ORIGINAL ARTICLE

POST GRADUATION IN ORAL PATHOLOGY: IS THE SHIP SINKING?

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ABSTRACT:
Background: It has been observed that day by day students are becoming more reluctant towards taking admission in post graduation courses in this branch and almost everywhere seats are remaining vacant. Therefore my aim of conducting this study is to analyze the perception of undergraduate students about post graduation in oral pathology despite of the fact that it lays foundation stone among 1st yr students. We wanted to understand the mind set of these students as to why they are no ready for transition of being oral pathologists than undergraduate so as to have professional outlook.

- It is purely research oriented subject.
- An oral pathologist only can assist dentist with diagnosis
- as we can see that day by day cancer patients are increasing right from children to adult so we need to have more research in this subject
- We only have good eye coordination, critical thinking, good problem solving skills
- We only can tell patients how to avoid these type of diseases & finding a treatment when we already have them
- We all know that diagnosis is a prognostic indicator for treatment planning. So without proper diagnosis no better treatment
- It is a challenging job by which keeping patient alive after diagnosis of difficult lesions like cancer etc.

To deal with current scenario of India with increasing population, this is the right time to change the mindset of upcoming dental students to opt for post graduation in oral pathology as it is an important bridge between dentistry and medicine. With the advancement of medicine and basic medical sciences it help in directing research in oral pathology because day by day oral cancers and microbial diseases are increasing so that they can meet needs of growing population.

Keywords: Post graduation, Oral Pathology and Microbiology, Scope of Branch

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INTRODUCTION:
Oral and maxillofacial pathology is the specialty of dentistry and pathology which deals with nature, identification, and management of diseases affecting oral and maxillofacial regions. Nowadays there is an increasing number of oral cancer and microbial diseases. The tremendous growth in molecular based techniques, immunology, genetics, broadens scope of this branch to a great height. It includes normal histology, normal oral anatomy, and pathologies of oral and paroraoral structures. This subject is taught in 1st, 2nd & 3rd year. It plays very important role laying down the foundation for dental students. The attainment of successful treatment lies in understanding the pathogenesis of diseases. The extension into maxillofacial and even head and neck surgery has increased scope of oral pathology.

AIMS AND OBJECTIVE: This study aims to understand and analyze the perception of undergraduate students about post graduation in the branch of Oral Pathology.

MATERIALS AND METHODS: Final year students and interns of 3 dental colleges of Vidarbha (Maharashtra) were asked to fill self-administered questionnaire based on interest of students in Oral Pathology as a future branch for their Post graduation.

STATISTICAL ANALYSIS: Two independent samples of study subjects, Group 1 having affiliations with a government dental college (n=40) and Group 2 having affiliations with two private dental colleges (n=160) in Nagpur city were purposively selected for this cross-sectional, descriptive study. Questionnaire comprising a validated set of 12 questions was administered to the study subjects, responses were coded in MS Excel and analyzed in STATA statistical software (version 10.1, 2010). Responses were summarized in percentages and compared across the groups by Chi-Square test or Fisher’s Exact test (for small numbers). Trends were analyzed by non-parametric test. Spearman’s rank correlation coefficient was used to assess degree of agreement between responses of two questions.

RESULTS

Distribution of subjects by their affiliations: Private and Govt.

Question-1: What is your plan after graduation?
a. Post-graduation
b. Private practice
c. Corporate dentistry
d. Research
e. Others

Response:

Significant difference in perceptions of govt. and private college students (Fisher's exact test, P=0.032) was found about their planning PG education. Moreover, a significant downward trend by options from post graduation to research is observed in all students (linear trend test, Prob > |z| = 0.013)

Question-2: Choose your level of confidence to practice after UG without opting for post graduation?

a. Confident
b. Very confident
c. Not confident

Response (in %) to Question 1
Response:

Pearson chi² (2) = 2.3545   Pr = 0.308, Prob > |z| = 0.889

Very few (10-20%) students in both the groups were very much confident about their starting practice without opting for PG.

Question – 3: Which specialty inspires you the most?
- a. Oral Diagnosis, Medicine & Radiology
- b. Pedodontics
- c. Orthodontics
- d. Conservative Dentistry & Endodontics
- e. Prosthodontics
- f. Periodontics
- g. Oral & Maxillofacial Surgery
- h. Public Health Dentistry
- i. Oral Pathology & Microbiology

Response:

Pearson chi² (8) = 14.2023   Pr = 0.077

Orthodontics, Conservative Dentistry & Endodontics and Oral & Maxillofacial Surgery inspired the students of both groups most while oral pathology and microbiology the least! Group 2 students thought, in the current scenario in Indian Dentistry the above mentioned specialties have a significant (p=0.008) edge over the others.

Question-4: In the current scenario in Indian Dentistry which specialty do you think has a leading edge over the others. (Choose maximum 3 and give rating 1,2,3)
- a. Oral Diagnosis, Medicine & Radiology
- b. Pedodontics
- c. Orthodontics
- d. Conservative Dentistry & Endodontics
- e. Prosthodontics
- f. Periodontics
- g. Oral & Maxillofacial Surgery
- h. Public Health Dentistry
- i. Oral Pathology & Microbiology

Response:

Fisher's exact test, P= 0.008; Spearman's rho for total subjects (n=200) = 0.6180 , |P| = 0.0000

Overall, there was a good and significant amount of agreement over specialty preferences among all
students envisaged by Q3 and Q4. But it was perceived significantly better by group 2 students.

**Spearman’s rho = 0.8655, P = 0.0000**

**Question-5:** What could be the reason for the choice in above mentioned question
a. Great help in day-to-day dental practice
b. More consultation opportunities
c. More academic job opportunities in Dental/Medical Colleges
d. Research related jobs in India or abroad

**Response:**

Fisher’s exact, P = 0.105  Prob > |z| = 0.076

Great help in day-to-day dental practice was the most cited reason in both groups while research related jobs in India or abroad was the least cited reason.

**Question-6:** Given the circumstances, would you opt for post graduation in Oral Pathology & Microbiology
a. Yes, for sure
b. No, definitely not
c. May be

**Response:**

Fisher’s exact, P = 0.263

Given the circumstances, majority of the students would not opt for post graduation in Oral Pathology & Microbiology, though a big chunk (> one-third) of them is yet undecided (“may be”).

**Question-7:** If yes, what could be the reason for opting post graduation in Oral Pathology & Microbiology
a. I am interested in Research activities
b. Patients prefer a postgraduate dentist over a BDS dentist irrespective of his specialty- thus it helps in practice
c. Beggars can’t be choosers

**Response:**

Fisher’s exact, P = 0.297

Patients preference for a postgraduate dentist over a BDS dentist irrespective of his specialty- which helps in practice was the most cited reason.

**Question-8:** If no, what do you think is the reason for not going for post graduation in Oral Pathology & Microbiology
a. I have no interest in the subject
b. No/scarcie job opportunities
c. Not helpful in day-to-day clinical practice
d. No consultation opportunities
Response:

**Question-9:** Do you think you have enough knowledge or experience to diagnose/handle patients with variety of lesions/diseases without going for post graduation in oral pathology?

- a. Yes, everything that I need to know was taught at BDS level
- b. No, definitely not
- c. May be

**Response:**

Pearson chi$^2$(3) = 1.3265  Pr = 0.723  Prob > |z| = 0.861

Majority of the students do not think they have enough knowledge or experience to diagnose/handle patients with variety of lesions/diseases without going for post graduation in oral pathology.

**Question-10:** If you require a consultation by specialist for diagnosis of a difficult/doubtful lesion in your Dental clinic, whom would you prefer to call

- a. Oral & Maxillofacial Surgeon
- b. Oral Pathologist
- c. I have enough knowledge and skill for biopsy procedure

**Response:**

Pearson chi$^2$(3) = 0.5472  Pr = 0.908

Students perceived that Oral Pathologist and ODMR specialist are required as a consultant by specialist for diagnosis of a difficult/doubtful lesion in Dental clinic.

**Question-11:** If you require to perform an incisional/excisional biopsy for a suspicious lesion in your dental clinic, whom would you prefer to call

- a. Oral & Maxillofacial Surgeon
- b. Oral Pathologist
- c. I have enough knowledge and skill for biopsy procedure

**Response:**

Pearson chi$^2$(3) = 0.7580  Pr = 0.859

Students thought that Oral Pathologist should be preferably called to perform an incisional/excisional biopsy for a suspicious lesion in any dental clinic, rather than others.

**Question-12:** How could the PG curriculum in Oral Pathology be modified so that you would like to opt for PG in that subject, choose one or many options:

- a. Inclusion of Forensic Odontology and eligibility for jobs in that field
b. Separation of D.A.D.H. and Oral Pathology into two Departments to create more job opportunities

c. Eligibility for job of Lecturership in General Pathology in a Dental College

d. Making post graduation in Oral Pathology recognised by foreign Universities will help for many research job opportunities abroad

Making post graduation in Oral Pathology recognised by foreign Universities was the least favoured choice while Separation of D.A.D.H. and Oral Pathology into two Departments was the least opted choice by these students.

Response:

\[
\text{Pearson chi}^2 (3) = 0.7580 \quad Pr = 0.923
\]

CONCLUSION:
- Study showed that maximum undergraduate students are interested in doing post graduation
- They are more interested in clinical branches mainly Orthodontics, Endodontics & Oral & Maxillofacial Surgery. They preferred these branches as they have more consultation & job opportunities in dental colleges in helpful in day to day practise.
- Very few students were confident without post graduation in their clinical practise, also they would love to call Oral Pathologists for consultation of doubtful lesions
- Patient prefers a post graduate dentist over a B.D.S. dentist
- Lack of job opportunities & no interest in the subjects were the most cited answers for non preference of the subject
- If given chance they would love to go for our subject when post graduation in Oral Pathology recognized by foreign universities
- Forensic Odontology to be included in the subject & more of job opportunities in dental college

SUGESTIONS:
To deal with current scenario of India with its increasing population it is the right time to change the mindset of upcoming dental students to opt for post graduation in Oral Pathology so that they can meet needs of growing population. Following actions if taken by senior concerned members can motivate undergraduate students for post graduations in Oral pathology & microbiology
- More of job opportunities for in Oral pathologists.
- Jobs to be given to Oral pathologists at P.H.C. level
- More government jobs for Oral pathologists
- Patients to be treated at 3rd year itself in Oral pathology like biopsy taking, FNAC, scrape cytology by students
- Oral pathologists can take 2nd year general pathology classes in dental colleges so jobs to be given to them as lectureship in place of general pathologists
- Forensic odontology to be added to Oral pathology to make it more interesting and jobs to be given to Oral Pathologist as Forensic Odontologists
- DCI/concerned universities must take above strong steps in this direction for future of oral pathology. otherwise ” the ship really seems to be sinking ”

REFERENCES:

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