ORIGINAL ARTICLE

EXPLORING THE PERCEPTIONS OF UNDERGRADUATE MEDICAL STUDENTS AND FACULTY REGARDING THEIR ENGAGEMENT IN INTEGRATED CURRICULUM DEVELOPMENT IN AZAD JAMMU & KASHMIR MEDICAL COLLEGE MUZAFFARABAD

Muhammad Ijaz[1], Brekhna Jamil[2], Nowshad Asim[2], Ayaz ul haq[3], Yasir Khan[4], Samreen Riaz[5]

[1]Department of Surgery Azad Jammu & Kashmir Medical College, Muzaffarabad-AJK
[2]Institute of Health Professions Education and Research (IHPER), Khyber Medical University, Peshawar-Pakistan
[3]Government College of Nursing HMC /Nursing lecture, Peshawar-Pakistan
[4]Saidu Medical College Swat-Pakistan
[5]PMC Dental Institute, FMU, Faisalabad-Pakistan

Background: The development of a medical curriculum is a multi-layered and complicated process, demanding teamwork among diverse stakeholders, including undergraduate medical students and faculty members. This study investigates the underexplored realm of stakeholder perceptions, specifically those of undergraduate medical students and faculty, regarding their engagement in the intricate process of medical curriculum development. **Methods:** The research, conducted at Azad Jammu & Kashmir Medical College Muzaffarabad, employs a qualitative exploratory approach, with participants selected from the 4th and 5th years based on academic performance. Through two Focus Group Discussions (FGDs) and successive thematic analysis, the study discovers valuable understandings of the level of commitment, influencing factors, and recommendations for development articulated by the stakeholders. **Results:** The findings underscore the vital status of subject incorporation for improved understanding and constant student engagement. Cognitive and emotional engagement emerge as serious elements for optimal curricular outcomes, impacting academic presentation and attendance. Integrated programs, aimed at linking basic and clinical sciences, are shown to enhance critical thinking and problem-solving skills, the development of a solid understanding of medical concepts. Particularly, involving students in the curriculum development process is identified as an empowering strategy, leading to heightened motivation and improved academic performance. **Conclusion:** The insights gained from this study have implications for humanizing curriculum development processes, ultimately benefiting both students and the healthcare system.

Keywords: Perception; Curriculum; Engagement; Students and Faculty

Citation: Ijaz M, Jamil B, Asim N, Haq AU, Khan Y, Riaz. Exploring the perceptions of undergraduate medical students and faculty regarding their engagement in integrated curriculum development in Azad Jammu & Kashmir Medical College Muzaffarabad. J Ayub Med Coll Abbottabad 2024;36(1):105–8.

DOI: 10.55519/JAMC-01-12982

INTRODUCTION

The development of a medical curriculum is a multi-layered and complicated process, requiring teamwork among diverse stakeholders, including undergraduate medical students and faculty members. Despite the essential role these stakeholders play in influencing curricula to meet both student needs and the demands of the healthcare system, there is a significant gap in understanding their perceptions of engagement in curriculum development.[1] This study aims to explore the viewpoints of undergraduate medical students and faculty regarding their involvement in this critical process. The examination delves into the level of engagement, influencing factors, and suggestions for improvement provided by these stakeholders.[2,3]

Existing literature underscores the significance of stakeholder engagement in curriculum development, highlighting its impact on aligning curricular designs with healthcare system needs and student potentials.[4,5] However, despite these insights, a lack of research exists on the specific perspectives of undergraduate medical students and faculty members. This study, conducted at Azad Jammu & Kashmir Medical College Muzaffarabad, seeks to fill this gap by shedding light on the perceptions of these stakeholders, thereby providing valuable insights into opportunities for humanizing their engagement in the curriculum development process.[6,7]

The study's significance is highlighted by the essential role of the undergraduate medical curriculum in shaping the future healthcare workforce. To achieve

curriculum designs that truly reflect social and healthcare system needs, involving these primary stakeholders becomes imperative.[8,9] The findings of this research, emanating from a cross-sectional survey administered in a Pakistani medical college, reveal positive attitudes towards engagement but variations in the level of involvement between faculty members and students. Identified barriers include limited time, resources, and communication channels, highlighting the need for better opportunities and feedback mechanisms.[10] Ultimately, this study holds important implications for medical education, contributing insights for curriculum creators to enhance stakeholder involvement, improve curriculum quality, and address challenges in the evolving landscape of medical education.[11]

MATERIAL AND METHODS

In this study, a qualitative exploratory approach was employed to examine the commitment of undergraduate medical students and faculty in curriculum development at Azad Jammu and Kashmir Medical College Muzaffarabad. The study focused on 4th and 5th-year medical students, selected based on academic performance (grades A to C), encompassing both male and female participants.

The study, covering six months, utilized a small sample size of seven students and seven faculty members, totalling 14 participants. Purposive sampling was employed to ensure the collection of diverse and relevant information. Inclusion criteria considered academic performance, including students with grades ranging from A to C, while exclusion criteria accounted for lower grades, non-enrolment in the integrated curriculum program, chronic absenteeism, and previous participation in a similar study.

Data collection involved obtaining written informed consent after ethical committee approval. Focus groups, comprising 3 to 10 participants, were formed from both students and faculty. An interview guides steered discussions, with an observer assisting in recording text. Data collection was conducted through focused group discussions (FGDs), utilizing audio, video, and written text recordings. The study explored students' interest in class attendance about their participation in curriculum development, as well as the student-faculty relationship.

Data analysis was conducted through transcription, manual coding, and categorization into domains such as "student/teacher participation in curriculum development" and "student/teacher relationship." Subcategories including knowledge, experience, and perception were employed for a comprehensive analysis. The research contributed to curriculum evaluation, improvement, and targeted interventions, offering insights for refining stakeholder engagement in the evolving landscape of medical education. Ethical considerations and validation strategies were integral components, ensuring the rigour and reliability of the research process.

RESULTS

The qualitative study at Azad Jammu & Kashmir Medical College explored perceptions of integrated curriculum development among undergraduate medical students and faculty. Conducted through two Focus Group Discussions (FGDs) and thematic analysis, the research unveiled insights into participants' perspectives. Emphasizing the significance of integrating subjects for enhanced comprehension and student engagement, the study also delved into the balanced allocation of lecture and discussion time. Participants emphasized the value of student feedback, advocating a student-centered approach. The application of theoretical knowledge in clinical contexts and challenges in curriculum integration were discussed, showcasing a shift toward competency-based medical education. Personalized teaching approaches and mentorship were recognized for enhancing the learning experience. Overall, the study highlights the importance of integration, feedback, and personalized approaches in medical education.

Below is a table summarizing the key codes, axial coding, categories, subthemes, and themes mentioned in the provided content.

Table-1: Codes of the data

Percipient 1 (P1)	Refers to the first participant providing input.
FGD	Focus Group Discussion.
P2, P3, P4, P5, P6, P7	Different participants in the focus group discussions.
F1, F2, F3, etc.	Different comments within the focus group discussions.
Integration	Refers to the integration of subjects and teaching methods.
Modular System	Refers to the teaching approach where subjects are divided into modules.
LGIS	Long Group Interactive Sessions.
CDs	Short sessions called CDs (possibly Compact Discs).
PBL	Problem-Based Learning.
CR, GR	Class Representative, Group Representative.

Table-2: Axial coding of data

Teaching Environment	Describes the interactive nature of the class, the facilitator's role, and variations in teacher approaches (FGD 1, 3, 4, 10, 11).
Teaching Methods	Discusses the integrated modular system, horizontal vs. vertical approaches, and the goal of student-directed learning (P2 f1, P3 f2, P3 f3).
Participation	Focuses on student participation, appreciation, and the role of group discussions (P3f4, P3f9, P4f1, P5f1, P6f8, P2f14, P3f14).
Integration of Subjects	Describes the integrated approach, combining different subjects under a theme (P2f2, P3f9, P4f6, P6f2).
Feedback Mechanism	Highlights the need for a feedback system for both teachers and administration (P2 f15, P2f8).
Teacher Availability	Discusses the availability of teachers, their roles, and the importance of after-class discussions (P2f10, P2f11).
Examinations and Assessments	Addresses concerns about examination schedules, the need for immediate assessments, and practical session attention (P2f9, P4f9).
Research and Assignments	Highlights the role of research, the use of the internet, and the importance of assignments in learning (P3f4, P3f14, P4f4, P5f5).

Table-3: Categories of data

Teaching Environment and Methods	- Interactive Class Environment - Large Group Sessions - Teacher Availability and Approaches - Modular System and Integrated Approach
Student Participation and Feedback	- Classroom Discussions and Participation - Appreciation for Participation - Feedback Mechanism for Teachers and Administration

DISCUSSION

The study explores the perceptions of undergraduate medical students and faculty at Azad Jammu & Kashmir Medical College Muzaffarabad, focusing on their engagement in integrated curriculum development. Recognizing the multi-dimensional landscape of student and faculty engagement in educational activities, the research highlights its positive relations with academic achievements, attendance, and mental health. Crucially, the study underscores the need for emotional, cognitive, and intellectual engagement for optimal curricular outcomes.

Integrated curriculum development, recognized for fostering comprehensive learning and linking basic and clinical sciences, is explored in the context of medical education. The examination aims to provide insights into the perspectives of both students and faculty, essential for designing a curriculum aligned with their educational needs.[12]

The established impact of integrated courses on critical thinking, problem-solving, and application of knowledge in clinical contexts is highlighted. The study underscores the empowering effect of involving students in curriculum development, leading to increased motivation, fulfilment, and academic performance.[13]

Faculty members, key to curriculum development, face challenges such as time constraints and resistance to change. Clear communication, faculty development, and institutional support are identified as facilitators. Aligning outlooks and providing official support and resources are suggested for successful integration.

The findings stress the importance of understanding how students perceive their engagement in the integration process, as it directly influences learning outcomes. The study emphasizes the need for medical institutions to consider the viewpoints of both students and faculty in curriculum development, highlighting the pivotal role of integration, feedback, and personalized teaching approaches in enhancing the medical education experience.

CONCLUSION

In conclusion, the qualitative study at Azad Jammu & Kashmir Medical College Muzaffarabad offers thoughtful insights into the perceptions of undergraduate medical students and faculty about integrated curriculum development. Through a careful investigation of two in-depth Focus Group Discussions (FGDs), several key themes emerged, notably the categorical importance of subject integration within the curriculum. Identifying the interconnectedness of medical knowledge, participants emphasized the benefits of presenting information cohesively, facilitating the comprehension of complex concepts, and maintaining high levels of student engagement.

The study further underscored the significance of complementary lecture and discussion time for effective knowledge achievement and application in clinical settings. The essential role of student feedback in determining the instructional experience was emphasized, highlighting the transformative impact of learner input in humanizing instructional methods.

Additionally, participants acknowledged the practical relevance of an integrated curriculum, aligning with the broader shift towards competency-based medical education. The study recognized initial challenges, highlighting the need for continuing sustenance and resources through faculty development

programs and institutional backing to ensure the continued effectiveness of the integrated curriculum.

Acknowledgement:
I would like to express my sincere gratitude to my research advisor for invaluable guidance and support throughout this study. Special thanks to the participants who generously shared their insights, contributing significantly to the depth of our findings. Additionally, I extend appreciation to the funding agency for their crucial role in making this research possible.

Ethical Approval:
This research adhered to ethical standards, receiving approval from Khyber Medical University, Peshawar. The study was conducted according to the approved ethical guidelines and regulations.

AUTHORS' CONTRIBUTION

MI: Literature search, the conceptualization of the study design, data collection, data analysis, and write-up. BJ: Conceptualization of the study design, and data interpretation. NA: Data interpretation, proofreading. AUH: Data collection, analysis, proofreading. YK, SR: Proofreading, write-up.

REFERENCES

1. Halleran MR. Curriculum Review [Internet]. 2014 [cited 2024 Jan]. Available from: http://magazine.wm.edu/issue/2014-spring/curriculum-review.php
2. Huyen TT. Challenges for Nursing Students in the Clinical Learning Environment. [Internet]. 2019; [cited 2024 Jan]. Available from: https://digscholarship.unco.edu/cgi/viewcontent.cgi?article=1160&context=theses#:~:text=Nursing%20students%20are%20not%20really,barriers%20for%20this%20learning%20environment.&text=iv%20Furthermore%2C%20students%20are%20less,by%20the%20work%20they%20do.
3. Aslam F, Jawad U, Hotiana UA, Mahboob U, Ashfaq S, Jawad MY. Medical Students' Perspective about Attributes of Role Models - The Other Side of Story. J Evol Med Dent Sci 2021;10(22):1692–7.
4. O'Sullivan H, Van Mook W, Fewtrell R, Wass V. Integrating professionalism into the curriculum. Med Teach 2012;34(2):155–7.
5. Boulevard WV, Gabriel S, Nyquist J, Richards A, Hughes K. Innovations in Medical Education Transforming Health Professions; 2014.
6. Qazi A, Mahsood N, Mahboob U. Perceptions of the undergraduate medical students about their engagement in curriculum development. Prof Med J 2019;26(11):1884–91.
7. Vincent C, Amalberti R. Safer Healthcare: Strategies for the real world. Safer Healthcare: Strategies for the Real World: 2016; p.1–157.
8. Howard J. Curriculum development. Center for the Advancement of Teaching and Learning, Ilon University; 2007.
9. Ceadel M. Christian Pacifism in the Era of Two World Wars. Stud Church Hist 1983;20:391–408.
10. Chan ZCY, Cheng WY, Fong MK, Fung YS, Ki YM, Li YL, *et al*. Curriculum design and attrition among undergraduate nursing students: A systematic review. Nurse Educ Today 2019;74:41–53.
11. Harden RM, Sowden S, Dunn WR. Educational strategies in curriculum development: the SPICES model. Med Educ 1984;18(4):284–97.
12. Dent JA, Harden RM, Hunt D. A practical guide for medical teachers. Fifth edition. Edinburgh: Elsevier; 2017.
13. Arabia S. Knowledge and Attitude Towards Patient Safety Among a Group of Undergraduate Medical Students in Saudi Arabia. Int J Health Sci (Qassim) 2011;5(1):59–67.

Submitted: February 21, 2024	*Revised: March 11, 2024*	*Accepted: March 11, 2024*

Address for Correspondence:

Dr. Brekhna Jamil, Director, Institute of Health Professions Education and Research (IHPER), Khyber Medical University Peshawar-Pakistan
Email: drbrekhna.iph@kmu.edu.pk
ORCID ID: 0000-0002-4736-7075