

Knowledge, Attitude and Perception of Oral Medicine among BDS Students - A Questionnaire Survey

Vivek Narayan*, M Ovia

Department of Oral Medicine and Radiology, Saveetha University, Chennai, India.

ABSTRACT

Oral medicine is a field of dentistry which involves diagnosis and treatment of disorders / conditions affecting the oral and maxillofacial regions that includes diseases of oral mucosa, disorders of orofacial region, salivary gland and orofacial pain. History taking is necessary for establishing the diagnosis of the patient's chief complaint and assessing the influence of the patient's systemic health on the patient's oral health. The aim of the study is to determine the knowledge, attitude and perception of Oral Medicine among BDS students. The survey was conducted in a private dental institute. 100 clinical BDS students participated in the study which contained a random number of III, IV & intern BDS students. I & II year BDS students were excluded from the study. The questionnaire was formulated using Google forms & distributed to the BDS students *via* Whatsapp and data was entered in MS Excel spreadsheet. The data from the Excel spreadsheet was transferred to SPSS software version 23.0 for analysis. Chi square tests were employed to find the association between different variables. The statistical significance was set at 5 %. The study showed a female predilection. The maximum responses were from IV year students followed by III year students and finally by the Interns. All students think case history taking is important. Majority of the 4th year students agree that both extraoral and intraoral examination is important in making a diagnosis. Most of the students encounter pigmented lesions in their daily clinical practice. All the students had difficulty in diagnosing a case while they all were able to differentiate the oral lesion belonging to the same category. 26 % III yrs & 23 % IVth yrs prefer biopsy when they fail to provide a provisional diagnosis while 24 % of the IVth yrs have an idea of sending Biopsy for a patient irrespective of any malignant change. Almost all the Interns (11 %) prefer referring patients with oral mucosal lesions to a specialist, remaining all the students prefer referring them to an oral medicine clinic. Final year BDS students' responses show up to be satisfactory in comparison with III year & Interns as they have a better understanding towards Oral medicine and importance of case history taking.

KEYWORDS

Oral medicine, knowledge, Oral medicine and radiology, Oral diagnosis, novel analysis

Corresponding Author:

Vivek Narayan, Department of Oral Medicine and Radiology, Saveetha University, Chennai, India;

Email: viveknarayan@saveetha.com

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INTRODUCTION

The importance of history taking among practitioners follows a recognized systematic scheme of enquiry to minimize the risk of missing important information. The chief complaint should be expressed in the patient's own words and the information presented can then be summarized by the clinician. History of presenting complaints should be in a chronological order which includes: the onset of condition, overall duration and progression, whether it is episodic or constant, nature and timing of any symptoms. In dental practice, the most common complaint is often pain. The severity of a patient's pain includes a site of pain which can be examined by asking the patient to point with one finger to where the pain is worst. Character that includes: sharp, ache, throbbing; severity is based on a scale of 1 – 10 where it is the most severe. Other factors include Radiation of pain; Timing includes the onset whether it was sudden or gradual. Duration of how long the pain has been present, whether it was continuous or intermittent, got worse at any particular time of day. History about what makes the pain better or worse including the use and type of medication. Questions regarding the patient's awareness of any relevant preceding event, including previous similar episodes, any associated symptoms, for example bad taste.¹⁻³

Past medical history includes general questions regarding major systems such as the cardiovascular, respiratory systems. History of asthma or other respiratory disorders, diabetes mellitus, epilepsy, hypertension or other cardiovascular problems like stroke, myocardial infarction, angina, hepatitis or jaundice. The past medical history is an essential component of risk assessment for the likelihood of a patient experiencing medical emergency.⁴⁻⁷ Positive responses should be followed-up by an assessment of the severity of the disorder, treatments used and their efficacy; previous problems with the arrest of haemorrhage should be addressed. It is important to ask about any known allergies. In case of a positive response, enquiry about the nature should be done and at the end, patients, should be allocated an American Society of Anaesthesiologists (ASA) classification which is referred to some protocols and also facilitates communication between clinicians.^{8,9} Our team has extensive knowledge and research experience that has translated into high quality publications.¹⁰⁻²⁹ The study aims in analysing the knowledge, attitude and perception of Oral Medicine among BDS students.

MATERIALS AND METHODS

Study Design

This is a prospective study conducted in a private dental institution. The survey was conducted in a private dental institute. 100 clinical BDS students participated in the study. The responses of the BDS students were recorded by using a questionnaire. The questionnaire was formulated using Google forms and distributed to the BDS students Whatsapp. The institutional ethical committee provided approval for the study.

Inclusion criteria

1. III, IV and internship BDS students

Exclusion criteria

1. I and II year BDS students
2. MDS students
3. Faculty of the institution

Data Collection

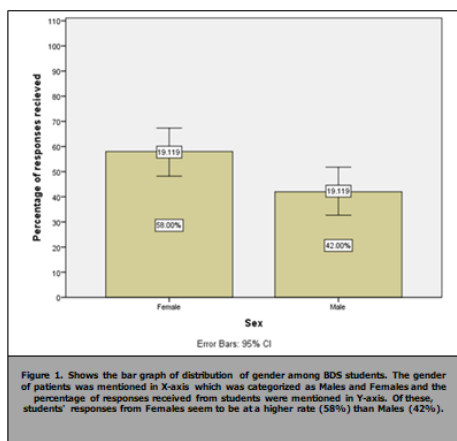
All the data after thorough verification were entered in Microsoft excel spread sheet in order to organise the data. The variables obtained from the data included age, gender and the responses by the students

Statistics

The statistical analysis of the obtained data was performed by the SPSS software version 23.0. The data from the excel spread sheet was transferred to SPSS software for analysis. Chi square tests were employed in order to find the association between different variables. The p value less than 5 % was considered statistically significant. The final results are presented in the form of graphs and tables for further interpretation and discussion.

RESULTS AND DISCUSSION

The total number of students participated in the study was 100. Among the 100 students 58 % were females and 42 % were males (Figure 1). This shows a slight female predilection. Subramaniam et al.³⁰ in his cross-sectional study "A barrier in case of history taking? - A cross-sectional survey among dental students and staff" showed female predilection.



Among the 100 clinical students, the majority were IV BDS students who were 63 % of the total sample. This was followed by III year students who were 26 % of the total population and finally the interns at 11 % forming the least of the total population (Figure 2). Subramaniam et al.³⁰ in his study reported that of the total population involved in the study 46.3 % were undergraduate students whose response was higher compared to PGs, House surgeons (25.9 %) and faculty members.³¹ The males and females among the students in each year were unevenly distributed. The males were 47 % and the females were 16 % in the IV BDS group. In the III BDS group there were only males who contributed 26 % of the population. In the intern group females were present and were 11 % of the population (Figure 3).³²

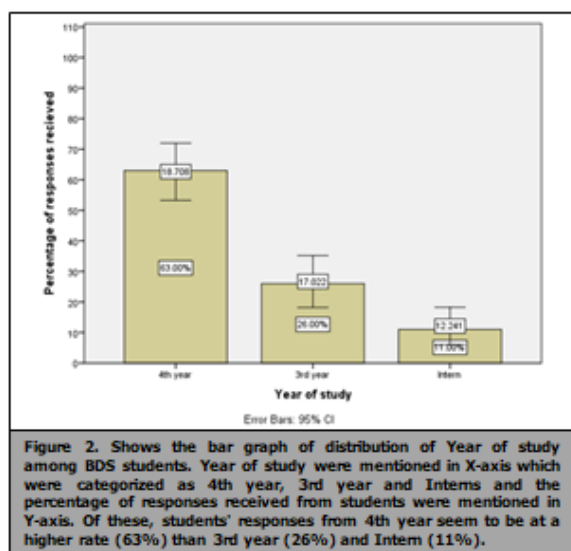


Figure 2. Shows the bar graph of distribution of Year of study among BDS students. Year of study were mentioned in X-axis which were categorized as 4th year, 3rd year and Interns and the percentage of responses received from students were mentioned in Y-axis. Of these, students' responses from 4th year seem to be at a higher rate (63%) than 3rd year (26%) and Intern (11%).

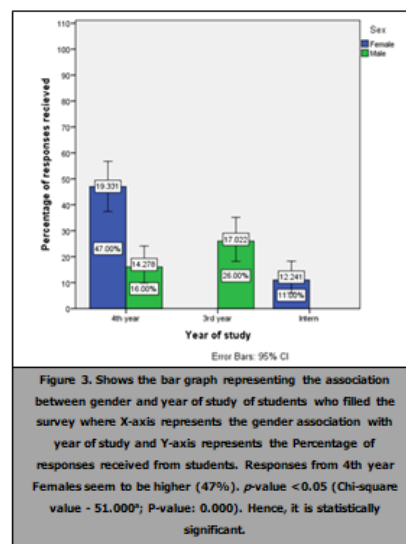


Figure 3. Shows the bar graph representing the association between gender and year of study of students who filled the survey where X-axis represents the gender association with year of study and Y-axis represents the Percentage of responses received from students. Responses from 4th year Females seem to be higher (47%). p -value < 0.05 (Chi-square value - 51.000; P -value: 0.000). Hence, it is statistically significant.

The study shows a female predilection. Analysing the number of responses, it was given higher by IV yrs > III yrs > Interns. The responses given by all students all 100 % think case history taking is more important in diagnosing a case. Most of the 4th years agree that both Extra and Intra Oral examination is important in making a diagnosis. Most of the students encounter pigmented lesions in their daily clinical practice. All the students felt difficulty in diagnosing a case while they all were able to differentiate the oral lesion belonging to the same category. 26 % III yrs and 23 % IVth yrs prefer biopsy when they fail to provide a provisional diagnosis while 24 % of the IVth yrs have an idea of sending Biopsy for a patient irrespective of any malignant change. Almost all the Interns (11 %) prefer referring patients with oral mucosal lesions to a specialist, remaining all the students prefer referring them to an oral medicine clinic (Table 1).

Questions	Response	Iii yr	Ivyr	Intern
1. Do you think all the questions in case history taking are important?	Yes	26 %	63 %	11 %
	A. History of present illness, Medical / surgical history, Previous dental treatments	26 %	0 %	0 %
	B. History of present illness, Medical / surgical history, Previous dental treatments, Personal history (brushing & adverse habits)	0 %	39 %	11 %
2. If your answer is 'no' to the previous question, what are the important questions in case history taking (except chief complaint)?	C. History of present illness, Medical / surgical history	0 %	24 %	0 %
			63 %	
3. When do you think both extraoral & Intraoral examination is essential?	A. For all cases	0 %	63 %	11 %
	B. Only for cases presenting with extraoral signs & symptoms	26 %	16 %	0 %

4. What type of oral mucosal lesions do you commonly encounter in the clinic?	A. Ulcers	0 %	26 %	0 %
	B. Pigmented lesions	23 %	0 %	40 %
	C. All of the above	0 %	0 %	11 %
5. Can you differentiate between oral lesions belonging to the same category? If yes please specify the category	Yes	26 %	63 %	11 %
6. Do you feel your diagnosis of the oral lesion is acceptable?	Yes	0 %	23 %	0 %
	Acceptable sometimes	26 %	40 %	11 %
7. Do you have difficulties in diagnosing oral lesions? If yes, state the difficulty.	Yes	26 %	63 %	11 %
8. When will you prefer a biopsy?	A. When you can't arrive at a provisional diagnosis	26 %	23 %	0 %
	B. When a lesion is suspicious for a malignant transformation	0 %	16 %	11 %
	C. For any lesion irrespective of malignant changes	0 %	24 %	0 %
9. Do you prefer to do any procedures prior to biopsy? If yes, state the name of the procedure.	Yes	26 %	63 %	11 %
10. How do you manage the oral mucosal lesions?	A. Referral to oral medicine clinic	26 %	47 %	0 %
	B. Consult an oral medicine specialist	0 %	0 %	11 %
11. Do you think patient follow up is necessary after a treatment for the oral lesion ?	A. Yes	0 %	63 %	0 %
	B. No	26 %	0 %	11 %

Table 1. Questionnaire Participant Response

Almazaro et al. reported that Oral medicine is still better known and more integrated with general healthcare in the USA than it is in Saudi Arabia.³¹ Other studies showed that it is not just the dental practices that refer patients to oral medicine specialists in the USA but also general practitioners do so.

Almazrooa et al.³¹ found the to be most challenging for Saudi Arabian physicians to diagnose and / or manage: nonspecific oral ulcers, oral lichen planus / lichenoid reactions, graft – versus - host disease, potentially malignant oral lesions, and vesiculobullous diseases. The findings from Alrashdan et al.³² agree with the study, indicating that oral ulcers have the highest rate of physician referral to oral medicine (72 %) followed by white or red lesions (66 %).

CONCLUSION

Within the limits of the study, it can be concluded that the Final year BDS students' responses were

satisfactory in comparison to III year and Interns. They have a better understanding towards Oral medicine and the importance of case history taking. However, efforts have to be made to make the other students also understand the importance of Oral Medicine and Oral Diagnosis in order to make a sound decision regarding diagnosis and treatment planning for the patients.

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