

Pre-Clinical Orientation of Dental Students (3rd and Final Year)

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Abstract

Aim: The basic aim of this study is to establish techniques to impart the best education to the students, clearly define goals and sense of personal and social responsibility along with commitment to address ethical and moral dilemmas.

Introduction: In Dental curriculum clinical orientation is important to prepare the pre-clinical under graduate students to manage the quality and the quantity of the work as well as groom their personalities to effectively perform their duties and responsibilities.

Materials and methods: The Cross-sectional study include 164 students of third and final year from 3 Government Colleges of Punjab. The data was collected on a specially designed Performa that was developed by a team of dental experts and through literature review.

Results: In this study less than 50% of the students had hospital visit, familiarity with inter departmental functionalities and their rules and regulations. 90.85% of the participants have information regarding the use of PPE. More than 50% knew how to approach patient, history taking, differential diagnosis, treatment planning, different medications, medical emergencies and their treatments and how to deal with patient attendants. 63.41% of the participants were familiar with stress management.

Conclusion: It can be concluded from this study that immediate measures should be taken to evaluate the short comings and to ensure that the students have adequate knowledge about various perspectives important for the pre-clinical orientation, so that they can perform their duties better in latter part.

Keywords: Pre-Clinical; Dental Students; Orientation; Participants

Aim

The basic aim of this study is to establish techniques to impart the best education to the students, clearly define goals and sense of personal and social responsibility along with commitment to address ethical and moral dilemmas.

Introduction

In Dental curriculum the basic aim of the clinical orientation is to prepare the pre-clinical undergraduate to make them able to perform their duties and responsibilities better as a student dentist and also to ensure the quality and quantity of work. The clinical student must presume the role of a dentist in order to understand policies and procedures so that he or she can prepare themselves for providing services to their patients once they will receive their Degree of Dental surgeon [1]. Education has always been concerned with the problems as well as the advantages of change. However, the rapid pace at which changes are currently taking place creates a more severe problem. Present curriculum planning requires a degree of co-operation which is lacking in various schools [2].

Multivariate analysis suggested that irrespective of gender third year and final year students are more concerned about the problems based

on mixture of self-study and problems oriented approach using cases. There should be a relationship between basic biological sciences and fundamental technique of dental sciences. Mostly the learning is achieved by group work in which they search out the basic biological background after studying clinical cases. At the same time, considering the social and psychological implications of the cases, they develop their own communication skills [3].

Several encounters of student's view through which educational objectives can be accomplished easily are that there should be a detail visit to hospitals before the start of rotations considering detailed explanations of the points including inter-department functionalities, rules and regulations. Students should be made well-aware about clinical dental hygiene in order to prevent the disease instead of cure and personal protection should be emphasized [4-6]. Different methods of teaching should be adopted to teach the students how to approach the patient, dealing with patient (empathy not the sympathy), differential diagnosis and treatment planning. Information regarding different medicines their side effects and last but not the least causes and treatments of commonly encountered medical emergencies [7,8].

The rationale of this is to determine various points to be in consideration to improve pre-clinical dental students in attaining their role and to preserve the knowledge acquired in the basic background

making them more confident and familiar with the utilization of dental auxiliaries. By doing this we ensure that they are well prepared to pursue their clinical practice in latter part.

Materials and Methods

After seeking approval from ERC, the observational cross-sectional study was conducted in the month of April 2020. Dental students of third year and final year from different Government Colleges of the Punjab, Pakistan were recruited in this study. The data was collected on a specially designed Perform that was developed by a team of dental experts and through literature review. The questionnaire involved different questions to evaluate different perspective to be involved in pre-clinical orientation of dental students. They were asked to fill the

Performa and submit it to the principle investigator while maintaining their confidentiality.

Results

The study was based on responses of 164 students of 3rd and final year from 3 government dental colleges of Punjab province. The responses were sent to a total of 250 students and thus the percentage comes out to be 65.6%. This survey consisted of 12 questions related to student’s clinical orientation and they chose their option on scale of Yes, No and to some extent. Participants also opted their choice on the scale of 0 to 10 for one question. The analysis of the survey is given in Table 1.

Questions	Responses					
	Frequency			%Age		
	Yes	No	Some extent	Yes	No	Some extent
Was a hospital visit arranged before the start of rotations?	67	97		40.85%	59.15%	
Was you being well aware of inter department functionalities?	71	93		43.29%	56.71%	
Were you familiar with the rules and regulations?	42	17	105	25.61%	10.37%	64.02%
Do you have information regarding personal protective equipment?	149	15		90.85%	9.15%	
Was you told how to approach the patient?	112	9	43	68.29%	5.49%	26.22%
Do you know the steps to be followed during history taking?	158	6		96.34%	3.66%	
Do you know how to proceed to differential diagnosis and treatment planning?	108	56		65.85%	34.15%	
Was you being well aware of different medications used and their side effects?	95	69		57.93%	42.07%	
Do you know how to manage stress?	104	60		63.41%	36.59%	
Were you told how to deal with patient's attendant?	111	53		67.68%	32.32%	
Was you being familiar with the medical emergencies and their managements?	90	74		54.88%	45.12%	

Table 1: Showing frequency and percentages of responses by the dental students.

This pie chart depicts the responsiveness for the question “Do you have information about clinical dental hygiene, weight your knowledge in the range 0-10 is as shown in Figure 1.

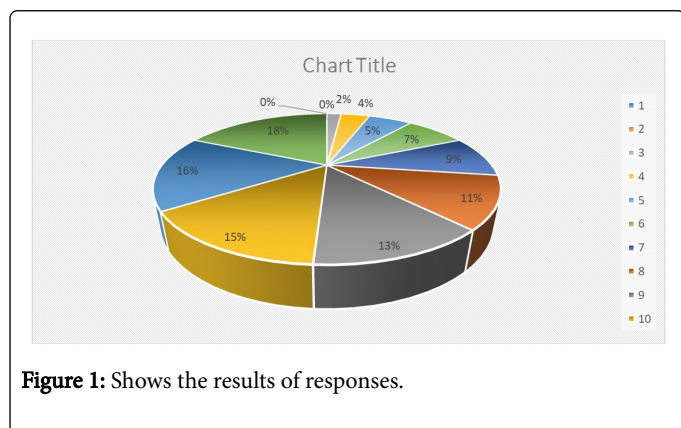


Figure 1: Shows the results of responses.

Discussion

Clinical Orientation is a lecture laboratory clinical course designed to introduce the student to the clinical dentistry. Dental students are required to teach the skills necessary for lifelong learning and to access student’s progress toward accomplishment of the goals. The clinical student is expected to assume the role of a dentist to possess the necessary background in order to perform, to understand the policies and procedures that must be followed as students. According to various analysis students irrespective of gender are more concerned about the establishing the meaningful and productive relationship between principle of basic Biological sciences and fundamental technique of dental sciences.

The questionnaire showed that less than (40.85%) students have hospital visit before the start of rotations, less than (43.29%), (25.61%) were familiar with inter-department functionalities and rules and regulations. According to one study students' clinical, communication, and professionalism skills are best assessed when faculty directly observe clinical encounters with patients [9].

The results of the present study show that less than half (42%) of the students were aware about clinical dental hygiene, while answering this question on a scale of 1-10. Another study conducted by Kawamura et al., shows similar results that the first step in establishing a positive oral-health habit is to provide significant knowledge to the patients and that is only possible when students have firm grip on the pros and cons.

The findings of the present longitudinal studies shows that maximum students were well aware of how to approach the patient (68.29%) and how to deal with patients attendants (67.68%). The caring component of the doctor patient relationship should remain intact because it possibly reflects one of the strongest motives for entering this field. Additionally, according to another study, an individual's attitudes are important because they are viewed as a mediating link between clinical competence and clinical performance [10,11].

This research analyzed that out of total 104 were familiar with how to deal or manage stress. Noran, et al. conducted a study that was concluded as student anxiety should be brought to attention and it suggested that anxiety control session and anxiety management classes should be blended within the lesson plan that is important for both the mental and physical health [12].

In this study one question was on familiarity with medical emergency and (90%) participants voted for yes. It is also covered in by the research by Müller et al. that medical emergencies are not rare in dental practice, although most of them are not life threatening [13]. Improvement of competence should include repeated participation in life support courses, designed to meet the need of the Dentist.

Personal protective equipment is designed to protect the dentist from direct or indirect transmission. These principles form the basis of current guidelines for the use of Personal Protective equipment in dentistry. A study conducted in Brisbane including 41% of the dentist shows that there is a need to further emphasize the need for further educational campaigns in practice infection control measures [7].

Taking in view the need of this questions on information about history, diagnosis, treatment planning and medications were asked which comes out with the percentage of (96.34%), (65.85%) and (57.93%). It is discussed by Lanning while discussing the topic of variation in Periodontal diagnosis and treatment planning that only the group of graduate students were able to diagnose the cases while faculty member with greater than 10 years' experience were able to diagnose this, though it is a slowly developing process but the basic foundation is important to construct a building [14]. There were following limitations of the study, as we didn't know the guidelines with which are provided at their institutions. Another limitation is that we didn't know what other government colleges are doing for preclinical orientation and the also lacking the guidelines of the private colleges too.

Conclusion

It can be concluded from this study that immediate measures should be taken to ensure that the students have adequate knowledge about hospital visit its interdepartmental functionalities, rules and regulations, Personal protective equipment and above all most importantly stress management and medical emergencies they encounter. By doing this we ensure that they are well-prepared to pursue their clinical practice in latter part.

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