Assessment of Knowledge, Attitude, Behavior of BDS Students towards Periodontics

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Abstract: Introduction and Aim: Periodontics is a unique branch of dentistry that enables both saving tooth/teeth and also replacing them in an effective way with implants. A branch , that should be credited for advancing the state of art, has had to reinvent itself as implant / grafting specialty. Though it is one of the major clinical branches, it appears to be fading among dental students as a career choice and the present study carried among BDS students (final years and interns) aims to assess their knowledge, attitude, importance of the impact of periodontal health care on the general well being and their opinion towards periodontology as career option in Davangere city, Karnataka.

Methods: Among 220 BDS students, a self structured questionnaire with 19 multiple choice questions based on knowledge, attitude towards Periodontics, career choice questions and their opinion on new BDS Curriculum, is circulated and the data was later obtained by collecting questionnaires from the students.

Results: Considering, results of the survey it can be known that Periodontics, does not enjoy the privilege of being a surgical & restorative department as seen with OMFS, Orthodontics, Endodontics, Prosthodontics. The future seems to be exciting considering the positive response towards new BDS curriculum.

Conclusion: A preconceived notion of Periodontics, as a department of scaling must be erased from the minds of future dentists by allowing them to explore the depths of Periodontics, its clinical importance, its overall role in systemic health of a person thus creating among them a fascination towards the subject.

Keywords: Periodontics, BDS students, career.

INTRODUCTION

Periodontology is the branch of dentistry that deals with dynamic structures of body like Gingiva, periodontal ligament, cementum, alveolar bone. It is concerned with diagnosis, prevention and treatment of diseases and conditions of supporting and surrounding tissues of teeth or their substitutes and maintenance of the health, function and aesthetics of these structures and tissues[2].

The early evidence of periodontal disease date back to 5000 BC .The royal library of Ashurbanipal holds thousands of clay tablets with information on periodontal disease & treatments used during early civilization engraved on it[1].

The specialty of Periodontology has been evolved with leaps and bounds in all aspects ranging from advances in diagnostic aids to use of growth factors and periodontal regeneration techniques using membranes & grafts to restore physiologic or near physiologic state of the periodontium[1].

The present survey is conducted among BDS students (Final year& Interns) to know their Knowledge, attitude towards Periodontics, Periodontics as career choice.

This survey might provide an insight into Knowledge of students about the subject, its clinical relevance, department of interest and the position of Periodontics over other departments. It can shed light on reasons that might be few among others responsible for Periodontics for not being the career of choice.

Clinical environments have a major role in students' learning because they provide the students with the opportunity to work with care-seekers and encounter real problems. In addition, clinical wards create a proper environment to apply knowledge and increase the students' awareness in practical fields and develop their psychomotor skills[3].

Methodology: A questionnaire based survey was conducted among 220 BDS students (final years and interns), of College of Dental sciences, Davangere, Karnataka from September 2022 to October 2022. Sample size estimation was done using the Statistical Package for Social Sciences [SPSS] for Windows Version 22.0 (Released 2013. Armonk, NY: IBM Corp.,) at 95% confidence interval and 5% allowable error. The ethical clearance was obtained from the Institutional Review Board, and the study was conducted in full accordance with the World Medical Association Declaration of Helsinki. The participants were educated on the purpose of the survey. Using the previous literature review a self structured questionnaire is prepared & presented to the participants in the study (Table 1).

Table 1: Self-structured questionnaire

The questionnaire consisted of 19 questions divided in two parts, **part I** included personal history of the participant, **part II** included questions related to Knowledge, Attitude and behavior. The questionnaire had both open ended and close ended questions.

Personal identity (Part I)

1) Gender	a) Male b) Female
2) What age group do you belong to?	a) 20 – 25 b) 25 & above
3) Year?	a) Final year b) Intern

Knowledge, Attitude & Behavior (Part II)

1) Do you intend to pursue a specialist career?	a) Yes indeed b) No c) Don't know
2) If you decide to specialize in future, what would be your 1st choice of specialty?	a) OMFS b) Orthodontology c) Periodontology d) Pedodontology e] Prosthodontology f) Endodontology g) PHD h) Oral pathology i)OMR
3) Which of these factors is likely to affect your decision on specialization?	a) Family & Friends expectations b)Social status c)Financial status d) Your competence in the field e) Lack of existing specialists in the field
4) What may discourage you from specializing in Periodontology?	a) Too expensive b)Less clinical returns c) General dentists performing periodontal surgeries d) A salary that does not take into account the degree of study
5) Have you ever asked the patient if they were previously diagnosed with periodontal disease?	a)Yes b) No c) Sometimes d) Never asked
6) Does oral micro-organisms disseminate into the blood stream?	a) Yes b)No c)Cannot
7) Can oral pathogens cross placenta?	a)Yes b) No c) Not possible
8) Is periodontal disease an inflammatory (or) infectious disease?	a)Inflammatory disease b)Infectious disease c) Inflammatory disease with superimposed infection d) Infectious disease resulting in inflammation
9)Do systemic diseases express themselves in oral cavity?	a)yes b) May be c) May not be d)No
10) Is Coronary artery disease, cerebral infarction possible risk factors for periodontal disease?	a) No b) Yes c) May be d) Absolutely no
11) Is their Bi – directional relation between Diabetes mellitus, Alzheimer's disease with periodontal disease?	a)Only Diabetes mellitus & Periodontal disease b) Only Alzheimer's & Periodontal disease c) Both Diabetes mellitus & Alzheimer's disease d) None
12) Does periodontal disease increase the risk for a number of cardiovascular events?	a) No b) Yes c) May be d) Absolutely no

13) Do you think Periodontists play an important role in assessment of systemic health?	a) Yes indeed b) No
14) Do you think technological advances will have a large impact on the future of the periodontal practices?	a) Yes b) No c) Hopefully d) May be
15) What do you think about Periodontists working with General dentists?	a) Good idea b) Bad idea c) Not quite sure
16)Is inter disciplinary model of treatment done by Periodontists consulting with other specialties	a)A Good idea b)A Bad idea c) May be profitable
17) What are your thoughts regarding old and new BDS curriculum?	a)old curriculum was better b) New curriculum will help BDS graduates to explore their skills c) optional subjects in new curriculum will diversify interdisciplinary practice .
18) Does the new curriculum of BDS, uplift the scope of periodontology as career in future among BDS graduates?	a) Yes b) No c) May be d) May not be e) It will remain the same

fig:1 sex wise distribution: Number of males to females participated in the study

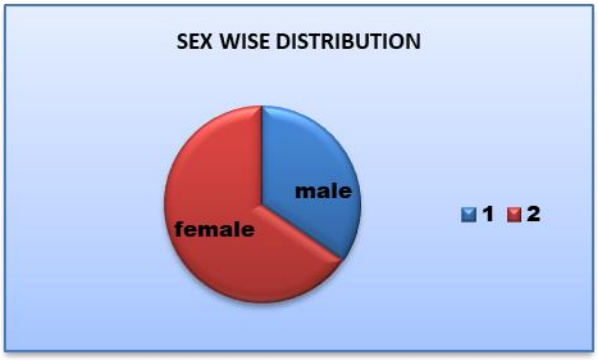
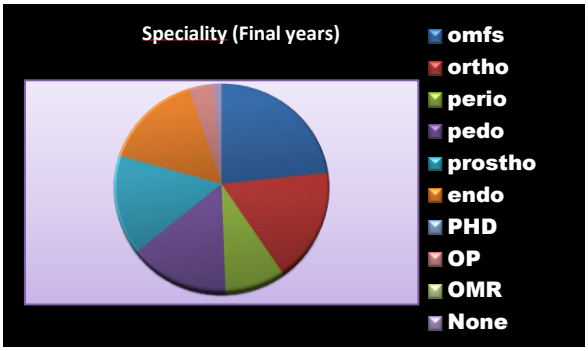


Fig2: If you decide to specialize in future, what would be your 1st choice of specialty?



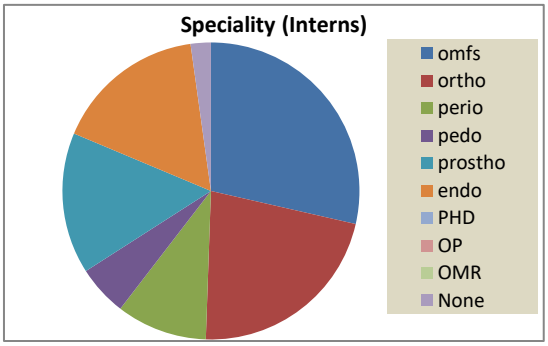


			TABLE 1: for Fig:2							
			.00	1.00	2.00	3.00	4.00	5.00	6.00	8.00
Year	4.00	Count	4	24	18	9	16	4	16	4
		% within Year	3.8%	22.6%	17.0%	8.5%	15.1%	3.8%	15.1%	3.8%
		% within q2	66.7%	48.0%	47.4%	50.0%	51.6%	100.0%	51.6%	100.0%
		% of Total	2.0%	12.2%	9.1%	4.6%	8.1%	2.0%	8.1%	2.0%
	5.00	Count	2	26	20	9	15	0	15	0
		% within Year	2.2%	28.6%	22.0%	9.9%	16.5%	0.0%	16.5%	0.0%
		% within q2	33.3%	52.0%	52.6%	50.0%	48.4%	0.0%	48.4%	0.0%
		% of Total	1.0%	13.2%	10.2%	4.6%	7.6%	0.0%	7.6%	0.0%
Total		Count	6	50	38	18	20	31	4	31
		% within Year	3.0%	25.4%	19.3%	9.1%	10.2%	15.7%	2.0%	15.7%
		% within q2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	3.0%	25.4%	19.3%	9.1%	10.2%	15.7%	2.0%	15.7%

Fig: 7 **What may discourage you from specializing in Periodontology?**

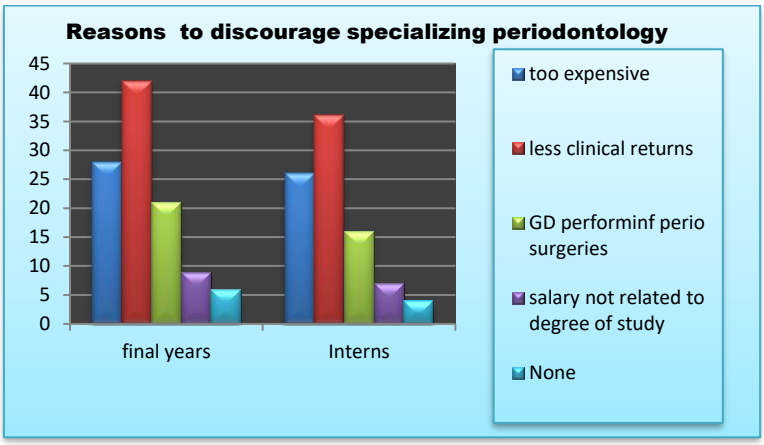


Table 2: Question : **If you decide to specialize in future, what would be your 1st choice of specialty?**

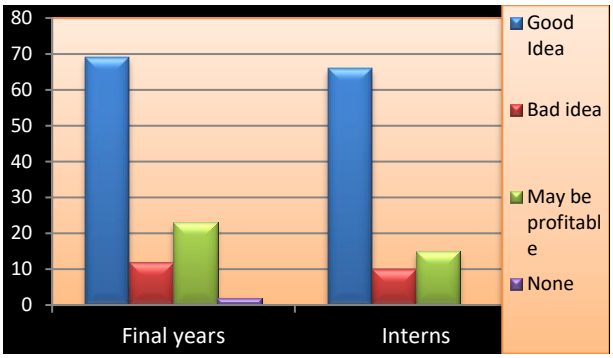


Fig:8 Comparing the response for **inter disciplinary model of treatment done by Periodontists consulting with other specialties**

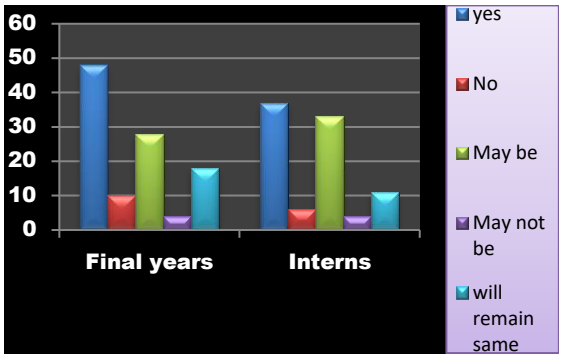


Fig:9 Response to - Does the new curriculum of BDS, uplift the scope of periodontology as career in future among BDS graduates?

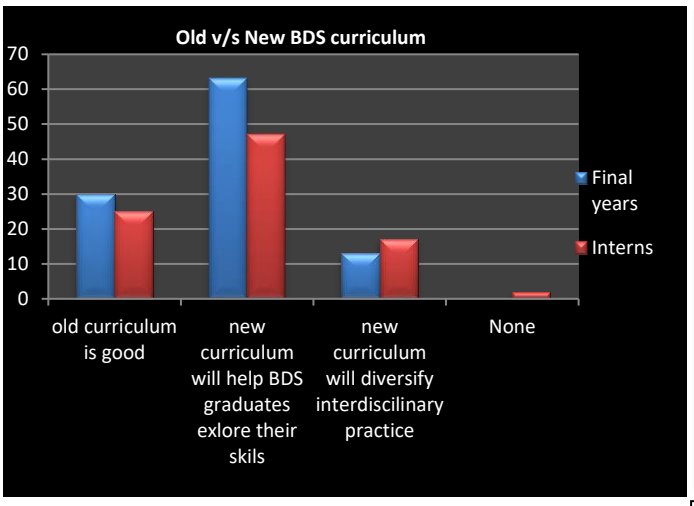


Fig:10 **What are your thoughts regarding old and new BDS curriculum?**

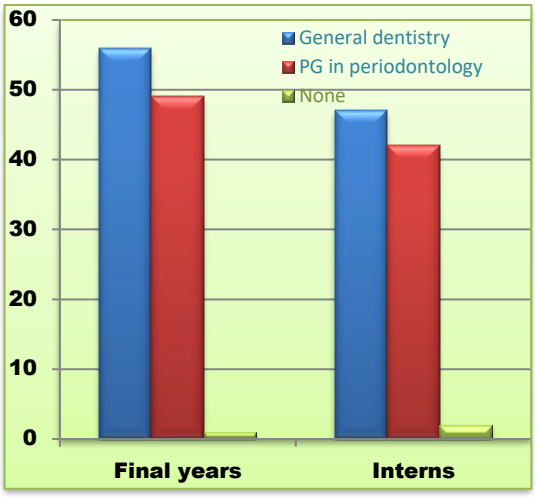


Fig:11 **Would you prefer to work as a General dentist (or) opt for PG in periodontology?**

Discussion: Of 220 circulated questionnaires, 197 were returned .Response was obtained from 129 females, 68 males and more than half belonging to the age group of 24-25 years .Maximum students were willing to pursue specialist course following BDS with Oral & Maxillofacial surgery as the most demanding subject, following it were Orthodontics, Endodontics but Periodontics was one of the least opted subject .

Another interesting response is pursuing general dentistry over Periodontics .This response clearly indicates the deep rooted notion of BDS students considering Periodontics as a subject of Scaling because of their limited exposure to the field of Periodontics in terms of it being a surgical department.

One of the important reasons for the neglect of this extensive clinical subject has been apparently their limited knowledge on importance of periodontal health and its relation with overall systemic health that needs to put a thought on.

The ability of a Periodontist to restore systemic health to some extent by means of performing simple non surgical periodontal therapy to complicated periodontal surgeries on delicate periodontium using various regenerative materials, like bone grafts , membranes; lasers and implants an integral part of their armor must be made known to them.

The academic staff members are the most important assets of a higher education institute. One of the most important determinants of the efficacy of clinical education is the performance of tutors because they impart their knowledge and experience to students through establishing an effective relationship[4].

Conclusion: The other side of a Periodontist apart from being a practitioner of Scaling and root planning, that is almost unknown must be familiarized to the dental students during their BDS course .This might help create among them a fascination towards the subject.

"The future belongs to those who prepare for it today"

-Malcolm X

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