

BDS Curriculum: Neglected Sibling

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ABSTRACT:

The medical educationists are emphasizing on the implementation of skills based curriculum which covers the oral health in a broader and global scale. Keeping in mind these things this study was conducted to know opinion of medical students regarding modern educational reforms and the present curriculum taught in their medical colleges.

Methodology: This survey was done in medical colleges with four year program in dentistry in Rawalpindi and Islamabad. A four-question survey about the format and characteristics of the dental curriculum was circulated among the 200 dental graduates graduating in the year 2014 belonging to different dental colleges in Rawalpindi and Islamabad. The respondents expressed their answers in yes or no. Respondents indicated the name of their school and answered survey questions. Descriptive statistics including percentage distribution for each response were used. Responses were recorded separately for all the four years.

Results: In response to the question about integration between oral diseases with systemic disease, almost all agreed that their curriculum is disjointed in first and second year. 40% of the students told that some integration is created in third and 30% agreed that the integration is there in fourth year. 20% said that the basic sciences were taught with clinical context in first and second year and was not done in third and fourth year. Exposure of dental students to community and public health services was around 20% in third year and 30% in fourth year. PBL and case based discussions are not used in the dental colleges in all years.

Conclusions: The dental curriculum in Pakistan needs to cover a much broader spectrum of diseases as well as patients. Linking the curriculum with modern tools like PBL can improve dental education. The link between the basic and clinical teaching and incorporation of community health can lead to marked shift in educational approach of the medical students.

KEYWORDS: M.B.B.S, dentistry, undergraduate, curriculum.

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INTRODUCTION

A lot of debate is going on worldwide about the competency of medical graduates¹. The M.B.B.S curriculum is undergoing reforms in this context to improve the quality of medical education and more focus is now on the skill component². Whether we are successful or not but attempts are going on for improvements and innovations³. Dentistry is a linked field with medicine which deals with a large number of patients and dental disease also form a major factors troubling the lives of patients. In our country this field is almost totally

neglected when the curricular reforms are taking place⁴. In western world the field of dentistry is growing like a modern industry but in our country it is treated like a second class degree⁵. The current curriculum debate in Pakistan is mostly revolving around arguments on shuffling various topics from one subject to another. It totally ignores the importance of our social demographics⁶. We do teach Implants to our under-graduates, but we forget that Implants is only minor percentage of the market needs. The designing of curriculum needs to know the patients for which the curriculum is designed. In our country the dental patients are the two extremes the paediatric and geriatric but the curriculum never focuses these two age groups⁷. In Pakistan, there is no dearth of experienced professionals and academicians, who have the global exposure to upgrade our curriculum and enable faster access to global developments⁸. In India the Paediatric and preventive dentistry is taught in clinical years which makes the students aware about the prevalence and treatment of paediatric dentistry⁹. The patients of dentistry

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are increasing day by day and they need specialist doctors to fulfil their needs. Many researchers have proposed a model for dental education that can built critical thinking in dental graduates and also create professionalism as well¹⁰. Oral health is a critical component of human health needs evidence-based approach to clinical decision making which built on integrative understanding of basic and applied science¹¹. In Harvard School of dentistry integrated clinical practice of dental care for adults occurs in the in clinical and preclinical years¹². Research skills are developed with opportunities to become involved in faculty research projects as well as in the conduct of community health projects. PBL in the final year, provides an opportunity to experience and learn from different clinical contexts¹³. In many countries a six year BDS programme has been introduced¹⁴. After the publication of the Flexner report, Gies worked to trigger significant change in dental education at the time. He emphasized the importance of stronger scholarship in biomedical and clinical sciences but many of Gies's recommendations did not gain popularity¹⁵. The American Dental Education Association (ADEA) developed programs and initiatives to support the reform of dental education¹⁶.

The present curriculum of B.D.S approved by the P.M.D.C is not according to the modern concepts of dentistry. Pakistan needs a paradigm shift towards research oriented and clinical based scientific methodologies with emphasized training on medical jurisprudence and human consumer rights as well¹⁷. Case based teaching and PBL incorporation can lead to improvement in competencies of medical graduates¹⁸. The oral health is a spectrum of diseases that needs a thinking mind to cure the disease¹⁹. The designing of the curriculum should be based on skills but to covers the oral health in a broader and global scale. Keeping in mind these things this study was conducted to know

opinion of medical students regarding modern educational reforms and the present curriculum taught in their medical colleges.

SUBJECTS AND METHOD

This survey was done in medical colleges with four year programme in dentistry in Rawalpindi and Islamabad. A four-question survey about the format and characteristics of the dental curriculum was circulated among the 200 dental graduates graduating in the year 2014 belonging to different dental colleges in Rawalpindi and Islamabad. The respondents expressed their answers in yes or no. Respondents indicated the name of their school and answered survey questions. Descriptive statistics including percentage distribution for each response were used. Responses were recorded separately for all the four years.

RESULTS

In response to the question about integration between oral diseases with systemic disease, almost all agreed that their curriculum is disjointed in first and second year. 40% of the students told that some integration is done in third and 30% agreed that the integration is there in fourth year. 20% said that the basic sciences were taught in clinical context. Contextual learning was done in first and second year and was not done in third and fourth year. Exposure of dental students to community and public health services was around 20% in third year and 30% in fourth year. PBL and case based discussions are not used in the dental colleges in all years (Table 1).

Table 1. Table Showing the Response of Students Regarding Different Factors Showing Integration of Dental with Systemic Health

Factors	First year	Second year	Third year	Fourth year
integration between oral disease with systemic disease is done	100% disagree	100% disagree	40% agreed	30% agreed
Contextual learning between basic and clinical sciences is done	20% Agreed	20% agreed	100% disagreed	100% disagreed
Exposure of dental students to community and public health services is done	100% disagreed	100% disagreed	20% agreed	30% agreed
Exposure to old and paediatric patients is done	100% disagreed	20% agreed	40% agreed	40% agreed
PBL and case based discussions are part of curriculum	100% disagreed	100% disagreed	100% disagreed	100% disagreed

DISCUSSION

Field of dentistry is not only linked to the oral cavity but it is a whole spectrum which needs to be revealed. The dentist is not the man needed to extract the tooth or treat the tooth ache but he should be trained to diagnose the associated disease with oral pathology. 40% of the students told that some integration is done in third and 30% agreed that it is there in the fourth year. The content taught in a disintegrated manner does not help the student in contextual learning. Development of a good curriculum reflects objectivity so as to ensure learning to an extent which can make students critical thinkers and also identify their learning needs²¹. The dental curriculum in Pakistan has not yet achieved this level and we have not addressed basic problems of dental patients. The stress on oral hygiene through media campaigns has created awareness in patients and reduction in caries is expected but cases still exist in the adult population²². This means that although the awareness is there the diagnosis and care required to treat and correlate with major systemic diseases is still lacking. Oral diseases are not a localized infection but these show link with systemic like diabetes mellitus and cardiovascular diseases. The link is so great that the fetal heart disease might be seen along with tooth abnormalities. Tooth discoloration may be related to drug interactions²³. Morbidity and mortality from oral and pharyngeal cancer is significantly high so the need exists to explore the complications of these diseases in context with the oral pathology²⁴. Epidemiologists have shown that until we have standardized, comprehensive programs to screen for oral cancer, patients will continue to get diagnosed far too late when the metastasis has taken place. Association of human papilloma virus with oral cancer dental hygiene oral cancer exams must be performed by the dental hygienists²⁵.

The dental curriculum is overloaded with marginally important content which should be replaced with essential clinical knowledge. In addition, the curriculum is poorly integrated. The clinical problems are not used to teach the content making it difficult for the students to apply the knowledge of basic sciences on the patient¹⁹. The disjointed and overcrowded content does not create the research environment required to improve the patient care. 40% of the students in third and 30% in fourth year agreed that integration between basic and clinical sciences is done (Table 1).

Community dentistry needs to be revived in our country. The increasing use of tobacco and smoking is a major threat for oral cancers²⁶. Awareness has to be created regarding dental hygiene so as to reduce the risk of these diseases. In a study done selected oral epithelial lesions were evaluated by oral

brush biopsy with a computer-assisted method of analysis and results showed this tool can help identify precancers and potentially curable cancers²⁷. Exposure of dental students to community and public health services was around 20% in third year and 30% in fourth year. Population-based surveys indicate that cancer screening and tobacco cessation advice are underutilized in the dental practice.

All over the world many medical schools utilize PBL for dental education like Harvard, Connecticut, and the University of British Columbia²⁸. In Pakistan PBL and case based discussions are not used in the dental colleges as a priority²⁹. Many recommendations have been made which suggest that the training of a dental practitioner for the twenty first century will require substantial integration of basic medical knowledge with the clinical aspects. This can be done with the incorporation of PBL³⁰. It is felt that dentally related biomedical cases suitable for a PBL program have not been developed and this educational approach has not been utilized in Pakistan as yet.

CONCLUSION

The dental curriculum in Pakistan needs to cover a much broader spectrum of diseases as well as patients. Linking the curriculum with modern tools like PBL can improve dental education. The link between the basic and clinical teaching and incorporation of community health can lead to marked shift in educational approach of the medical students.

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