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## Short Communication

### Oral medicine and radiology- the Indian scenario

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**ABSTRACT**

Although Oral medicine and oral radiology are distinct speciality in the many parts of the world it is a combined specialty of dentistry in India. Our review discusses the formation and growth of this speciality in India. The current hardships it faces and the challenges that lie in future of this specialty in India. We have considered an undergraduate outlook of this speciality. We have also discussed factors that make the choice of Oral medicine as an attractive or unattractive career choice is also elaborated in this review. From a dental undergraduate point of view oral medicine and radiology is certainly not the first choice speciality subject in the current Indian scenario. Modernization of maxillofacial imaging techniques and "relevant" changes in the course curriculum - could draw more aspiring undergraduates to choose oral medicine and radiology as an attractive career option.

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## INTRODUCTION

Oral medicine is the speciality concerned with 'dental' and medical related disorders of the oral and the facial region, including orofacial manifestations of systemic diseases. The latter include gastrointestinal, dermatological, rheumatological and haematological diseases, autoimmune and immunodeficiency disorders and the manifestations of neurological or psychiatric disease [1].

As defined by the American Dental Association, Oral and Maxillofacial Radiology is the specialty of dentistry and discipline of radiology concerned with production and interpretation of images and data produced by all modalities of radiant energy that are used for the diagnosis and management of diseases, disorders and conditions of the oral and maxillofacial region [2].

Intraoral radiography is the mainstay of oral radiology, which also includes special imaging techniques

sialography and advanced imaging techniques such as (CBCT) Cone Beam Computerized Tomography. When compared to general radiology, oral radiology deals more specifically with dental and maxillofacial structures. Owing to the complex nature of skull bones and dental structure when compared to any other part of the body, imaging in this specific area becomes more challenging.

## HISTORY

Dentistry has come a long way from the skills practised by barber surgeons. It is aptly said that oral cavity is the mirror of the human body and this is streamlined to specialists in oral medicine. Oral medicine specialists play a major role in early diagnosis and prevention of various diseases. The history of oral medicine traces back to the 18th century. Sir Jonathan Hutchinson, a surgeon at the London Hospital, is regarded as the

father of oral medicine. In 1920s Dr William Geis of Columbia university, United States of America established oral medicine as a distinct area of study.

Oral medicine as a subject in the curriculum of Bachelor of dental Surgery in India was introduced around 37 years ago. Government Dental College, Bangalore was the first dental college in India to teach oral medicine with help from World Health Organisation WHO. Government Dental College, Bangalore was also the first to introduce the Master in Dental Surgery (MDS) 2-year duration course in oral medicine, diagnosis and radiology 1970.

Dental Radiology was only a minor subject being merged with subjects like conservative dentistry, periodontics and oral surgery. In the year 1959 a 2 year Masters Degree was initiated by Bombay University. In the year 1970 the Bombay University changed MDS course in dental radiology to MDS course in Oral Medicine, diagnosis and radiology. In the same year the World Health Organisation (WHO) also gifted an orthopantomograph X-ray unit which was installed in Government Dental College, Bangalore. The growth and development of speciality of Oral Medicine remained incomplete without a registered organisation to create a platform for establishing the identity of oral physicians. Therefore Indian Academy of Oral Medicine was formed on 20th June 1985 under the guidance of Dr BK Venkataraman and Dr. Ramachandra Reddy in Bangalore. During the Fifth National Conference held in Chennai, the academy was renamed as Indian Academy of Oral Medicine and Radiology. Presently, the Academy has over 1500 life members.

#### **SCOPE OF ORAL MEDICINE AND RADIOLOGY**

Oral medicine and radiology has a curriculum envisaged with oral mucosal lesions, tumors, oral manifestation of systemic diseases, radiographic imaging principles and techniques and its interpretation, palliative care and treatment modalities [3]. Majority of Oral medicine specialists work in clinical settings, such as hospitals, dental clinics, outpatient surgical centers. Directly after graduating, oral medicine specialists also join as teaching faculty at various universities and dental schools. In a recent study conducted to determine the scope of oral medicine in Australia Clinical records of patients referred to a hospital and private Oral medicine and pathology clinic were audited. They observed that a majority of the referrals were generated by general dental practitioners. They also observed that most commonly reported problems were epithelial hyperplasia/hyperkeratosis, oral candidosis, oral lichen

planus, xerostomia, recurrent aphthous ulcers and burning mouth syndrome. Oral medicine specialists requested diagnostic imaging for 13% of hospital and 9.42% of private patients, diagnostic biopsies were required for 18.4% of hospital and 19.3% of private patients, blood tests were ordered for 14.4% of hospital and 12.13% of private patients, while medications were prescribed for approximately 36% of hospital and 51% of private patients. The concluded that there is a strong demand for oral medicine services [4]. A survey conducted in the United states also revealed that there is a strong need for oral medicine specialist services [5].

In a recently conducted Irish study it was observed that majority of patients who were referred to for oral medicine services in a university hospital were females. Most of the referrals came from general dental practitioners. White lesions were the most common reason for referral. Raised soft tissue lesions including epulis and mucocoeles were second and ulceration, including recurrent aphthous and traumatic ulceration, was the third most common reason for referral [6].

A survey that was designed and conducted by an international panel of oral medicine experts to assess the current state of oral medicine practice internationally revealed that the two most common settings for an oral medicine practice were in a hospital and a dental school [7]. The survey also revealed that India has the largest expansion of oral medicine services as due increasing numbers of clinicians within the speciality as compared with other countries [7].

#### **CURRENT STATUS IN INDIA**

Around 24,000 dental graduates pass out every year in India whereas there are only around 3000 post graduate seats [8].

During post graduate entrance selection process, the arbitrary trend observed is that students opt their field of specialisation in orthodontics, oral and maxillofacial surgery and endodontics. In today's scenario oral medicine and radiology is opted as the last resort to fill in the vacancy of available private and government post graduate seats. However a few graduates endowed with an academic interest for furthering their career in clinical care, research, learning and teaching also opt for this field. In spite of the rapid progress being made in the field of dental imaging, the lack of support and understanding of the benefits of advanced imaging procedures and rigid curriculum based clinical practise, the brighter side of the speciality has been neglected and gone unnoticed. When it is an era of digital imaging with a transition from 2-D to 3-D mapping, use of the classic intra oral radiograph and orthopantomogram gives us a retro perception.

Although there have been some recent modifications, thrust has been given only to increase the number of post graduate seats in oral medicine rather than improving the quality of education of the existing seats. This is in sharp contrast to countries like Britain where post graduation in oral medicine can be perceived only after MBBS and as on January 2008 there are only 29 honorary oral medicine practitioners [9].

To conclude Oral medicine and Radiology can be selected as a career choice if one is properly oriented and dedicated to patient care and maintaining an inter disciplinary balance between other dental and medical specialities. Oral medicine and radiology is for those who have academic bent of mind and who further wish to undertake research in this speciality for furthering the growth of oral medicine and radiology. The broad based dental and medical background allows the clinician for comprehensive assessment, diagnosis, and non-surgical management of varied and challenging cases while also providing opportunities as an educator or a researcher in local, national and international arenas.<sup>8</sup> But above all these, the question still remains in the mind whether the advancements in the field of oral medicine and radiology can be put into day to day practise as these advancements are sometimes very expensive. This creates a doubt in minds of thousands of aspirants who wish to become a specialist in the field of oral medicine and radiology. Nevertheless a time will come when oral medicine specialists in India will revolutionize the field of dentistry by using all the sophisticated and advanced imaging and diagnostic techniques which are cost effective.

## REFERENCE

1. Zakrzewska JM. Training in oral medicine. *J R Soc Med* 2001; 94:79-82.
2. White SC, Pharoah MJ. *Oral Radiology Principles and interpretation*. 5th edn, 2004, p IX.
3. Ongole R, Praveen BN. *Text book of Oral Medicine, Oral Diagnosis and Oral Radiology*. Elsevier, Cyber City, India, 2010, pp 5-6.
4. Farah CS, Simanovic B, Savage NW. Scope of practice, referral patterns and lesion occurrence of an oral medicine service in Australia. *Oral Dis*. 2008;14:367-75.
5. Miller CS, Hall EH, Falace DA, Jacobson JJ, Lederman DA, Segelman AE. Need and Demand for Oral Medicine Services in 1996. A report prepared by the Subcommittee on Need and Demand for Oral Medicine Services, a subcommittee of the Specialty Recognition Committee, American Academy of Oral Medicine. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 1997;84:630-34.
6. Riordain RN, O'Sullivan K, McCreary C. Retrospective evaluation of the referral pattern to an oral medicine unit in Ireland. *Community Dent Health* 2011;28:107-10.
7. Stoopler ET, Shirlaw P, Arvind M, Lo Russo L, Bez C, De Rossi S et al An international survey of oral medicine practice. proceedings from the 5th World Workshop in Oral Medicine *Oral Dis* 2011;17 Suppl 1:99-104.
8. DCI trying to increase PG seats' Sunday, Jan 09, 2011. *The Hindu*. Available via [www.hindu.com/2011/01/09/stories/2011010961020300.htm](http://www.hindu.com/2011/01/09/stories/2011010961020300.htm) (Accessed Jan 22 2012).
9. Atkin P, Allan R, Mighell A. Oral medicine. *BMJ Careers* 2006:33-6.

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