

ORIGINAL ARTICLE

Challenges Faced by Senior Faculty in the Implementation of Integrated Curriculum in Developing CountriesMadeeha Rehan¹, Neelofar Shaheen², Noushaba Sadiq³**ABSTRACT**

Objective: To identify the key challenges faced by senior faculty members in the implementation of an integrated curriculum in developing countries

Study Design: Quantitative descriptive cross-sectional

Place and Duration of Study: Foundation University Medical College Islamabad and Women Medical College Abbottabad. Four months duration (Jun 2017-Sep 2017)

Materials and Methods: The study was conducted in two private medical colleges. The sampling technique employed was a purposeful non-probability sampling technique. A total of 60 senior faculty members (Associate Professors and Professors) participated in the study. Data collection was carried out using a self-developed, validated questionnaire (closed-ended), consisting of 20 items based on the Likert scale format of Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Neutral, 0 Disagree (D) = 2 points, and Strongly Disagree (SD) = 1 point.

Results: Descriptive analytics were run on SPSS version 21. The common challenges confronted by senior faculty members in the implementation of an integrated curriculum consisted of; Lack of sequential planning of the integrated curriculum (66.5%), insufficient continuous medical education (CME) activities for faculty (56.5%) along with ineffective communication among faculty members (53.5%), lack of effective teamwork (42.6%) and lastly, deteriorating quality of students in medical colleges (48.6%).

Conclusion: Senior faculty members faced diverse challenges while their institutes decided to implement the modular integrated curriculum. The lack of a collaborative approach in curriculum planning adversely affected curriculum organization and sequencing. Lack of interdepartmental communication and collaboration and deficient faculty development programmes together with the deteriorating quality of medical students were the major challenges faced by senior faculty members in implementing an integrated curriculum.

Key Words: *Challenges in Integrated Curriculum, Curriculum Implementation, Faculty Development, Integrated Curriculum, Medical Education.*

Introduction

Curriculum development is a dynamic process. The medical curriculum has gone through many reforms. These reforms are never easy, but they are inevitable.¹ The problems arising at different levels of the educational system do not lie in the curriculum formulation, but rather in its implementation.

According to Ivowi (2004) curriculum implementation implies putting “theory into practice” or “proposal into action”. Even after investing enormous proportions of money and effort into implementing an integrated curriculum, its successful accomplishment remains a dream yet to be realized in most medical colleges at the national level.² The students who have experienced an integrated curriculum perceive it as a strength in terms of enhancing problem-solving skills, and student-centred teaching and learning,³ therefore, there is a dire need for designing effective policies for successful curriculum implementation. Hence, it is imperative that methods of curriculum implementation are addressed and focused upon.⁴ According to Muller et al (2008) and Shaheen et al (2021), curriculum integration is a complex process understood and implemented differently at different

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rates in different contexts.^{5,6}

It is an undeniable fact that no educational policy can be successfully implemented unless teachers' problems are taken into consideration before initiating decision-making and planning of curriculum.⁷ The teacher is the most qualified resource person and is the best candidate to be consulted in all stages of curriculum development. Nevertheless, it has been observed that when it comes to decision-making in education, teachers' opinions are not given their due weightage, which in turn negatively impacts curriculum implementation. This issue, therefore, calls for careful consideration by the stakeholders involved in designing and implementing the integrated curriculum.⁸

As per the literature review, relatively younger faculty members are more willing, open, and adaptive to change as compared to their senior counterparts. Undoubtedly, senior faculty members are integral to the success of any academic institution. They are consistently growing professionally and contributing to their discipline, and they also serve as mentors to the junior faculty.⁹ Vital features of an organization such as leadership, maintenance of cohesive culture and a positive climate depend upon the senior members of the faculty. It takes determination, will and participation to lead the change of curricular reforms.¹⁰ Faculty face diverse challenges everywhere in the world and literature reports even the challenges related to infrastructure, space, and administrative issues.¹¹ Thus, it is of utmost importance to identify first and then try to resolve the problems and the needs of senior faculty to nurture their desired characteristics over the career continuum.¹²

This study aimed to identify the major challenges encountered by senior faculty members during the implementation of the integrated curriculum in their institutes.

Materials and Methods

This quantitative study of the cross-sectional design was carried out in two private medical colleges in different provinces where an integrated curriculum was already implemented. Ethical approval was acquired from the ethical review committee of the respective institution. The sampling technique employed was the purposeful sampling technique. It included the Associate Professors and Professors as

their participants. The 60 senior faculty members were all those who had been part of the transition from traditional to integrated curriculum. All Assistant Professors and the faculty of the medical education department were not included in the study. Written informed consent was taken from all the participants.

Data collection was done via the use of a self-developed descriptive questionnaire. The main questions were related to intrinsic motivation, mindsets, interdepartmental and intradepartmental issues, CME activities, lack of teamwork and curriculum organization. It was validated by 4 medical educationists. It consisted of 20 items in total, based on the Likert scale format of Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Neutral, 0 Disagree (D) = 2 points, and Strongly Disagree (SD) = 1 point. Data were analysed using SPSS version 21.

Results

A total of sixty senior faculty members including Associate Professors (63.3%) and Professors (36.6%) were included in the study. Out of the sixty participants', forty were females and twenty were males (Table I).

Table I: Demographics of the Participants

Variables	Frequency (%)
Age (years)	
40-55	28 (46.66)
56-70	32 (53.33)
Designation	
Professor	22 (36.66)
Associate professor	38 (63.33)
Gender	
Male	20 (33.33)
Female	40 (66.66)
Teaching experience (years)	
10-19	29 (48.33)
≥ 20	31 (51.66)

Amongst various major challenges identified, most common were lack of sequential planning of integrated curriculum, insufficient continuous medical education (CME) activities for faculty, lack of effective teamwork, lack of interdepartmental communication, lack of collaborative approach in designing the table of specifications, deteriorating quality of students in medical colleges and lastly inadequate infrastructure (Table II).

50% of the faculty members believed an integrated curriculum is associated with a reduction in rote

Table II: Major Challenges Faced by Senior Faculty in Transition from Traditional to an Integrated Curriculum

	Challenges	Frequency (Strongly agree)
1	Lack of sequential planning of integrated curriculum	66.5%
2	Insufficient CME activities for faculty	56.5%
3	Lack of effective teamwork	48.6%
4	Deteriorating quality of students in medical colleges	42.6%
5	Lack of interdepartmental communication	53.5%
6	Lack of collaborative approach in designing Table of Specifications	57.1%
7	Inadequate infrastructure	44.6%

learning as compared to a discipline-based curriculum, and 17.9% strongly agreed that integrated curriculum results in the production of more competent doctors as compared to the discipline-based curriculum. Similarly, 23.2% of the participants agreed that after having practised traditional teaching and learning methodologies for a long period of time, they did not feel motivated to adopt new teaching and learning strategies in an integrated curriculum. On the flip side, 32% agreed that a student-centred approach in an integrated curriculum limits a teacher's authority over students.

Discussion

According to Asebiomo (2009), not only a well-formulated curriculum is important but its effective implementation is necessary to achieve the desired goals of education.¹³ A study conducted at the national level,² concluded that the design and implementation of an integrated curriculum in public sector institutions with established curricula is a difficult process, and resistance by faculty was the most common issue in this context where changing the mindset of faculty members at senior level is mandatory.¹⁴ This is in contrast to our findings because most of the senior faculty members were more than willing to adapt to the change and strongly agreed that an integrated curriculum enhances problem-solving and critical-thinking skills as compared to a traditional disciplined-based

curriculum. However, most of the faculty members are of the opinion that there is a lack of faculty development approaches to polish their skills which could allow them to adopt advanced teaching strategies. In a systematic review, it is recommended that various formal and informal faculty development approaches including workshops, seminars, experiential learning, timely feedback and effective peer coaching should be incorporated into faculty development programmes.¹⁵ In a study conducted in Nigeria, inadequate faculty training and interdepartmental issues were found to be the most common causes which are consistent with our study findings.¹⁶ While in contrast to our study, time constraints and temporal restrictions were the main issues faced by the faculty in curriculum implementation.

Most of the senior faculty members believed that there is a dearth of coordination and communication at the interdepartmental and intradepartmental levels about curriculum designing and changes done in the curriculum later. It is a matter of urgency to formulate a well-structured curriculum committee consisting of senior faculty members and a qualified medical educationist. Though caution needs to be exercised and overambitious attempts must be avoided. It is best, to begin with, modular integration under the supervision of Modular Integration Committees followed by a module coordinator for every committee. Representatives from different departments including clinical teachers and a medical educationist should be members of committees.¹⁴

Also, for the successful implementation of an integrated curriculum monthly and fortnightly meetings of the faculty should be arranged to finalize the teaching-learning schedule. The reason for transitioning to an integrated system, including its advantages and disadvantages should be explained to the faculty.¹⁵

In our study, most of the faculty members believed there were no incentives or rewards for competent and hardworking faculty members. In one study, it has been mentioned that there should be incentives and rewards for the faculty members involved in curriculum development through a collaborative approach and skilful conflict resolution. This strategy of improving extrinsic motivation can boost the

curricular change process.¹⁷ While extrinsic motivation is important, intrinsic motivation has also an important role to play. According to literature intrinsic motivations of faculty and their professional and ethical values are often ignored while using different faculty development approaches. Therefore, it is essential to re-design faculty development approaches not only for skill enhancement but also as an opportunity for the renewal of personal and professional growth.¹⁴ In most western countries medical education is a characterized trend toward student-centred learning, however in most eastern and developing countries medical education remains a more traditional teacher-centred process.¹⁸ This trend is changing now and many developing countries are adopting integrated curricula where faculty have multiple roles to play.¹⁹

A vast majority of the faculty members were of the view that there is an inadequate infrastructure which is a huge obstacle to the implementation of the integrated curriculum. This is in accordance with a study conducted at a national level in which it was concluded that good infrastructure is required for successful curriculum implementation.¹ In fact the infrastructure, serves as the necessity to be considered before implementing the integrated curriculum.²⁰

In our study, most of the faculty members agreed that selection criteria for admission of medical students in medical colleges need reviewing. This is consistent with another study in which it was reported that awareness should be provided to medical teachers and students regarding integrated curriculum.² The integrated curriculum necessitates the involvement of students in the curriculum implementation, review, and assessments to make sure that the students take responsibility for their own learning and provide valuable input to the faculty and administrators.²¹

Limitations of the study

1. Sample size was small but we had only senior faculty as our target population and there were only two institutions so the results can be considered applicable to other similar settings.
2. A close-ended questionnaire was designed therefore opinions of faculty members could not be taken.

Conclusion

In conclusion, curriculum implementation is the lifeblood of an educational institution and is critical to the success of any medical college. There is a dire need to design an innovative and creative faculty policy to simplify integration, enhance faculty development approaches and collaborate at the political, institutional, and administrative levels to resolve the issues related to curriculum implementation effectively.

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CONFLICT OF INTEREST

Authors declared no conflicts of Interest.

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DATA SHARING STATEMENT

The data that support the findings of this study are available from the corresponding author upon request.

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