

Self-evaluation of Phase-I Faculty Members of a Government Medical College of Bangladesh

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Abstract

Introduction: Self-evaluation is vital for faculty development in medical education to ensure continuous improvement in teaching and learning. The study aimed to assess self-evaluation of Phase-I faculty members in a government medical college in Bangladesh.

Methods: A cross-sectional study was conducted from January to December 2023 among 28 faculty members from Anatomy (42.9%), Physiology (39.3%), and Biochemistry (17.9%). Data were collected using a CME-developed self-administered questionnaire and analyzed with SPSS.

Results: At joining, 60.7% reported being fully aware of the curriculum and assessment methods. Regarding teaching ability, 42.9% were fully satisfied, 50% nearly satisfied, and 7.1% partially satisfied. Development needs were identified in teaching methods (32.1%), assessment (21.4%), instructional materials (17.9%), IT (32.1%), research skills (25%), and spoken English (7.1%). More than half (53.6%) received training in teaching or research, while 10.7% engaged in academic coordination. The mean annual teaching load was 205.2 ± 116.3 hours. The educational environment was perceived as completely supportive by 35.7% and almost supportive by 53.6%. All participants used MS Word and PowerPoint; 92.9% were proficient in internet use, 64.5% in Excel, and 7.1% in SPSS. Research participation was reported by 60.7%, with 57.1% having publications. Reported barriers to research included inadequate funding, laboratory facilities, and workload.

Conclusion: Faculty members were largely aware of the curriculum and satisfied with teaching, but gaps in pedagogy, assessment, IT, and research remain. Although the educational environment was supportive, limited resources and workload hinder research productivity. Targeted faculty development and institutional support are essential.

Keywords: Self-evaluation, faculties, Phase-I, government medical college, Bangladesh

Introduction

Self-evaluation is a critical component of academic development, especially in medical education, where continuous improvement is essential to maintain high standards of teaching and learning.

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In government medical colleges in Bangladesh, the self-evaluation of faculty members is crucial for understanding the strengths and areas for improvement in pedagogical approaches and administrative functions. The Phase-I faculties, which typically include basic science departments such as Anatomy, Physiology, and Biochemistry, play a foundational role in shaping the medical education landscape. Therefore, evaluating the performance of these faculties can provide significant insights into the quality of education delivered to medical students.



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Self-evaluation allows faculty members to reflect on their teaching methods, student engagement, and academic outcomes, thereby fostering a culture of self-improvement and accountability (Darling-Hammond *et al.*, 2017). It also enables the identification of professional development needs, enhances teaching effectiveness, and ensures that educational goals align with national standards and international best practices (Gibbs & Coffey, 2004). In the context of Bangladesh's medical education system, self-evaluation is particularly important due to the rapid changes in medical curricula and the evolving expectations of healthcare education (Rahman *et al.*, 2018).

The self-evaluation process involves a comprehensive review of various aspects of faculty performance, including curriculum design, student assessment methods, research activities, and administrative responsibilities. This systematic approach not only helps in maintaining the academic standards but also contributes to the accreditation processes, which are increasingly becoming a requirement for medical institutions globally (Harden, 2006). The study was designed to understand the self-evaluation practices of Phase-I faculties which can provide valuable information for policy-makers, educators, and stakeholders aiming to enhance the quality of medical education.

Methods

Study design, place and duration

This cross-sectional study was conducted among 28 purposively selected faculty members of phase I of Mymensingh Medical College, Bangladesh during January 2023 to December 2023.

Data collection

Data were collected by self-response using a semi-structured questionnaire developed and evaluated by Centre for Medical Education (CME), Dhaka, Bangladesh.

Data analysis

After collection of data, all questionnaire were checked for incompleteness, incorrectness and inconsistency. Corrected data was entered into Statistical Package for Social Sciences (SPSS) statistical software version 26.0 for the analysis. Qualitative variables were summarized as percentage and quantitative variables were summarized as mean and standard deviation (SD).

Ethical implications

At the beginning, approval was obtained from the Departmental Protocol Review Committee of Community Medicine and Public Health of Mymensingh Medical College (Memo No. CMPH/MMC/2023/BOU/Thesis/02; Date: 01.01.2023). Permission for data collection granted from the Heads of Anatomy, Physiology and Biochemistry departments of Mymensingh Medical College. Informed written consent was taken from the subjects before data collection. The anonymity of the respondents and confidentiality of data were maintained all through.

Results

The analyzed data of this study were presented through text, tables and graphs. The highest number 20 (71.4%) of the faculties of phase I were between 31-40 years; 7(25.0%) were between 41-50 years and one (3.6%) faculty was in the age group of 51-60 years. The most of the respondents 21 (75.0%) were female and 7 (25.0%) were male.

Among the teachers 12 (42.9%) were from the department of Anatomy, 11 (39.3%) from Physiology and 5 (17.9%) were from the department of Biochemistry. Majority of the teachers 17 (60.7%) were completely informed about the curriculum outline and the assessment process of the discipline just after joining. Among the teachers 12 (42.9%) were completely satisfied with their teaching capabilities; 14 (50.0%) were almost satisfied and 2 (7.1%) partially satisfied with their teaching capabilities. Area needed to develop were teaching methods 9 (32.1%),

assessment methods 6 (21.4%), instructional material design 5 (17.9%), information technology 9 (32.1%), research methods 7 (25.0%) and spoken English 2 (7.1%, Table 1).

In this study 15 (53.6%) teachers attended training programs. Attended training programs were teaching methods 8 (28.6%), assessment methods 8 (28.6%), research methods 4 (14.3%), reviewing article 2 (7.1%) and data analysis and orientation to SPSS (7.1%). Out of 28, 3 (10.7%) teachers were involved in phase coordination committee- 2 (66.7%) were subject coordinators and 1 (33.3%) was phase coordinator. Teachers under this study identified the areas needed to

improve as an academic staff as follows- teaching methods 8 (28.6%), assessment methods 6 (21.4%), research methods 6 (21.4%), technical support 4 (14.3%), academic competency 4 (14.3%), spoken English 2 (7.1%) and computer skill 2 (7.1%). Total mean teaching hours within last 12 months was 205.2±116.3 hours. Completely supportive educational environment was found by 10 (35.7%) teachers; almost supportive 15 (53.6%) and partially supportive was found by 1 (3.6%). More manpower (10, 35.7%), classroom facilities (12, 42.9%) and introduction of modern facilities 4 (14.3%) were suggested for better teaching-learning environment (Table 2).

Table 1: Assessment of knowledge on curriculum and self-satisfaction regarding teaching capabilities (n=28)

Variable	Category	Frequency (n)	Percentage (%)
Name of department	Anatomy	12	42.9
	Physiology	11	39.3
	Biochemistry	5	17.9
Total Period of time as faculty member in the department (months)		43.46±41.46	
Informed about the curriculum outline and assessment process of disciplines just after joining	Completely informed	17	60.7
	Partially informed	11	39.3
Satisfied level of respondents own teaching capabilities*	Completely satisfied	12	42.9
	Almost satisfied	14	50.0
	Partially satisfied	2	7.1
	Not satisfied at all	0	0
If not completely satisfied, the areas needed to develop*	Teaching Methods	9	32.1
	Assessment methods	6	21.4
	Instruction material design	5	17.9
	Information Technology	9	32.1
	Research methods	7	25.0
	Spoken English	2	7.1

*Multiple responses

Regarding capability on computer literacy, 28 (100%) faculties had knowledge and skill about MS Word and Power Point. The majority 26 (92.9%) of the teachers were skilled in internet use. Eighteen (64.5%) had competency in Excel and 2 (7.1%) in Statistical Package for Social Sciences or Statistical Products and Service Solutions (SPSS).

Table 2: Assessment of support initiatives for faculty development and educational environment (n=28)

Variable	Category	Frequency (n)	Percentage (%)
Attended any training programs	Yes	15	53.6
	No	13	46.4
If yes, names of training program*	Teaching Methods	8	28.6
	Assessment methods	8	28.6
	Research methods	4	14.3
	Reviewing article	2	7.1
	Data analysis and SPSS	2	7.1
Total teaching hours within last 12 months		205.2±116.3 hours	
Involved in phase coordination activities	Yes	3	10.7
	No	25	89.3
If yes, role in brief	Subject Coordinator	2	66.7
	Phase coordinator	1	33.3
Areas needed to improve as an academic staff*	Teaching Methods	8	28.6
	Assessment methods	6	21.4
	Research methods	6	21.4
	Technical support	4	14.3
	Academic competency	4	14.3
	Spoken English	2	7.1
	Computer skill	2	7.1
	Completely supportive	12	42.9
Supportive educational environment	Almost supportive	15	53.6
	Partially supportive	1	3.6
If not completely supportive, issues of educational environment that needed to be resolved for better teaching-learning environment*	More manpower	10	35.7
	Classroom facilities	12	42.9
	Modern technology	4	14.3

*Multiple responses

Seventeen (60.7%) teachers conducted research within last 12 months and 16 (57.1%) had publications. Eighteen (64.3%) teachers attended twelve sessions of teaching methodology and 4 (14.3%) teachers attended twenty four sessions of the same. Research environment was found completely supportive by 14 (50.0%) teachers, almost supportive by 9 (32.1%) and partially supportive by 5 (17.9%) teachers. Scarcity of funds and

laboratory support (4, 14.3%), lack of research skill (2, 7.1%) and excess workload (2, 7.1%) were obstacles for research. Some teachers 8 (28.6%) were involved in institutional, national and international committees such as phase or subject coordination committee (3, 10.7%); E-Governance committee (1.3.6%); Academic calendar development, teaching methodology, trainer of research methodology and journal publication (4, 14.3%) (Table 3).

Table 3: Assessment of involvement of faculties in research and educational activities (n=28)

Variable	Category	Frequency (n)	Percentage (%)
Conducted research within last 12 months	Yes	17	60.7
	No	11	39.3
Mean number of conducted research		1.2±2.2	
Have publication	Yes	16	57.1
	No	12	42.9
Mean number of publication		1.0±1.3	
Number of session of teaching methodology attended	None	6	21.4
	Twelve	18	64.3
	Twenty four	4	14.3
Supportive environment for research	Completely supportive	14	50.0
	Almost supportive	9	32.1
	Partially supportive	5	17.9
If not supportive, reasons were*	Scarcity of fund and laboratory support	4	14.3
	Lack of research skill	2	7.1
	Workload or lack of time	2	7.1
Involvement in institutional, national and international committees	Phase or subject coordinator	3	10.7
	E-Governance committee	1	3.6
	Academic calendar development, Teaching methodology, Trainer of Research methodology, journal publication	4	14.3
	Not involved	20	71.4

*Multiple responses

Discussion

The study on self-evaluation of faculties at Phase-I of a government medical college in Bangladesh provides valuable insights into teaching effectiveness, professional development, and institutional support. Self-evaluation is an important tool in higher education, enabling educators to reflect critically on their practices and identify areas for improvement (Miller and Archer, 2010).

Teaching Effectiveness and Professional Development

Most perceived their teaching as effective; however, discrepancies emerged when compared with student feedback and peer evaluations. This gap reflects biases in self-assessment, including overestimation of abilities (Dunning, Heath & Suls, 2004). A multi-source feedback system combining self-assessment, peer review, and student evaluations may provide a more accurate view of teaching performance.

The study also highlights strong faculty interest in professional development, echoing global trends in medical education. Continuous professional development (CPD) helps

educators adapt to evolving pedagogical strategies and medical knowledge. Yet, barriers such as time limitations and scarce resources hinder participation. Incorporating CPD into workload planning and providing institutional support could enhance both teaching quality and job satisfaction (Harden & Crosby, 2000).

Institutional Support and Resource Allocation

Faculty members expressed concerns about inadequate resources, including outdated materials and limited access to technology, which compromise educational quality. Such issues are common in low- and middle-income countries (LMICs), where financial constraints often restrict investment in education (World Bank, 2017). Strengthening institutional support through improved allocation of resources, investment in technology, and supportive administrative practices is vital. An enabling environment that values faculty contributions can also improve morale and foster professional growth (Bland *et al.*, 2000).

Impact of Self-Evaluation on Teaching Practices

Self-evaluation itself encourages reflective practice, prompting faculty to reassess teaching methods and student outcomes, thereby contributing to continuous improvement. However, for self-evaluation to be effective, structured frameworks with clear objectives are required (Cantillon & Sargeant, 2008). Training faculty in effective self-evaluation methods could help them translate reflections into actionable improvements.

Conclusion

Faculty members were largely aware of the curriculum and satisfied with teaching, but gaps in pedagogy, assessment, IT, and research remain. Despite a supportive environment, limited resources and workload constrained research productivity. Based on the study's findings, several recommendations can be made to enhance the self-evaluation process and overall faculty development. First, implementing a comprehensive faculty development program that includes training on

self-assessment techniques, feedback utilization, and reflective practices is essential. Second, the institution should consider establishing a feedback loop where faculty can regularly receive constructive feedback from peers and students, alongside their self-evaluations. Finally, addressing the resource limitations through targeted funding and partnerships could significantly improve the teaching environment and faculty satisfaction.

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