

ORIGINAL ARTICLE

The Necessity to Review Oral Pathology Curriculum: A need of timeMEHWASH KASHIF¹, AYESHA ASLAM², UZMA ZAREEF³, SANA IQBAL⁴, SHAMA MASHOOD⁵, TAUSEEF AHMED⁶¹Head of the department and Associate Professor of Oral Pathology, Karachi Medical and Dental College.^{2,4}Karachi Medical and Dental College/ Abbasi Shaheed Hospital³Professor in Oral Pathology, Liaquat College of Medicine and Dentistry.⁵Associate Professor, HOD in Dept. of Medical Education, Karachi Medical and Dental College⁶Assistant professor, Dept. of Oral Pathology, Liaquat College of Medicine and DentistryCorrespondence to Dr. Ayesha Aslam, E-mail: ayeshoaslam31@gmail.com, Mobile: 03138156859**ABSTRACT****Aim:** To assess the necessity to review the Oral pathology curriculum, based on the expert opinion of faculty members of oral pathology of Karachi.**Methods:** In this cross-sectional study the data was collected by non-probability sampling technique from different colleges of Karachi. Distribution of the online questionnaire regarding curriculum of oral pathology was made through Google online forms. Questionnaire was only filled by oral pathology specialists/ experts/faculty of dental colleges of different cities after taking their verbal consent. Inclusion criteria was Oral pathology faculty members from all Pakistan Medical Council affiliated colleges having undergraduate BDS program.**Results:** Males were 22(66.7%). Among the respondents, 40.62% were Assistant Professor, followed by Demonstrator 31.25% and Associate professor 28.12%. Among participants, approximately 13(39.4%) agreed that the PMC syllabus is non-specific. Topic selection is difficult for 12(36.4%) participants. About 21(63.6%) thought that an extensive Oral Pathology syllabus is needed. Reviews for the inclusion of general pathology topics scored 14(42.4%) disagreement. About 11(33.3%) reported having missing Oral Pathology topics in the curriculum. Majority 18(54.5%) agreed to revise the curriculum.**Conclusion:** It has been concluded that faculty members of oral pathology recommend a high necessity to review the Oral pathology curriculum in Pakistan. By gathering modifications within the existing program of curriculum, it can be made more intriguing and systematized for students.**Keywords:** Oral pathology, curriculum, cross-sectional, study**INTRODUCTION**

The new collection of documents sees increased prominence on important curriculum constituents such as patient safety, employed as a team, and patient-centered care. There is also a better prominence on teaching excellence, student satisfaction, and student preparedness and support. Supervision relating to methods of teaching and learning, and assessment (educational measurement), is also provided. It is expected that this new format will further increase accessibility and utility for educators, institutions, societies, and regulators, across the sector¹.

Professionalism includes a combination of knowledge, skills, and behaviors that reflect the capacity to safely and effectively conduct professional tasks. The method to become a qualified professional is difficult. Four competency-based learning features seem to be: elements of the curriculum and topics influenced by social requirements; concentrated on student-centered learning; the accomplishment of education; and restricted commitment towards time-based learning and measurable goals. In addition to a competency-based strategy, undergraduates of dentistry learning may be affected by Organizational characteristics and external influences, but the research takes a limited account of these variables². Curriculum structure and design play a vital role in developing the competency of individuals.

Oral pathology is an exclusive and diversified branch of dentistry that recognizes and accomplishes oral diseases in the oral and maxillofacial region. This is one of

the foremost subjects in basic dental sciences which is taught to 3rd year BDS undergraduate students or 2nd year BDS students in some institutes. It encompasses the education of different constraints of oral disease like etiology, pathogenesis, and clinical presentation, histopathological, and radio graphical features trailed by the management. ³ Beginning in 2005, the oral pathology course in Sheffield was progressively modified by the introduction of virtual microscopy with a focus on creating a more integrated, clinically orientated, and dynamic approach to student teaching and learning in histopathology⁴.

Nevertheless, due to the wide-ranging number of disease that marks the oral cavity, the main issue mostly seeming by the teaching faculty is what to teach and what not to teach below the undergraduate level. This problem is talked about by Pakistan medical and dental council as surrounded by the enormous range of responsibilities facility of curriculum guideline for each course along with several credit hours and mark dispersion scheme for professional examinations⁵. Oral pathology becomes more apparent in Pakistan and internationally because most of the students and postgraduates going to this field⁶. As a result of which a good pool of oral pathologists has developed in Pakistan society. The incidence of oral pathologies is quite high⁷. Graduates should be familiar with oral pathologies and their pathogenesis and must be taught standard course outline so that they are able to do so. The American association of dental schools available very thorough and comprehensive guidelines for oral pathology curriculum in 1992 these are not broadly acknowledged by the oral pathologist in US dental schools perhaps again because of the same reason that it includes

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a very wide-ranging list of topics without given facts that it was formulated for undergraduate students. Odell et al, suggested a curriculum comprising six main topics individually with supplementary subdivisions whereas these are better than the AADS guidelines additional variations are still required⁸. In a new article published on October 28, 2014, it has been recommended by the PMDC that whole curriculum of BDS should be revised as it has not been revised since 10 years⁹.

The purpose of this study is to improve the curriculum of oral pathology so students will encounter different pathologies at the undergraduate level. This study will give better improvement regarding the curriculum of oral pathology moreover it will be better for undergraduate students to study a more definite pattern. To acquire the different points of view of various oral pathology faculty members in different dental colleges of Pakistan, regarding the curriculum of oral pathology subject given by PMC.

METHODS

This perspective cross-section study was conducted from September to November 2019 at Karachi medical and dental college and Liaquat College of Medicine and dentistry and Dar-ul-Sehat Hospital. The protocol was approved by an ethical board review committee of the institute with reference no EC/27/20. The data was collected by a non-probability sampling technique from different colleges of Pakistan. The distribution of the online questionnaire regarding the curriculum of oral pathology was made through Google online forms. The questionnaire was only filled by oral pathology specialists/ experts/faculty of dental colleges of Pakistan after taking their consent. Total thirty five forms were distributed and thirty three forms

were received completely filled. The inclusion criteria were Oral pathology faculty members from all Pakistan Medical and Dental Colleges (PMDC) affiliated colleges having undergraduate BDS program. Participants from both genders have fulfilled PMDC criteria for faculty of dental College. The exclusion criteria were faculty of dental colleges not registered by PMDC and not given consent. Data was analyzed on SPSS version 17.00. Qualitative and quantitative variables were computed and analyzed. Chi-square test was used to found an association between variables. P-value of 0.05 was considered significant.

RESULTS

In this study males were 22(66.7%) and females were 10(30.3%) (Figure 1). Among the respondents, 40.62% were Assistant Professor, followed by Demonstrator 31.25% and Associate professor 28.12%. (Figure II). Among participants, approximately 13(39.4%) agreed that the PMDC syllabus is non-specific. Topic selection is difficult for 12(36.4%) participants. About 21(63.6%) thought that an extensive OP syllabus is needed. Reviews for the inclusion of general pathology topics scored 14(42.4%) disagreement. About 11(33.3%) reported having missing OP topics in the curriculum. The majority 54.5% (18) agreed to revise the curriculum. Adaptation of model curriculum consists specifically of the diseases more common and prevalent in Pakistan is 17(51.5%) (Table I). Chi-square test was applied to found association among participants and it was found that the association of designation with oral pathology was non-significant and association of gender with the curriculum was also non-significant (Table II, III).

Table I: Response of faculty members with the questionnaire

Response	PMDC syllabus non-specific n%	Topic selection difficult n%	Extensive OP syllabusn%	General pathology topics inclusion n%	Missing OP topics n%	Revise OP syllabus n%	Pakistan's model n%
strongly disagree	2 (6.1)	0	4(12.1)	3 (9.1)	1(3.0)	1(3.0)	1(3.0)
disagree	12 (36.4)	10 (36.4)	21(63.6)	14(42.4)	11(33.3)	1(3.0)	2(6.1)
uncertain	1(3.0)	6(18.2)	1(3.0)	7 (21.2)	6 (18.2)	2(6.1)	3(9.1)
agree	13(39.4)	12(36.4)	4 (12.1)	6 (18.2)	11(33.3)	18(54.5)	17(51.5)
strongly agree	4(12.1)	2(6.1)	2 (6.1)	2(6.1)	3 (9.1)	10 (30.3)	9 (27.3)

Table II: Association of designation with curriculum

Variables	p-value
PMDC syllabus non-specific	0.007
Topic selection difficult	0.220
Extensive OP syllabus	0.098
General pathology topics inclusion	0.663
Missing OP topics	0.531
Revise OP syllabus	0.093
Pakistan's model	0.063

Table III: Association of gender with curriculum

Variables	p-value
PMDC syllabus non-specific	0.568
Topic selection difficult	0.155
Extensive OP syllabus	0.711
General pathology topics inclusion	0.259
Missing OP topics	0.858
Revise OP syllabus	0.247
Pakistan's model	0.283

Fig. 1:

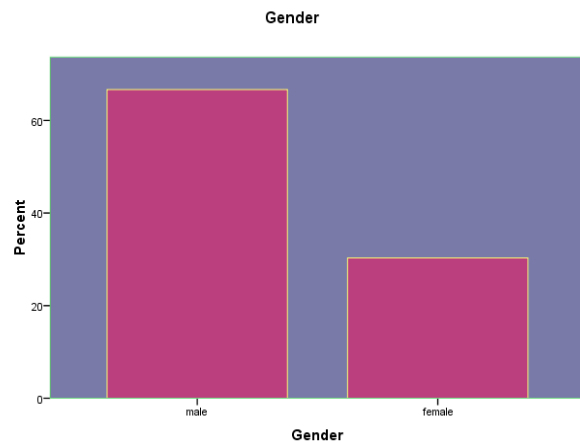
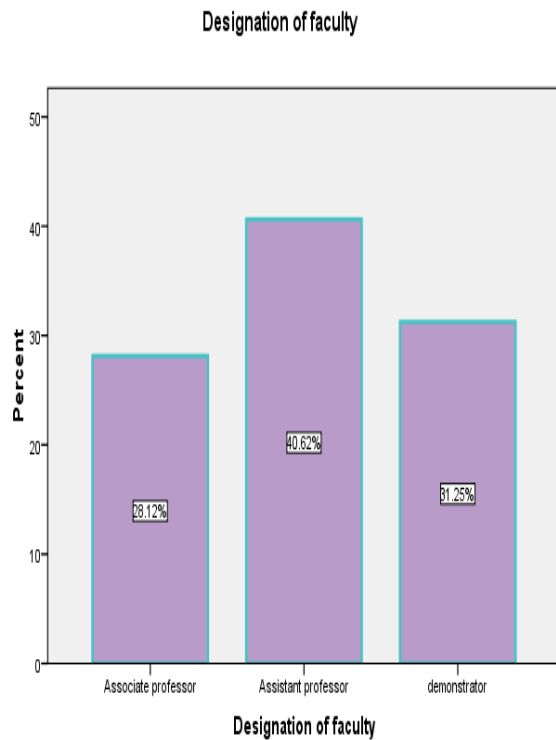


Fig. II



DISCUSSION

The role of the academic environment in educational institutions in healthcare professionals, which is widely viewed on a worldwide scale, is essential to effective student performance. Many problems threaten the production and effectiveness of dental education, and then to strengthen the academic environment, dental organizations have to create effective mechanisms to integrate current global patterns in dental education¹⁰.

The purpose of this article to boost the curriculum of oral pathology for undergraduates or context for the explanation of disease and to deliver students with knowledge of the functional and essential changes in disease so that medical signs and symptoms are often understood and constructed.

One of the most fundamental dental science subjects taught to 3rd year BDS students is oral pathology. Oral pathology, like other basic dental science subjects, is currently rising as a specialization in Pakistan as more students seek national and international post-graduation opportunities. Graduate students are prepared according to standard outlines to familiarize them with oral cavity pathologies. However, the new oral pathology curriculum currently taught at Pakistan Dental College is insufficient at the undergraduate level and requires thorough revision¹¹. The curriculum should include basic introduction of the subject along with diagnostic techniques of oral diseases, study of radiographs, basic histopathology related to oral diseases, immune histochemical techniques, introduction of

molecular pathology of oral diseases and orofacial syndromes. Further could be added like introduction to surgical oral pathology, anatomic pathology, dermatopathology and forensic pathology.

There are 55 recognized dental colleges in Pakistan. The Bachelors of Dental Surgery (BDS) course is currently four years in length. The new curriculum is established by the country's legislative body, the PMC. However, the Higher Education Commission (HEC) also put a 5-year long curriculum on their website¹²⁻¹⁴.

Among participants approximately 39.4% agreed that the current syllabus of oral pathology is non-specific. Topic selection is difficult for 36.4% of participants. About 63.6% thought that an extensive OP syllabus is needed. Reviews for the inclusion of general pathology topics scored 42.4% disagreement. About 33.3% reported having missing OP topics in the curriculum. The majority 54.5% agreed to revise the curriculum. 51.5% agreed for adaptation of the model curriculum consist specifically of the diseases more common and prevalent in Pakistan. A study conducted on the need to revise the oral pathology curriculum in Pakistan revealed almost similar concerns regarding the oral pathology curriculum¹⁵.

Chi-square test was applied to found correlation among participants and it was found that the association of designation with oral pathology was non-significant and association of gender with the curriculum is also non-significant. A study conducted in Taiwan published in 2020, reported that there were 70 oral pathology clinicians which are associated with the teaching of anatomic and histological oral pathology. There is a deficiency of oral pathology training centers as per the increasing needs of the population¹⁶. The high burden of oral pathologies in the Pakistani community is quite significant¹⁷.

A study published in 2019, studied the postgraduate educational preferences of dental students of Pakistan. Very few students intend to pursue their career in basic sciences and especially in Oral Pathology. ¹⁸In different countries, the role of the dentist in the community changes and may vary. The role of faculty is very important to design a comprehensive dental curriculum guideline that supports the highest possible quality of dental education¹⁹. An article offers a curriculum development model designed to help faculty make decisions about course content and prominences. The model allows mentors to evaluate content relevance and priority based on three criteria; commonness, uniqueness, and the significance of diseases and conditions²⁰.

Cross-sectional design and small sample size are the limitations of this study. It is recommended that further longitudinal studies should be made to further comprehensively evaluate the current curriculum of oral pathology. It is also recommended that the curriculum should be revised in the light of current national and international guidelines available in the subject with the incorporation of medical educationalists. ^{21, 22} Students should be made aware through seminars and conferences about the knowledge and attitudes towards the subject. It is also recommended that further postgraduate studies and supervisors should be available which will bring the subject to higher standards.

CONCLUSION

It has been concluded that faculty members of oral pathology recommend a high necessity to review the Oral pathology curriculum in Pakistan. By gathering modifications within the existing program of curriculum, it can be made more intriguing and systematized for the students.

Conflict of interest: The authors pronounce that they have no conflicts of interest.

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