Original Article Empowering the Student as a Student as A **Stakeholder; Through Incorporating Their** Stakeholder Feedback in Modifying Curriculum of Oral Biology

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ABSTRACT

Objective: To empower student as a stakeholder by incorporating their feedback in modifying curriculum of Oral Biology, which may be helpful for improving it.

Study Design: Qualitative explorative study

Place and Duration of Study: This study was conducted at the A qualitative explorative study was conducted during 6 month period, from Feb to Aug 2020 was done at Foundation University College of Dentistry(FUCD), Islamabad.

Materials and Methods: Equally stratified students were involved in focus group discussion (FGD) in two session as per their academic accomplishments i.e. high highfliers (70-80%) and low fliers (56-62%) scores in Oral Biology. In both FGD session, 14 students participated.

Results: Students expressed 6conjoint themes on which are the followings; i) Teaching mode, ii) Problems in First year BDS (Bachelor of Dental Surgery) education, iii) Teachers/Students cooperation, iv) Faculty qualification/ experience status, v) Student's role in curriculum development and vi) Lack of interactive sessions.

Conclusion: Our study findings indicate that the curriculum status can be made better by integrating multiple teaching modes and by including feedback of student as a substantial source of analytical input. The weaknesses highlighted by the feedback of student's regarding curriculum, syllabus, teachers and methods of evaluation are essential for high quality learning.

Key Words: Oral Biology, Curriculum, Student's feedback, BDS students.

Citation of article: Sheikh QM, Chaudhry MWG, Abbas BZ, Chaudhry SYG, Durrani AU. Empowering the Student as A Stakeholder; Through Incorporating Their Feedback in Modifying Curriculum of Oral Biology. Med Forum 2021;32(5):22-26.

INTRODUCTION

An effective curriculum meets the basic cultural and societal demands and serve the prospects of the population.1 Curriculum development has to be revisited continuously based upon the feedback and reviews². The latest curriculum may differ from the conventional curricula which was more discipline based, and quite difficult to integrate³.

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Received:	November, 2020
Accepted:	February, 2021
Printed:	May, 2021

The most important pillar of curricular development is the subject specialists and teachers, who utilizes their knowledge and ideas for an effective output⁴. Feedback can be referred as a phenomenon of identifying the breach between the existing and expected levels of knowledge/skill². Previously, the feedback was thought to be the way of the teacher's viewpoint towards the students, and was mandatory for the teachers and was more teacher centric⁵. In contrary to that, a learning centered feedback involves the learners along with the teachers in the development of the curriculum. This view of feedback has identified various lags, and helped cover them in grasping more advantage from the system⁵.

As a health care expert do we ever sense that what dental students undergo during their professional studies? This question captivated me to conduct a study regarding students opinion about our dental educational system.

It is quite hard to comprehend in our medical/dental educational system it seems as to why the students should have a say in development the dental curriculum, whereas students' feedback in this reference is greatlycommended⁶.

A thorough assessment of today's medical education system reveals that students role is passive, and they are

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overlooked by university authorities in improvement of the curriculum, scrutinizing/evaluating. This results in lack of comprehension of the medical education system that results in demotivation of thestudents⁷.

To have students a meaningful role in curriculum designing as encouraged by WFME 2015 document; active role of students in medical education department of the institute will result in improved understanding of course content and autonomy ,which can result in less psychological pressure.

MATERIALS AND METHODS

A qualitative explorative, study was conducted at Foundation University College of Dentistry, Islamabad for a 6 month period starting from Feb to Aug 2020. A purposeful sampling type was used.

Sample comprised of students of Second year BDS in the Oral Biology subject, divided in two groups as per their score i.e. high achievers (70-80%) and low achievers (56-62%). A 2sessions FGD was conducted, by allotting them into groups of 7 each. The top achiever group comprised of female students only while the low achiever group had four females and three males.

The moderator of the sessions was there searcher himself .Prior to the start of each FGD session a informed consent was taken from students in written form. Six set of questions were inquired from them and their answers were written as well as audio. Each session was conducted in duration of 60 to 90 minutes. Result formulation was done in terms of weaknesses and strengths of Oral Biology curriculum by compiling student's feedback.

DATA ANALYSIS

The data was transcribed and properly documented for every FGD. Arrangement of the written material resulted in achievement of Conformability, student's responses were Manual Scanning and key messages were noted. Transcribed responses were aligned to each question and continuous statements and phrases were underlined. Coding was done by thematic analysis;

Selective codes, Open codes and Themes were derived. To authenticate outcome triangulation and member checking was performed.

RESULTS

High Achieving Students (70-80%): Expectations about curriculum:

Nearly all the students pointed out that they had high hopes of dental education when they joined Dental studies. As per their idea the class sessions will be as enlightening as in pre-medical intermediate classes.

Approximately 10% subjects indicated that their anticipations about curriculum were met; thus the experience of being a dental student was good.

Difficulties in 1st year BDS with regards to curriculum:

Many students said that they had an idea that there will be marked difference between intermediate and BDS curriculum as in pre-medical intermediate they had to study one book for each subject, however, in BDS alongwith presentations and discussion there are two different books.

Teaching method: They had to adjust to a new teaching approach; mostly there were presentations and slides.

Communication between teacher and student: Teachers communication style was unsatisfactory reported by most of the students (75%). Lectures were delivered as PowerPoint slides.

Theoretical and practical modes of study: More than 50% students preferred the practical session of OSPE. One student said, "Comparatively to the theory exam, the OSPE were quite easy".

Role of students in curriculum development: When the respondents were asked to give feedback on how the institute can help them to meet their anticipations, a majority (75%) of students stated that they should be given chance to give input in the curriculum.

Communication skills: Some students were of the opinion that there is communication gap between teachers and students in lectures.

Interactive sessions and discussions: Majority of the students pointed out that there should be interactive sessions and group discussions in the curriculum.

Student's presentation and competition: Students have to study in detail for preparing for a presentation.

Satisfaction of students regarding teaching methods: Fewer students (20%) stated that they are satisfied with the mode of education, however they mentioned there was a room for improvement.

Low Achieving Students (56-62%):

Difficulty in Oral Biology: Curriculum of oral biology was reported tough by many students .One student said that, "I think the curriculum was a bit difficult for a normal student."

Teaching method: Many students pointed out that the methods of teaching were not proper. As one student said, "I couldn't understand Oral Bio from the beginning, because teacher's way of teaching was the reason".

Unmet expectations: Almost 80% of the students said their expectations to Oral Biology curriculum were not met. As one of the students said that, "I think my expectations were not met, I was hoping that they will teach us only the basic concepts".

Satisfactory curriculum: Fewer students (20%) were of the opinion that the curriculum is acceptable as per their expectations. As one student stated that, "I really had no issues with the curriculum, because there were limited numbers of books".

Cooperation between teachers and students: There should be a harmonization among students and teachers. As one student said, "I had a few problems

with our teachers, because the slides were very basic but the course was very lengthy".

Table No.1:	Demographic	data of	participants,	high
fliers.				_

Gender	Student codes
Female	A1
Female	A2
Female	A3
Female	A4
Female	A5
Female	A6
Female	A7

Table No.2: Demographic data of participants, low fliers.

Gender	Student codes.
Male	B1
Male	B2
Male	B3
Female	B4
Female	B5
Female	B6
Female	B7

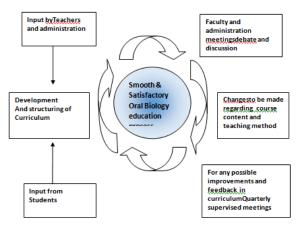


Figure No.1: Conceptual framework of student's engagement in curriculum development

Role of students in curriculum development: The faculty should take in the opinions of Dental students when deciding the pattern of study. As one student said that, "Teaching style should be changed, they should put more attention towards us, and they should give more time to us, and I think there wasn't too much concern towards us".

Check and balance of teaching staff: According to one student. "Institute should check the teachers if they are delivering the lectures according to the need of the students".

Flaws in curriculum: According to majority of the students the curriculum has flaws in point of view of teaching methodology.

Self-study: One student stated that, "in the end we had to study by ourselves to understand the concepts, & answer to any questions, we were told that to look in this book &that particular page. It was difficult in the beginning".

Earlier difficulty, later comfort: One student stated that, "it was difficult for us to capture things, take the concept on the 1^{st} go, but as the year progressed we were like use to it & tried to go with it as it is, & managed by ourselves".

DISCUSSION

Curriculum as the foundation of any institute which shows the roadmap of events taking place during the whole academic year, but it is a dynamic state so it always needs improvements as per community needs, for this, feedback of students being an important part indicates the problems they are facing which leads to further improvement in the curriculum.

Themes we identified are consistent with those identified by Delva et al regarding determinants of feedback-seeking.⁸ Consistent with prior studies, participants in our 2 groups described the importance of teachers creating a safe environment for feedback Dijksterhuis MG, Schuwirth.^{4,9} As per this study the curriculum of Oral Biology is quite inadequate and it needs to be revised. The following are the 6 themes that were highlighted by both FGD;

- 1. Teaching mode
- 2. Problems in 1st year BDS education
- 3. Teachers/Students cooperation
- 4. Faculty qualification/experience status
- 5. Student's role in curriculum development
- 6. Lack of interactive sessions.

In this study, there is deviation from the student's feedback in the current status of medical curriculum, specially, in basic dentistry subject like Oral Biology.¹⁰

The literature too, raise the issue of lack of trained faculty who are involved in medical teachings also that need of monitoring it¹¹.

Students faced problems in the first year taking into account the difference between intermediate and BDS education system. So an experienced teaching faculty plays a vital role in such a situations. These basic issues must be addressed and finalized in curriculum designing thusintroducing interdisciplinary teaching and learning strategies that successfully inspire and educate students⁵ In the present study, qualifications/experience and communication skills of the teaching faculty are marked observations by students. Dissatisfaction was shown for teaching of Oral Biology and also that the content was not matching the course book recommended by them, this made the student's poor understanding of the subject, which is backed by Eva &Regher.^{12,13} These findings highlight the significance of student's

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involvement in medical curriculum formulation.^{14,15} In our institute, the MBBS (Bachelors of Medicine Bachelors of Surgery) students give a proper feedback in curriculum development, whereas no BDS students are involved.¹

Research suggest numerous examples that support student's involvement in the curriculum reforms and about their advantages.^{13,16} A research done by D'Haese et al has shown that student's involvement in curriculum reforming led to a great improvement in Ghent University, Belgium. After having a few sessions of discussions that involved study body, academicians and college administrations the duration of study was revisited, that reduced from 7 to 6 years^{17,18}.

Fujikawa H et al studied that when student contributes in the curriculum reforms, also they associate with brilliant and influential peers, which results in having a positive professional approach and behavior⁷.

Another study conducted by Mahmood K revealed the difficulty to have professionals who are knowledgeable and skillful for certain disciplines^{19,20}.

To meet the 21st century challenges, the current curriculum design is not appropriate.^{21,22}

Medical or dental students who can take stress, score highest. Institutes stress more on delivering knowledge, instead of emphasizing on concept-building and evidence based learning.²³

The students need to have better comprehension of other areas of health e.g. population health, healthcare systems, health policies.²⁴

The institutes of medicine in Pakistan may need to shadow the pathways of international medical institutes and to give equal chances to all the stakeholders for designing the curriculum.¹⁸

The current study has these key benefits;

- 1. For improvement of BDS curriculum only a few studies are student centric.
- 2. Student's say in medical education using FGDs gives them an prospect to express their experiences regarding curriculum^{2,25}. This builds up their professionalism which is the need of the hour.²⁵

This study limitations were linked to how the FGDs were composed, which includes few males as compare to the females.

At the beginning of this study, there were two medical colleges were choosen, but due to technical & logistics problems, only one college was included. Another limitation is that our faculty members as well as administrators were not included.

Students learn better in an atmosphere in which they can get and use feedback about what they don't know without fearing negative reactions from their teacher.²⁷

CONCLUSION

Students are one of the pillars in the educational communities so their input is always necessary; we need to hear from them to guide ourselves in our mode of instruction thus basing our curriculum on what students really need.

This study opinionates a selective group of BDS students views in a medical institute. For generalization of these findings further large-scale research studies should be done.

This study should lead educators who are interested in exploring the possibilities of using student feedback as a source of input into curriculum development.

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Acknowledgement: Dr. Muhammad Rizwan, Department of Oral Pathology, Foundation University College of Dentistry, FUCD, Islamabad.

Dr. Minal Masood, Department of Orthodontics, Armed Forces Institute of Dentistry, Rawalpindi.

Conflict of Interest: The study has no conflict of interest to declare by any author.

REFERENCES

- 1. Mariño R, Ghanim A, Barrow S, Morgan M. Cultural competence skills in a dental curriculum: A review. Eur J Dent Educ 2018;22(1):e94-e100.
- Orsini C, Binnie V, Wilson S, Villegas MJ. Learning climate and feedback as predictors of dental students' self-determined motivation: The mediating role of basic psychological needs satisfaction. Eur J Dent Educ 2018;22(2): e228-e36.
- 3. Perry S, Burrow M, Leung W, Bridges S. Simulation and curriculum design: a global survey in dental education. Aust Dent J 2017;62(4): 453-63.
- 4. Alsubaie MA. Curriculum development: Teacher involvement in curriculum development. J Educ Prac 2016;7(9):106-7.
- 5. Malecka B, Boud D, Carless D. Eliciting, processing and enacting feedback: mechanisms for embedding student feedback literacy within the curriculum. Teaching in Higher Educ 2020: 1-15.
- 6. Handley F, Eve J. TESTA Plus: More ways to involve undergraduates in assessment and feedback design. Student Engagement in Higher Educ J 2016;1(1).

- Fujikawa H, Wong J, Kurihara H, Kitamura K, Nishigori H. Why do students participate in medical education? The Clin Teacher 2015; 12(1):46-9.
- 8. Delva D, Sargeant J, Miller S, Holland J, Alexiadis Brown P, Leblanc C, et al. Encouraging residents to seek feedback. Medical Teacher 2013;35(12):e1625-e31.
- Dijksterhuis MG, Schuwirth LW, Braat DD, Teunissen PW, Scheele F. A qualitative study on trainees' and supervisors' perceptions of assessment for learning in postgraduate medical education. Medical Teacher 2013;35(8): e1396-e402.
- 10. Crowther P. Centring the Student through Intrinsic Feedback. Charrette 2020;6(1):53-70.
- 11. Leinster SJ. Medical education in the real world. Med Educ 2003;37(5):397-8.
- 12. Eva KW, Regehr G. Effective feedback for maintenance of competence: from data delivery to trusting dialogues. CMAJ 2013;185(6):463-4.
- 13. Ahea M. The Value and Effectiveness of Feedback in Improving Students' Learning and Professionalizing Teaching in Higher Education. J Educ Practice 2016;7(16):38-41.
- 14. Lara R, Mogensen K, Markuns J. Effective feedback in the education of health professionals. Support Line 2016;38(2):3-8.
- Saffari SS, Lambert RF, Dang L, Pagni S, Dragan IF. Integrating student feedback during "Dental Curriculum Hack-A-thon". BMC Med Educ 2018;18(1):1-6.
- Mandhane N, Ansari S, Shaikh TP, Deolekar S. Positive feedback: a tool for quality education in field of medicine. Int J Research Med Sci 2015; 3(8):1868-73.
- 17. Dhaese SAM, Van de Caveye I, Bussche PV, Bogaert S, De Maeseneer J. Student participation: To the benefit of both the student and the faculty. Education for Health 2015;28(1):79.

- Freeman Z, Cairns A, Binnie V, McAndrew R, Ellis J. Understanding dental students' use of feedback. Eur J Dent Educ 2020;24(3):465-75.
- 19. Mahmood K. A comparison between needed competencies of academic librarians and LIS curricula in Pakistan. Electronic Library 2003;21(2):99-109.
- 20. Mahmood K. LIS curriculum review using focus group interviews of employers 2012.
- 21. Cooke M, Irby DM, Sullivan W, Ludmerer KM. American medical education 100 years after the Flexner report. New Engl J Med 2006;355(13): 1339-44.
- 22. Al-Madi EM, AlShiddi M, Al-Saleh S, AbdelLatif H. Developing a dental curriculum for the 21st century in a new dental school in Saudi Arabia. J Dental Educ 2018;82(6):591-601.
- 23. Majeed A. 2017. [cited 2017]. Available from: http://blogs.jpmsonline.com.
- 24. Maeshiro R, Johnson I, Koo D, Parboosingh J, Carney JK, Gesundheit N, et al. Medical education for a healthier population: reflections on the Flexner Report from a public health perspective. Acad Med 2010;85(2):211-9.
- 25. Yasmin S. Development of professional dental ethics course with additional islamic perspective and dental students'feedback. Pakistan Oral & Dental J 2016;36(2).
- Sheikh QM, Chaudhry MWG, Masood F, Masood M, Mustafa G, Ijaz A. Dental curriculum development by engaging students: the need of time. Pakistan Armed Forces Med J 2020;70(1): 32-7.
- 27. Friedlander LT, Meldrum AM, Lyons K. Curriculum development in final year dentistry to enhance competency and professionalism for contemporary general dental practice. Eur J Dent Educ 2019;23(4):498-506.