

CRITICAL REFORMS REQUIRED IN THE CURRICULUM OF ORAL BIOLOGY; A STUDENT FEEDBACK SURVEY

¹QAISER MASUD SHEIKH, ²WAJAHAT GHAFOOR CHAUDARY, ³SAIMA SIDDIQUI,
⁴RAFEY AHMAD JAMEEL, ⁵SHAH SALMAN KHAN, ⁶UMAIR FARRUKH

ABSTRACT

The object was to revisit the conventional curriculum of the Oral Biology discipline, in light of the student's feedback.

This study was conducted at Foundation University College of Dentistry (FUCD), Islamabad. This is a qualitative explorative study, which comprised a period of 18 months in which the students were categorised according to their grades into two groups, the high achieving (70%-80%) and the low achieving (56%-62%), in the discipline of Oral Biology. Each group was introduced to two sessions of Focused Group Discussion (FGD). The total students involved were 14.

The reservations made by the students were grounded on six basic themes, which included: i) Teaching & learning styles, ii) Student's concerns concerning 1st year BDS education, iii) Lack of collaborations amongst Teachers / Students, iv) Status of faculty teaching experience, v) Influence of student feedback in curriculum reforms and vi) Very less to non-existent interactive sessions in lectures. The above-mentioned 6 themes are the foundation for Oral Biology curricular reforms.

This study noted some major reasons for the dropped scores of the students. Based on our results, some reforms were suggested and implemented in the curriculum of Oral Biology. The Medical Education Department offered workshops and teacher training courses to the faculty members helping them make their lectures more interactive and concept-building.

Keywords: curriculum reforms, student feedback, teaching and learning styles.

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INTRODUCTION

Dental education is a stressful pedagogical procedure, which is multifaceted. The students are expected

¹ Dr Qaiser Masud Sheikh, Assistant Professor, Department of Medical Education, Foundation University College of Dentistry, Foundation University Islamabad. Email: qaiser.masud@fui.edu.pk

² Dr Wajahat Ghafoor Chaudary, Assistant Professor, Department of Oral Pathology, Foundation University College of Dentistry, Foundation University Islamabad. Email: wajahat.ghafoor@fui.edu.pk

³ Dr Saima Siddiqui, Lecturer, Department of Medical Education Hamdard College of Medicine and Dentistry, Hamdard University, Karachi, Email: saima.siddiqui@hamdard.edu.pk

⁴ Dr Rafey Ahmad Jameel (Corresponding Author) Assistant Professor, Department of Oral Biology, Dr Ishrat ul Ebad Khan Institute of Oral Health Sciences, Dow University of Health Sciences, Karachi Email: rafey.jameel@duhs.edu.pk

⁵ Dr Shah Salman Khan, Assistant Professor, Department of Oral Biology, Watim Dental College, Rawalpindi Email: shahdent@yahoo.com

⁶ Dr Umair Farrukh, Vice Principal, Associate Professor & Head of the Department of Community Dentistry, Watim Dental College, Rawalpindi, Email: umair_farrukh@yahoo.com

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to attain a unique and diverse collection of competencies at the undergraduate level. The idea to conduct a study regarding students' viewpoints concerning our dental education system erupted from here.

It has always been difficult to accept students as a part of curriculum development as stakeholders within most third-world countries' medical/ dental educational systems, including Pakistan. The question remains unanswered as to why the students cannot provide their input in curriculum development through their feedback, as feedback is a powerful tool for assessing and developing the curriculum.¹

A full assessment of the medical educational system reveals that students are generally ignored by the university stakeholders in reforming and analysing the curriculum, which results in demotivation of the students.² The WFME 2015 document supports an active role of students in the educational development of their particular institute, their input should be given a proper weightage which will result in an improved understanding of their subject matter and this will

result in reduced stress and anxiety levels.³

This study aimed to collect students' feedback on our dental college concerning the curriculum of Oral Biology. So that we can make proper reforms in the dental curriculum by focusing on the students' input thus making a healthier environment for learning.^{4,5}

METHODOLOGY

A qualitative study was conducted at FUCD, for a 6-month time starting from Feb 2019 to Aug 2019. The sampling technique used was purposeful sampling type. The sample was taken from 2nd year BDS students who were divided into 2 groups based on their grades in Oral Biology. The 2 groups were high scorers (70-80%) and low scorers (56-62%). A 2 session FGD was conducted by assigning the students into groups of 7 each. The students included in the high-scoring group were all females and the low-scoring group consisted of 2 male and 5 female students.

The moderators and the researchers took informed consent in writing from students just before each FGD session. Each student was asked 6 questions and his/her response was audio tape-recorded and deciphered. The period of each FGD session was around 90 minutes. The results were then formulated based on positive and negative points of the Oral Biology curriculum based on students' opinions.

DATA ANALYSIS

The data was transcribed for each focus group discussion and documented properly. The responses were documented and scanned manually. Continuous statements were highlighted. Thematic analysis was done to make codes. There were open and selective codes and then themes were made. In the end, member checking and triangulation were done.

RESULTS

High-scoring (70-80% marks) students highlighted the following:

The majority of them mentioned that before getting admission to BDS they thought that the curriculum of BDS would be similar to the Higher Secondary School Certificate Examination (HSSC).

Just 20% of students were satisfied with the BDS curriculum.

Students also mentioned that in the HSSC examination, they had to study from only a single book for each subject, but here they have to go through more than one book, lectures, or notes.

More than three-quarters of students were not happy with the teaching styles of the teachers because they

were giving presentations that only, had basic concepts, the rest, the students had to learn by themselves.

Half of the students liked OSPE (Objective Structured Practical Examination) as an assessment tool as they found it was easier than the written exam SEQ. A student said, "In Comparison to the theory exam, the OSPE was easy".

Students also highlighted that the institute should take their input when designing their curriculum.

A few students mentioned the communication gap between teachers and students during the lectures.

Many students mentioned missing interactive sessions and group discussions.

The common problem they were facing was that when they were asked to make a presentation, there were no guidelines given by the teachers, so they had to study & prepare that topic by themselves.

Low scoring (56-62%) students highlighted the following:

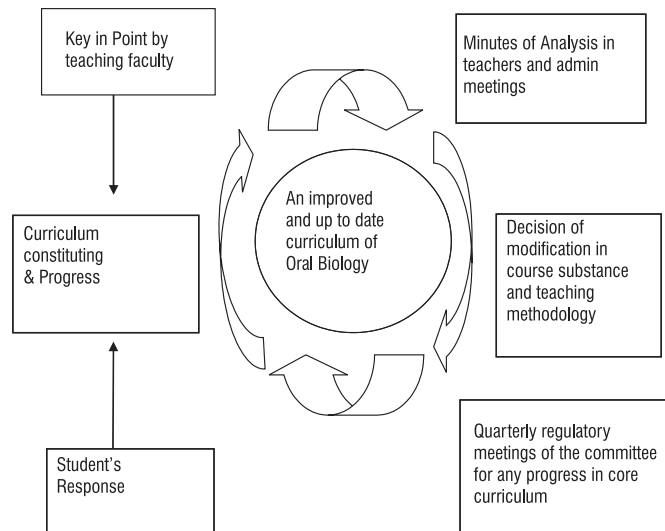


Fig 1: Student's engagement conceptual framework in curriculum reforms

TABLE 1: DEMOGRAPHIC DATA OF PARTICIPANTS, HIGH ACHIEVERS

Gender	Student codes
Female	A-1
Female	A-2
Female	A-3
Female	A-4
Female	A-5
Female	A-6
Female	A-7

TABLE 2: DEMOGRAPHIC DATA OF PARTICIPANTS, LOW ACHIEVERS

Gender	Student codes
Male	B-1
Male	B-2
Male	B-3
Female	B-4
Female	B-5
Female	B-6
Female	B-7

Most of the students said that the Oral Biology curriculum is tough, as a student stated, *"I think the curriculum was a bit problematic for a normal student."*

The majority of the students in this group highlighted the teaching approach, they explained that from the beginning they didn't understand this subject.

Approximately 80% of students were of the opinion that their expectations were not met regarding concept-building lectures, whereas 20% of students were satisfied.

During this discussion student also mentioned, *"I had issues with my teachers, owing to the precision of slides and they were lengthy"*.

Students pointed out that teachers should give value to our opinion as they don't give importance when there is some query about any topic.

Nearly all of the students talked about curriculum deficiencies in teaching approaches.

A student stated that *"it was difficult for us to capture things, take the concept on the 1st go, but as the year progressed, we get used to it & tried to go with it"*.

DISCUSSION

A worldwide debate is going on the competency of Dental/Medical graduates these days. The M.B.B.S curriculum has developed following the current trends and needs, whereas the reforms in the curriculum of dentistry have remained negligible.^{6,7}

Students' feedback is a well-recognized and valid tool, which is considered to play a very critical role in making reforms in the curriculum.^{8,9}

In this study, students' insights of their standpoints were recorded about a single discipline of dentistry, Oral Biology. The themes that we chalked out from their receptivity to the curriculum fall in line with that of Delva *et al* on the subject of factors of feedback.¹⁰ Constant with earlier studies, the students in both groups voiced their apprehension about the conducive

environment that inspires them to give their feedback which is the same as in studies by Dijksterhuis MG, Schuwirth.¹¹ A total number of 6 themes that were emphasized by both focus group discussions include; teaching & learning styles, students' concerns with respect to 1st year BDS education, lack of collaborations amongst teachers/students, status of faculty teaching experience, influence of student feedback in curriculum reforms, very less to non-existent interactive sessions in lectures.

Another point that is highlighted by many previous studies is the lack of medical education qualifications for dental faculty.

In the literature, we found that institutions are implementing faculty development programs to equip faculty with skills and knowledge of teaching approaches so that we can produce healthcare professionals.^{12,13}

As andragogy theory promotes that students want an improvement in teaching methodology by leaning toward self-directed learning. They want their lecturers to be facilitators instead of conventional academicians.¹⁴

In our context, the students were facing issues because of the change of two educational systems naming the HSSC Examination to BDS. This can be dealt with by training our teaching faculty. Such circumstances are best dealt with by qualified teaching faculty. The above-mentioned issues should be properly sorted out and dealt with in modernizing the curriculum.

In this study, students expressed discontent as regards Oral Biology teaching owing to the faculty's teaching methodology. The discordance of course and that in course books made it tough for the students to understand.¹⁵

Traditional undergraduate dental curricula need reconstruction to communicate core knowledge rather than to provide surplus information, and by introducing interdisciplinary teaching to inspire and educate students.¹⁶ Using different techniques in education is a dire need for a successful curriculum. According to literature findings, the student should be involved when reforming the medical curriculum.^{17,18} There are numerous benefits highlighted in the literature about student involvement.¹⁹ Various colleges do involve medical students in curricular reforms, whereas dental students are ignored.

In a study conducted in Belgium, students were involved in curriculum changes, and as a result, the duration of one academic year was reduced.²⁰

Another study showed that when students were allowed to interact with smart and motivated peers and with the faculty, it results in the creation of professional behaviour.²¹

A study by Mahmood *et al* mentioned that professionals having relevant skills and essential knowledge are rare.^{22,23}

The current educational teaching and training do not meet the healthcare challenges of the 21st century.²⁴ So, it is high time to make changes in the curriculum of undergraduate medical training.

Undergraduate medical institute curricula not only need to add more updated knowledge but also cater to the needs of the community, so that future doctors may serve them better.^{25,26}

The present study highlighted a few initiatives to bring about the Curriculum Reforms, which include the curriculum should be consolidated with more emphasis on the updated and relevant material according to the needs of society.²⁷ The teaching strategies should be redirected towards developing educational frameworks, interactive sessions involving problem-based learning, or case-based learning for improving the clinical competency of students displayed in the context of realistic professional tasks.^{28,29} Attempts should be made to orchestrate group practice teams in the clinical years to develop a more continuous relationship between faculty and students, encouraging student peer teaching. Best outcomes can be produced by working together in clinical teams using appropriate teaching methods. Enhance student learning by using the latest technology including virtual labs, the internet & online journal access.

My study has a few limitations which include the sample size not covering the whole class. In FGDs, there were more females than males. It involves just one subject (Oral Biology). Just one college was involved. Other stakeholders like managers, deans, or teachers were not included.

CONCLUSION

Students & teachers do differ in opinion about the curriculum. However, the curricular reforms may minimize the difference. The major problem raised by our students in our study is poor teaching methodology, so we addressed it by encouraging our faculty to participate in our faculty development program. This may bring better learning for students & eventually satisfy them.

Further studies like this will be constructive in making dental education reformative policies which will act as a foundation stone for a prospective shift in the future of dental education.

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CONTRIBUTIONS BY AUTHORS

- 1 Qaiser Masud Sheikh:** Has contribution in accuracy of results and integrity of the research and manuscript writing. Has approved the final version.
- 2 Muhammad Wajahat Ghafoor:** Has contribution in conceiving and designing the study, and has written and critically reviewed the manuscript.
- 3 Saima Siddiqui:** Has contribution in data collection, recording analysis.
- 4 Rafey Ahmad Jameel:** Has contribution in data collection and manuscript writing, recording analysis.
- 5 Shah Salman Khan:** Contribution in study data collection and interpretation.
- 6 Umair Farrukh:** Contribution in study design and manuscript writing.