

Comparative Assessment of Medical Professionalism in Medical Interns of Old and Competency-Based Medical Education Curricula

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ABSTRACT

Professionalism in medical education focuses on ethics, competence, and communication skills development. CBME integrates AETCOM, a longitudinal program emphasizing teaching and experiential learning. AETCOM comprises 27 modules, utilizing problem-oriented approaches with case scenarios. Assessing professionalism in CBME and traditional curricula is essential for educational effectiveness. Both curricula demonstrate similar professionalism levels among interns, contextual factors such as curriculum implementation challenges, resource constraints, pandemic-related disruptions, survey timing, and participation rates may contribute to the observed outcomes. Addressing these factors could enhance the effectiveness of professionalism education within CBME frameworks.

KEYWORDS: Medical professionalism, Interns, CBME.

INTRODUCTION

Professionalism in medical education focuses on ethics, competence, and communication skills development. Before CBME, traditional curricula lacked explicit professionalism integration. CBME addresses this gap, emphasizing interpersonal skills alongside clinical competence. CBME integrates AETCOM, a longitudinal program emphasizing teaching and experiential learning. AETCOM comprises 27 modules, utilizing problem-oriented approaches with case scenarios. Assessing professionalism in CBME and traditional curricula is essential for educational effectiveness.

OBJECTIVES

To assess and compare the dimensions of medical professionalism, as measured by the Learners' Attitude of Medical Professionalism Scale (LAMPS), in medical interns who have undergone training in the old-traditional curriculum and those in the competency-based medical education (CBME) curriculum.

- **Study Design**
- A cross-sectional comparative design

- **Study Site**
- GMERS Medical College and Hospital, Gandhinagar
- **Study Duration**
- February – July 2024 (Six months)
- **Study Population**
- Medical interns from old and CBME curricula
- **Study Tool**
- Learners' Attitude of Medical Professionalism Scale (LAMPS) via Google Forms
- **Data Collection**
- Invited participation via WhatsApp
- Ensuring anonymity
- **Data Analysis**
- Descriptive statistics and inferential tests (t-tests) for comparative analysis
- **Ethical Considerations**
- Obtained approval from IEC
- Ensuring informed consent and confidentiality

METHODOLOGY

Learners' Attitude of Medical Professionalism Scale:

❖ **Domains:**

- duty/accountability;
- excellence/autonomy
- honor/integrity;
- altruism; and
- respect

❖ **Reliability:** Cranach's $\alpha = 0.7$ (Good internal consistency)

❖ **Items:** Total 28 items: 7 for duty/accountability; 6 for excellence/autonomy; and 5 each for the other domains

RESULTS

Table 1: Demography of the medical interns

Characteristics	Groups	
	CBME Curriculum N = 154	Old Curriculum N = 84
Age in years (Mean \pm SD)	22.34 \pm 0.89	23.45 \pm 1.39
Males, n (%)	102 (67.11%)	42 (50.00%)
Females, n (%)	52 (32.89%)	42 (50.00%)

Table 2: Medical professionalism scores among medical interns

Variables	Groups	
	CBME Curriculum n = 154 (Mean \pm SD)	Old Curriculum n = 84 (Mean \pm SD)
Duty/Accountability	3.7477 \pm 1.0066	3.8673 \pm 0.9954
Excellence/Autonomy	3.8139 \pm 0.9896	3.8472 \pm 1.1238
Honor/Integrity	3.4597 \pm 1.0957	3.2548 \pm 1.2240
Altruism	3.4870 \pm 1.0845	3.5595 \pm 1.1027

Respect	3.8740 ± 1.0775	3.9738 ± 1.1485
Total Score	3.6865 ± 1.0587	3.7177 ± 1.1402

Table 3: Statistical inference of medical professionalism scores

Variables	Statistics				
	Difference of Mean	Standard error of difference	95% CI of SE	t-statistic	Significance
Duty/ Accountability	-0.12	0.136	-0.3876 to 0.1483	-0.88	P = 0.3798
Excellence/ Autonomy	-0.033	0.141	-0.3110 to 0.2442	-0.237	P = 0.8130
Honour/ Integrity	0.205	0.155	-0.1003 to 0.5103	1.323	P = 0.1872
Altruism	-0.073	0.148	-0.3640 to 0.2190	-0.49	P = 0.6246
Respect	-0.1	0.15	-0.3945 to 0.1950	-0.667	P = 0.5055
Total Score	- 0.031	0.148	-0.2596 to 0.3220	0.2114	P = 0.8328

Factors may contribute to these almost identical outcomes:

- **CBME Introduction Challenges**
- Faculty unfamiliarity with AETCOM module concepts despite training initiatives like CISP, BCME, and ACME
- **Constitutional Amendment**
- Expansion of MBBS capacity (150 to 200) strained infrastructure and staff resources
- **COVID-19 Disruptions**
- Shift to online classes limited clinical exposure, hindering students' understanding of professionalism
- **Survey Timing Discrepancy**
- CBME interns surveyed at internship onset, traditional interns upon completion, potentially skewing results
- **Differential Participation Rates**
- Higher participation among CBME interns (95.06%) compared to traditional interns (67.74%)

STRENGTHS AND LIMITATIONS

- **Limitations**
- **Survey Timing Discrepancy:** Differential timing of survey administration.
- **Differential Participation Rates:** Varied participation rates between curricula groups.
- **Strengths**
- **Sample Size:** Substantial number of interns from both curricula
- **Validated Tool:** Utilized the Learners' Attitude of Medical Professionalism Scale (LAMPS).

CONCLUSION

While both curricula demonstrate similar professionalism levels among interns, contextual factors such as curriculum implementation challenges, resource constraints, pandemic-related disruptions, survey timing, and participation rates may contribute to the observed outcomes. Addressing these factors could enhance the effectiveness of professionalism education within CBME frameworks.

RECOMMENDATIONS

- ❖ **Enhanced Faculty Training:** Provide comprehensive training for faculty on AETCOM and CBME principles to ensure effective implementation.
- ❖ **Adequate Faculty Resources:** Ensure sufficient faculty members and resources to effectively implement and support the CBME curriculum.
- ❖ **Continuous Evaluation:** Establish ongoing assessment and feedback systems to regularly improve professionalism education.

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