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Faculty Perspective on the Challenges Faced During Implementation of Integrated Curriculum

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ABSTRACT

Background: Curriculum is a dynamic thing that has evolved over the years to ensure the competency of health care professionals. Due to guidelines issued by international accrediting agencies, University College of Medicine & Dentistry implemented an integrated modular curriculum in 2015 that is coordinated and coherent.
Objectives: The objective of this study was to explore the difficulties that the faculty faced while implementing an integrated curriculum for undergraduate dental program (BDS) at University College of Dentistry, University of Lahore.
Methods: This descriptive exploratory study was conducted from September 2020 to January 2021 at University College of Dentistry, University of Lahore. Thirty-five faculty members were interviewed. The interviews were analyzed thematically after being transcribed.
Results: Six themes emerged from the analysis of interviews. These themes were: working environment, distribution of workload, communication, faculty development and retention, evaluation and leadership.
Conclusions: Integrated curriculum may be the need of the hour; however, its implementation comes with a set of challenges, which include non-conducive working environment, uneven distribution of workload, absence of a sound faculty development and retention program or absence of adequate resources. These factors may hinder the implementation of the integrated curriculum.

Key Words: Curriculum, Faculty and Dentistry

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INTRODUCTION

The 1993 World Summit on Medical Education sowed the seeds for restructuring curricula in order to establish effective health care systems. In 1994, WFME advocated the same change.[1] Fast forward some years, the body responsible for the

accreditation of all U.S medical schools, The Liaison Committee on Medical Education (LCME), renewed its licensing standards in 2013 and stated that a curriculum be "coherent and coordinated and integrated within and across the academic periods of study". The medical curriculum has, hence, constantly evolved across the globe in response to the guidelines issued by accrediting authorities in order to produce competent healthcare professionals.[2]

In light of the suggestions put forward by various accrediting bodies globally, reform of traditional medical curriculum in Pakistan was inevitable. University College of Medicine and Dentistry (The University of Lahore) decided to incorporate recent educational guidelines to develop an integrated and modular curriculum, which focuses on the integration of all subjects across one year of study to be taught in a module style system with all subjects focusing on one particular topic at the same time in a given module, rather than the conventional annual system where all subjects and topics are taught at different times, and the focus may be on different topics within the same time frame. This integrated and modular system was implemented in 2015. The curriculum aimed to break down barriers between basic and clinical sciences in order to promote retention of relevant knowledge and development of skills through progressive development of concepts along with their applications. Because this change was dictated by accrediting authorities without issuing any guidelines on design criteria for the said curriculum, initiating and implementing it was not easy and required a continuous and dedicated effort on part of the faculty. As rightly stated by Bland, "successful curricular change only occurs through the dedicated efforts of effective change agents."[3] Faculty is the most effective change agent since it is at the forefront of the process. As expected, the effects of implementing the new/revised curriculum were the greatest on the faculty because a new curriculum meant a change in the learning philosophy, student instruction, student assessment and evaluation along with a different and probably tedious process of faculty development.[4,5] This study was hence undertaken to explore the challenges faced by faculty while implementing an integrated curriculum for an undergraduate dental program.

METHODS

After obtaining ethical approval from the Ethical Committee of the University of Lahore (Ref: ERC/09/20/03) in September 2020 this descriptive exploratory study was conducted from September 2020 to January 2021 at University College of Medicine & Dentistry, The University of Lahore (UCD, UOL) By means of convenience sampling, 35 faculty members were chosen to be interviewed. The chosen faculty members were from different years of medical teaching and were representative of different tiers of seniority, including demonstrators, assistant professors, associate professors, and professors. Out of these, four faculty members were certified medical educationists with a master's degree in medical education, and all remaining faculty members held a certificate in health professions education. Prior to the conduction of interviews, the research project and its significance were explained. A written consent was taken from the study participants. The Department of Medical Education (DME) was established for the purpose of implementing integrated

curriculum. DME will oversee the process of curriculum implementation and run faculty development workshops. Curriculum committee was established including the representatives from both basic and clinical departments to give their input on curricular content. Even though the faculty believed they had less control of their own subjects, the autonomy of each department remained unaffected as the departmental structure was not changed. An interview guide which was validated by 5 health professions educators within and outside the institute was used to guide the discussion in these interviews, where none of the health professions educators were part of the research team. All interviews were conducted at the University of Lahore and lasted between 40-60 minutes. Interviews were conducted in English and were audiotaped, transcribed and analyzed thematically. Triangulation of data was ensured, and transcribed data was shared with the participants to ensure that they had no objections on it.

RESULTS

After conducting interviews with the faculty members, the recordings were transcribed and coded in the software Atlast Ti. Sixty nine (69) codes were formed initially which were grouped for similarity. Ultimately 16 codes were formed which were grouped under 6 themes. Sub themes or minor themes were not identified separately as there was no element within each theme that required particular focus.

The first theme that emerged was "**working environment"**. All faculty members were of the opinion that the implementation of integrated curriculum affected the working environment because in the traditional curriculum with conventional teaching and learning strategies, each department took responsibility of its own work. However, with the introduction of the integrated curriculum, a greater amount of inter and intra departmental interaction was required. This exposed many different behaviors of different faculty members specially those who did not appear to be on the same wavelength regarding the implementation phase. A participant said, ""My colleagues thought the traditional system was better. We feel that our department does not have the same power as it used to. Nobody is happy with this, because at once we have faced a lot of burden as we have to deal with students, departments and individual faculty members with whom we're collaborating." Junior faculty members also expressed their opinions that the senior faculty members were apprehensive towards the implementation of integrated curriculum and hence showed resistance.

The second theme was "**distribution of workload"**. All faculty members stated that they felt over worked and overburdened because implementing the new curriculum required a lot more effort than was anticipated. Most of the faculty members stated that an increase in workload had a significant effect on their personal lives as they were working extra hours in order to ensure that the implementation phase was smooth. The faculty also said there was no system in place that would compensate the faculty for the extra amount of work that they were doing hence a significant number of trained faculty members resigned as soon as they saw better opportunities elsewhere. The remaining staff hence struggled with the new staff that was un-trained and required immediate and extensive training to keep the implementation process smooth.

The third theme was "**communication**." 28 out of 35 faculty members believed most of the challenges they were facing during the implementation phase were due to lack of proper communication on all levels. They also expressed that initially timely communications could not be made between the institute, students, and their parents. For this reason, parents complained they did not understand the need to implement the integrated curriculum. Students complained they had to no one to seek guidance from, and they found it difficult to accept the curriculum as it was only being implemented in UCD, UOL and not in any other college in the city. A participant said "Most of the parents were very annoyed, that what are you doing and what are you teaching? Students don't have any idea on which lines they have to study, or they have to prepare for the exams, they are feeling like balls between the departments, they have to go to many teachers or many individuals for guidance."

The fourth theme was "**faculty development and retention**." The faculty had a divided opinion on the effectiveness of the faculty development programs. While all the interviewees said that they attended the workshops that were being conducted by the department of medical education, only 50% of them said that they were effective. They pointed out that the practical implementation of the curriculum was very different from what they had learnt in theory in the workshops that they attended.

The fifth theme was "**evaluation**." Since there was no system in place to evaluate the curriculum and/or its outcomes, the faculty was apprehensive about the implementation phase throughout because they were not sure as to whether what was being implemented was even correct or not. They also believed that the decision to implement the integrated curriculum was only taken due to external pressure from the accrediting authorities (Pakistan Medical and Dental Council) and international universities and there was no actual need for an integrated curriculum at the time. The absence of a proper evaluation program and the feeling that the implementation of integrated modular curriculum was not a need of the local market made the faculty dis interested and hence made it difficult for them to implement this change wholeheartedly.

The sixth theme was "**leadership**." Faculty believed that the leadership or senior management of the institute had a vital role to play both during the developmental and implementation phase of the curriculum. They believed that it was the leadership's responsibility to ensure that the vision they had regarding the institute was shared with the faculty so that all the faculty members were on the same page as to why the integrated curriculum was being implemented. They also believed that it was the leadership's responsibility to ensure that the resources that were required to implement the new teaching learning strategies (e.g., PBL) as a part of the integrated curriculum were adequate. The faculty felt that resources were compromised, and preference was always given to the undergraduate medical program rather than the undergraduate dentistry program, hence their implementation phase was much smoother as compared to the implementation of the dental curriculum.

DISCUSSION

Themes that were identified in this study were based on problem areas that were recurrent across all faculty interviews.

Faculty members believed that the implementation of the integrated curriculum affected the working environment because implementation phase required greater amounts of intra and inter departmental interaction and coordination, which was difficult as not all the faculty members were on the same wavelength regarding implementation. Faculty apprehensions regarding the implementation of integrated curriculum are documented across literature. Faculty often feels that in an integrated curriculum, they will lose control over their subject and will not be able to teach in their preferred manner and order.[6] The resistant attitude of faculty members affects the working environment adversely and the working environment does not remain conducive for change as collaboration and coordination between departments becomes difficult in a resistant environment. It is important to note that a change in curriculum cannot be implemented by a fraction of the faculty or by one or two teachers alone. Successful implementation requires a conducive environment in which, if not all, at least most of the faculty members are willing and enthusiastic to implement the change.

Regarding theme 2, distribution of workload, all faculty members agreed that they felt demotivated due to increased and uneven distribution of workload. Literature f reports that in order to avoid faculty burn out, additional funding may be required for incentives as well as capacity building.[6,7] In order to implement a new curriculum, the administrative work of the academic faculty extends well beyond the allocated working hours, and this is often not recognized in the university's workload calculation models.[8] Workload pressures that affect the professional performance negatively are documented across literature. Much of the workload is attributed to managerial tasks, which have an administrative focus and hence may affect the quality of teaching and learning. A case study on a curriculum reform in Hong Kong reports that only 28.3% of the faculty agreed that their role in the implementation of curriculum had been clearly defined. This suggests that they had not been clearly instructed on the roles they would have to play and the responsibilities they would have to fulfill in the implementation phase.[9]

Communication or the lack of it was a major barrier in the smooth implementation of integrated curriculum. It has been reported that lack of communication between stakeholders can make the faculty members feel isolated and uninvolved in the process of implementing a new curriculum. This can also leave the faculty feeling perplexed and ill equipped to take on the task of curriculum implementation. In a study conducted by Syeda Kausar and Lubna Baig, it was documented that communication between stakeholders was one of the key reasons for the delay of implementation of an innovative curriculum.[10]

Literature also emphasizes on the importance of participation and communication of all stakeholders from the initial step of curriculum planning and development because as the process progresses and integration within the curriculum increases, an even better system of communication is required to facilitate joint planning and in turn smooth implementation of the curriculum.[11]

Faculty development as well as faculty retention was a barrier in the implementation of integrated curriculum. While all faculty

members agreed there were ample faculty development workshops conducted, no consensus could be achieved on their effectiveness. Hence, the faculty felt unprepared to implement the integrated curriculum. In addition to this, due to a sudden increase in workload, a significant number of trained faculty members resigned. The new faculty that was hired was untrained hence there was a pressing need for a continuous and effective faculty development program. Literature identifies faculty turn over i.e. frequent shifting of faculty members from one institute to another, as one of the barriers for the smooth implementation of curriculum. Professional development is important so that the faculty can learn about latest teaching practices and can update their academic knowledge. Staff retention and stability is vital for even distribution of workload and to achieve stability and knowledge retention.[12]

Since UCD was the first dental college in the country to develop an integrated curriculum for dentistry, the faculty throughout remained unsure of how the curriculum itself would be evaluated at the end. While frequent meetings to discuss the issues with implementation were held, none of the said meetings focused on developing an evaluation program for the curriculum. Because of the said reason, faculty remained under the impression that the integrated curriculum was implemented due to a need of satisfying external reporting requirements. Implementation, hence, remained halfhearted. Literature also supports and highlights the importance of the process of program evaluation as it serves the important purpose of monitoring the program and refining the elements of the program to maintain its quality and effectiveness.[13]

Regarding the sixth and last theme (leadership) faculty believed that it was the leadership's responsibility to provide adequate resources and ensure that all departments were on the same page regarding the change in curriculum in order to ensure its smooth implementation. Most of the leadership skills associated with curriculum are managerial and administrative type and require the leaders to take into account the willingness and capabilities of their staff. If the leadership is able to think in multiple dimensions while stepping back to see what is working and identifying the changes that need to be made in order to secure further development, the faculty will feel encouraged and potentially restore their faith in the curriculum change.[14] This also signifies that leadership is not merely a position, but a relationship that encourages the team to strive and achieve the goals of the institute. While society's changing health needs and innovations in education require the curricula of medical schools to be regularly revised, the introduction/implementation of a new curriculum poses certain difficulties to teachers.

The limitation of the present study is that it was a single center study. A cross-institutional study can be planned for the future for better comparison of results and faculty perspectives.

CONCLUSION

Integrated curriculum may be the need of the hour; however, its implementation comes with a set of challenges, which may include non-favorable working environment, an uneven distribution of the workload, absence of a sound faculty development and

retention program or absence of adequate resources in that particular sector. These factors may hinder the implementation of the integrated curriculum.

Conflict of interest:
All authors declared no conflict of interest.

Contributors:

KA: Idea conception, Initial Manuscript writing.
RAK: Data collection, data analysis, andmanuscript finalization.
MAA: Data analysis, manuscript writing andcritical review.
KJ: Editing, proofread, validation
RK: Methodology, investigation, reviewing
AAR: Study design, data analysis, manuscriptwriting
All authors approved the final version and signed the agreement to be accountable for allaspects of work.

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

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