarafdar, Professor and Head, Department of Community Medicine, Z H Sikder Women's Medical College, Dhaka. Email: babla762@yahoo.com

Medical colleges working with student-centered, integrated and problem-based curricula obtain higher scores as compared to those dealing with conventional curricula. Thus, an institution's educational environment is associated with lower range of the achievement may be due to teachercentered and learning atmosphere.⁷

It is a regular feature in Bangladesh, India and Pakistan that teachers are authoritarian on the students and so students' perceptions of the teachers move towards negative direction. In the similar way, the support system, burdensome course content, and factual learning–all are creating communication barrier for the students.⁸

It was concluded in a study in Pakistan in 2018 that 40% students considered overall educational environment as not good. It is a common perception of the junior students that they are not dealt with in a way which is expected of them. All the students showed their negative perceptions towards their teachers teaching-learning method.⁹

For modifying and improving the quality of educational environment, students' feedback of their educational environment is of great importance. The traditional mode of learning and teaching as per the undergraduate MBBS curriculum is still predominantly followed in Bangladesh with a teacher centered, discipline-oriented, information gathering and hospital-based approach. The curriculum followed as prescribed by BMDC (Bangladesh Medical and Dental Council) consists of lecture, tutorial, practical and ward classes having only a few problem-solving sessions.¹⁰

For measuring educational climate for undergraduate medical students, the Dundee Ready Education Environment Measure (DREEM) was designed.¹¹ It is observed that students' perception towards educational environment has great effects on their responses to learning processes for example changing the classroom arrangement may influence students' perception on quality of education.¹²

One of the most valid and reliable recommended tools for assessing learning environment is the DREEM questionnaire. Describing different learning domains, outlining problematic issues, and solving emerging problems to enhance a learning process's efficiency, the DREEM questionnaire is one of the most efficient tool. To compare learning experiences in diverse settings, it can be used for comparing different situations.¹³

It is believed that a smooth, successful transition from the traditional to the integrated curriculum is required for medical students through improving in the perception of the learning environment which will eventually proceed to significantly higher achievement of students, if there is integrated medical education system in place. Medical students enrolled in the integrated curriculum showed higher DREEM scores, with significantly better learning and academic self-perceptions as was observed among the Egyptian students in a study in 2020.¹⁴

As a perception survey reveals, the teachers in undergraduate medical education in Bangladesh are not student friendly and are not taking care of them during the teaching sessions, which may lead to lack of interest in the learning sessions and the learning experience among the students are not positive. Modern day students expect some improvement in the teaching process so that their views are also reflected.¹⁵

In the findings of a study it was clearly indicated that the preference of medical students is changing from passive learning to active learning. In Bangladesh, medical teaching is predominantly teacher oriented.¹⁶

There is a need for paradigm shift where it should become more student centric than teacher centric. So, the traditional method of medical teaching should gradually shift from its theory-based lessons towards practical work-based education. Hence, to strengthen medical education, it is the responsibility of medical teachers to accept the perception and preference of medical students in teaching and learning methods.¹⁷

It is most important that student centered learning appears to be reflective of today's society; choice for education and democracy to express view are important concepts of modern day teaching methodology. A novel concept of integrated, concise and clinically oriented medical curriculum is time demanding and many modern-day educationists think that it makes medical students "practical thinkers" rather than "passive studiers"; exploratory behavior and comprehensive approach to learning are the outcome of student centered medical education.¹⁸

Qualified, knowledgeable faculties with effective communication skill are the most significant characteristic feature of student centered education environment. Focusing on factual teaching, improving and implementing student-centered teaching activities, promoting students' ability to conceptualize, understand and engage students in learning process through their full participation are the ways the student's perception for quality education fulfills.¹⁹

Researchers observed that student's perception become negative because of delayed feedback from teachers, unavailable or poorly arranged technical support, limited self-regulation and self- motivation, the intense sense of isolation and deprivation, monotonous one-way instructional methods, and poorly-designed traditional course content play vital role in student's negative perception towards medical education.²⁰

Researchers in several countries have evaluated the perceptions of their students utilizing the DREEM questionnaire to study the educational environment. A few problematic areas of learning environment were perceived by students, as revealed by a study, such as students become stressed more often; they felt that the course organizers were authoritarian and emphasized factual learning.²¹

Conclusion

Improvement is required across all domains of the educational environment at medical colleges. A curriculum that includes problem-based learning may be of value to provide students with stimulating learning; structured clinical teaching with specific curricular objectives, as well as mentoring of students by faculty in a student-centered environment, might improve the learning environment of the medical students.

Perception of the medical students in Bangladesh regarding quality of education

References

- Lederman JS, Lederman NG Bartos, SA, Bartels SL, Meyer AA, Schwartz RS. Meaningful assessment of learners' understandings about scientific inquiry. Journal of research and science, 2014; 51(1): 65-83
- 2. Diamond BS, Maerten-Rivera J, Rohrer RE, Lee O, 2014. Effectiveness of a curricular and professional development intervention at improving elementary teachers' science content knowledge and student achievement outcomes: year 1 results. J. Res. Sci. Teach. 51, 635–658.
- 3. Rennie LJ, Goodrum D. and Hackling M. Science Teaching and Learning in Australian Schools: Results of a National Study. Research in Science Education; 31, 455–498 (2001). Available from https://doi.org/10.1023/A:1013171905815
- Ogunmade, T.O., 2005. The status and quality of secondary science teaching and learning in Lagos State, Nigeria. Available from: https://ro.ecu.edu.au/ cgi/viewcontent.cgi?referer=&httpsredir=1&article =1086&context=theses
- 5. Khan MSI. Trends and Problems of Science and Technology Education at Secondary Level of Bangladesh with Special Reference to Munshigonj District: British Period to Till Date. Institute of Education & Research University of Dhaka, December, 2018.
- Genn JM. AMEE Medical Education Guide No. 23 (Part 1): Curriculum, environment, climate, quality and change in medical education-a unifying perspective. Med Teach. 2001 Jul;23(4):337-344. doi: 10.1080/01421590120063330. PMID: 12098379.
- Zawawi AH, Elzubeir M. Using DREEM to compare graduating students' perceptions of learning environments at medical schools adopting contrasting educational strategies. Med Teach. 2012; 34 Suppl. 1: S25-31. DOI: 10.3109/0142159X.2012.656747
- Kohli V, Dhaliwal U. Medical students' perception of the educational environment in a medical college in India: a cross-sectional study using the Dundee Ready Educational Environment questionnaire. J Educ Eval Health Prof. 2013; 1: 5.
- Hasnain S, Pirzada N, Hassan SZU, Ali M. and Rehan M.W. Evaluation of perceptions of undergraduate medical students about learning environment at Allama Iqbal medical college Lahore, Pakistan, Biomedica 2018; 34(3):192-299.
- Nahar N, Talukder MHK, Khan MTH, Mohammad S, Nargis T. Students' Perception of Educational Environment of Medical Colleges in Bangladesh. Bangabandhu Sheikh Mujib Medical Univ J. 2010; 3(2): 97-102
- Roff, S., McAleer, S., Harden, R.M., Al-Qahtani, M., Ahmed, A.U., Deza, H., Groenen, G., Pimparyon, P., 1997. Development and validation of the Dundee

Ready Education Environment Measure (DREEM). Med. Teacher.19, 295–299.

- Ahmed TS, Rashid TJ, Huda S, Sultana N, Billah AM. Perception of Medical Students on Current Medical Education in Bangladesh, Bangladesh Journal of Medical Education 2022; 13(02):13-25. DOI: https://doi.org/10.3329/bjme.v13i2.60941
- Miles S, Swift L, Leinster SJ. The Dundee Ready Education Environment Measure (DREEM): a review of its adoption and use. Med Teach. 2012;34(9):e620-34. doi: 10.3109/0142159X.2012.668625. Epub 2012 Apr 3. PMID: 22471916.
- 14. Fayed MM, Abdo SA, Sharif AF. Preclinical and Clinical Medical Students' Perception of the Learning Environment: A Reference to the Forensic Medicine and Clinical Toxicology Course, Advances in Medical Education and Practice 2022:13 369–406
- 15. Mostafa A, Hoque R, Haque M. Student-Based Analysis of Perception Regarding the Educational Environment Using the Dundee Ready Education Environment Measure Questionnaire at Chattagram Maa-O-Shishu Hospital Medical College, Bangladesh. Florence Nightingale Hemsire Derg. 2019 Oct 1;27(3):211-221. doi: 10.5152/ FNJN.2019.19025. PMID: 34267975; PMCID: PMC8127582.
- 16. Jana PK, Sarkar TK, Adhikari M, Chellaiyan VG, Ali FL, Chowdhuri S. A study on the preference of teaching methods among medical undergraduate students in a tertiary care teaching hospital, India. J Edu Health Promot 2020;9:275.
- 17. Yusof YA, Taridi NM, Mustapa M, Shaharuddin S, Hamid MW, Shakrin NN. Studentcentred approach in medical education: A review of the teachinglearning activities and the perceptions of educators on the student's engagement and performance at the faculty of medicine and defence health, national defence university of Malaysia. Adv Hum Biol 2022;12:101-7.
- Hasan T and Ageely H. The Scope of Student Centered Learning in Medicine. J. Basic. Appl. Sci. Res., 1(7):638-643, 2011
- Mascolo MF. Beyond student-centered and teachercentered pedagogy: Teaching and learning as guided participation, Pedagogy and the Human Sciences 2009; 1(1):3-27
- 20. Khagendra A et al. Students' Perception of Quality Education: A Review (December 10, 2019). Students' Perception of Quality Education: A Review, Polysemy 1.1 (2019). Available at SSRN: https:// ssrn.com/abstract=3646948
- 21. Pai PG, Menezes V, Srikanth, Subramanian AM, Shenoy JP. Medical Students' Perception of Their Educational Environment, Journal of Clinical and Diagnostic Research. 2014 Jan, Vol-8(1): 103-107