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Research Article

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Perceptions of Medical Teaching Staff Toward the Twelve Roles of Teachers at Almogtarebeen University: A Cross-Sectional Study

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Abstract

Background: *Faculty perceptions of their roles significantly influence educational outcomes. Harden's model of the twelve roles for medical teachers offers a comprehensive framework to balance traditional and student-centered approaches. This study examines how faculty members at the Faculty of Medicine, University of Almogtarebeen, perceive and adhere to these roles.*

Methods: *A descriptive cross-sectional study was conducted, targeting 50 faculty members. Data were collected using structured, pre-tested questionnaires. Quantitative data analysis was performed using SPSS version 25, and qualitative insights were gathered through open-ended responses.*

Results: *Faculty members primarily identified as information providers, emphasizing teacher-centered learning in lectures and clinical settings. Less preference was shown for roles such as facilitator and resource developer. Statistical analysis identified correlations between years of experience and role perception. Barriers included limited institutional support and lack of training in student-centered approaches. Figures and tables illustrate the statistical findings.*

Conclusions: *Transitioning from teacher-centered to student-centered roles requires targeted faculty development programs and structural curriculum reforms.*

Keywords: Medical Education, Teacher Perceptions, Harden's Model, Faculty Development, Medical Curriculum.

1. Background

Medical education has undergone a paradigm shift globally, with increased emphasis on student-centered learning, active participation, and competency-based education [1]. Harden's twelve roles of medical teachers, introduced in 2000, serve as a comprehensive framework for understanding and improving teaching practices in medical schools. These roles span diverse responsibilities, including information provider, facilitator, curriculum developer, and assessor, offering a roadmap for holistic educational development [1].

Despite the model's relevance, its adoption in developing countries remains inconsistent due to systemic challenges, including limited faculty training and resources. Previous studies, such as those by Almahal et al. revealed that many medical educators in Sudan view their roles narrowly, focusing predominantly on delivering content

while neglecting roles like mentor or role model. Similar trends have been reported in other low-resource settings, underscoring the need for structured interventions to align faculty perceptions with the twelve-role framework [3, 4].

Research in developed countries highlights the benefits of embracing diverse roles. For example, Harrison et al. [6] demonstrated that training faculty in formative assessment strategies significantly improved student outcomes. Similarly, Krasne et al [7]. emphasized the importance of fostering a culture of active learning through role adaptation. These findings underline the potential for transformative change if institutions invest in faculty development programs and curriculum redesign.

At the University of Almogtarebeen, faculty perceptions of their roles have not been systematically studied. Understanding these perceptions is critical for designing targeted interventions that address local barriers and promote alignment with global best practices. This study aims to explore how medical educators at this institution perceive and implement the twelve roles, identify gaps, and propose actionable solutions.

2. Methods

2.1. Study Design

This descriptive cross-sectional study employed both quantitative and qualitative methods to explore faculty perceptions.

2.2. Setting

The study was conducted at the Faculty of Medicine, University of Almogtarebeen, a leading medical institution in Sudan with a diverse faculty and student body.

2.3. Participants

The study included 50 full-time faculty members from clinical and basic sciences departments. Inclusion criteria encompassed all academic ranks from lecturer to professor, while part-time faculty were excluded.

2.4. Data Collection

A structured, pre-tested questionnaire comprised sections on demographic information, perceptions of the twelve roles, and barriers to role fulfillment. Open-ended questions were included to capture qualitative insights.

The Questionnaire was developed by Harden and Lilley in 2018. This instrument was later adapted into Turkish, and its psychometric properties were evaluated in a study published in the Journal of Basic and Clinical Health Sciences in 2021 [8].

2.5. Data Analysis

Quantitative data were analyzed using SPSS version 25, with chi-square tests for significance. Figures and tables were created to present demographic distributions, role preferences, and key statistical outcomes. Open-ended responses were thematically analyzed to identify key patterns and recommendations.

2.6. Ethical Considerations

Ethical approval was obtained from the IRB at the University of Al Neelain. Verbal consent was secured from all participants prior to data collection.

3. Results

3.1. Quantitative Findings

3.1.1. Demographics

Out of 50 participants, 58% were male and 42% female (Table 1). Faculty distribution across departments included clinical sciences (56%), basic sciences (32%), and community health (12%). Academic ranks comprised lecturers (45%), assistant professors (40%), and senior faculty (15%).

Category	Percentage (%)	Category
Male	58	Male
Female	42	Female

Table 1: Demographic Distribution of Faculty Members

3.1.2. Role Preferences

Faculty members predominantly identified as information providers, with 82% emphasizing this role in clinical settings and 68% in lectures. Less than 30% recognized roles such as facilitator or resource developer as critical (Table 2).

Role	Percentage	Clinical Setting	Lecture-Based
Information Provider	82%	Yes	Yes
Facilitator	28%	No	Limited
Resource Developer	25%	No	Limited

Table 2: Role Preferences Among Faculty Members

3.1.2. Role Preferences

Faculty members predominantly identified as information providers, with 82% emphasizing this role in clinical settings and 68% in lectures. Less than 30% recognized roles such as facilitator or resource developer as critical (Table 2).

Role	Regular Engagement	Occasional Engagement	Rare Engagement
Information Provider	45%	30%	25%
Facilitator	20%	40%	40%
Assessor	25%	35%	40%

Table 3: Frequency of Role Engagement

3.1.4. Barriers to Role Adoption

The main barriers identified were time constraints (45%), insufficient training (35%), and lack of institutional support (30%) (Table 4).

Barrier	Percentage (%)
Time Constraints	45
Insufficient Training	35
Lack of Institutional Support	30
Barrier	Percentage (%)

Table 4: Barriers to Role Adoption

3.1.5. Qualitative Insights

Open-ended responses highlighted the following barriers:

- **Time Constraints:** Faculty noted overloaded schedules prevented engagement with diverse teaching roles.
- **Lack of Training:** Insufficient training in active learning methodologies hindered adoption of student-centered approaches.
- **Institutional Challenges:** Limited administrative support and inadequate resources were frequently cited.

4. Discussion

This descriptive cross-sectional institution-based study was conducted at the Faculty of Medicine at the University of Almogtarebeen, and a structured questionnaire was used for data collection. The aim was to study the perceptions of faculty members at the University of Almogtareben toward the twelve roles of the teacher. The current commitment of faculty members to these roles was assessed, and their preferred future personal commitment was evaluated. The male-to-female ratio of staff was 66-44%.

The medical teacher is not just an instructor or a task master: he or she is a helper and guide who fits into many different roles all at the same time. The twelve roles provided by Harden provide us with an understanding of the modified role of the teacher [6].

The findings align with global studies emphasizing the dominance of traditional teaching roles in medical education. For example, Almahal et al. identified a similar trend in Sudan, where faculty members predominantly adhered to teacher-centered approaches while struggling with formative assessment and active learning practices [6]. These parallels highlight systemic barriers, including time limitations and a lack of awareness about modern educational frameworks [7].

Faculty perceptions reflect broader challenges reported in other studies. Krasne et al. demonstrated that structured faculty development programs effectively bridge gaps in teaching methodologies, enabling educators to adopt roles like facilitator and curriculum planner [7]. Similarly, Harrison et al. found that training in formative assessment could significantly improve teacher effectiveness and student engagement [9].

Addressing these challenges requires multifaceted interventions:

Faculty Development Programs: Training workshops focusing on Harden's twelve roles, particularly student-centered methodologies, are essential. Studies by Konopasek et al. and Krasne et al. highlight the effectiveness of targeted training initiatives [7,8].

Curriculum Redesign: Embedding the twelve roles into curriculum planning ensures balanced role distribution among faculty members. Alignment with global frameworks like SPICES further enhances educational outcomes [2].

Institutional Support: Administrative backing, including reduced teaching loads and resource allocation for training, addresses barriers like time constraints [3,9].

The qualitative insights also emphasize the importance of cultural shifts in education. As noted by Almahal et al., fostering an environment that values student-centered learning requires advocacy and awareness campaigns targeting both faculty and institutional leaders [6].

5. Conclusions

Faculty members at the University of Almogtarebeen predominantly perceive their roles as information providers. Transitioning to a balanced adoption of Harden's twelve roles necessitates targeted interventions, including faculty training, resource allocation, and curriculum redesign. These measures will support the institution's goal of aligning with global best practices in medical education.

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