# Dual-degree oral and maxillofacial surgery: evidence-based view of Chilean candidates

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**Introduction:** Oral and maxillofacial disease profile is treated by overlapping medical and surgical specialties, most of them without the high-level stomatological training who dentists have. Of these specialties, oral and maxillofacial surgery (OMS) is the only one that requires medical, dental and surgical training, which currently is achieved by 3 main pathways. Until today, the debate continues about which of them is the ideal, although in Latin America the only way to become an OMS specialist is the odontological.

**Methodology:** Critical review of international literature in OMS journals and guidelines of international societies, focusing on the bioethical topics, clinical competences, educational, legal and social aspects.

**Results:** Dual-degree is advantageous to the OMS practice because of the following aspects: clinical scope (oncological and reconstructive surgery), access to fellowships and scientific-professionals societies, knowledge/evidence generation, surgical prerogatives, legal support and social acknowledgement.

**Discussion:** From a bioethical perspective, single-degree specialist dealing with maxillofacial pathology may exceed his/her competences, due to medical or dental training lack. The dual-degree specialist seems to be whom, from a comprehensive perspective of the patient, has the knowledge and skills to fully meet the community's rights to health and contribute to specialty development. Unfortunately, Latin America has not dual-degree training programs and none of Chilean single-degree ones fulfil the IAOMS guidelines.

This review exposes the need to develop a dual-degree program in Chile to achieve a comprehensive approach to the patient with maxillofacial pathology; consistent with social, cultural, economic and educational reality of the country. Conflict of interest: None declared.

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# Who publishes in leading oral and maxillofacial surgery journals?

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**Introduction:** There is a growing concern about the scientific production in oral and maxillofacial surgery (OMS) field, making it essential to have bibliometric assessments to estimate current status and trends.

**Methods:** A search was performed in Web of Knowledge platform (Thomson Reuters, ISI), using an algorithm to include all publications between 2001 and 2010 of four leading OMS journals. This variables was evaluated: country, author, institution, year and journal.

**Results:** 6149 publications was founded. Most productive countries were United States (21.1%), followed by England (12.9%), Japan (10.1%), Germany (9.7%) and China (6.5%). Most prolific authors correspond to Brenan (57), Dodson (41), White (41), Phillips (36), Yamamoto (36), Ellis (35), Iizuka (35), Neukam (35) and Wiltfang (35). Most productive institutions were Harvard University (96), University Texas (94), University North Carolina (72), University Hong Kong (64) and Massachusetts General Hospital (61). Biggest volume of publications was for "Journal of Oral and Maxillofacial Surgery" (45.3%), followed by "International Journal of Oral and Maxillofacial Surgery" (24.3%), "British Journal of Oral and Maxillofacial Surgery" (19.8%) and "Journal of Cranio-Maxillofacial Surgery" (10.6%). In 2001 there were 375 publications, while 2010 were 810, representing a 116% growth.

**Discussion:** Results shows two relevant issues, first, there is a strong concentration of OMS scientific production in United States/England, and its institutions/surgeons; and second, there has been a significant growth in the volume of publications over last decade. It is necessary to create and strengthen new scientific sources in OMS.

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## Treatment of snoring and obstructive sleep apnea with mandibular advancement device: analysis of the results of imaging studies. Preliminary study

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There are several sleep disorders reported by the American Academy of Sleep Medicine. Among them, one of the most common is obstructive sleep apneaobstructive sleep hypopnea syndrome.

In the last decade, several functional appliances have been developed for the treatment of snoring and obstructive sleep apnea, with the mechanism of action is a change in position of the jaw, tongue and other structures of the upper airway.

Considering these problems the aim was to establish linear and volumetric measurements of the upper airway of five patients with OSA who were using a mandibular advancement device (SOS apnea<sup>®</sup>) using the software Dolphing Imaging<sup>®</sup>, determining the amount of linear increase and by volume of the upper airway, and the results of the polysomnographic tests with and without the use of the device.

The results show an increase of airway volume and improvement of polysomnographic testing with the use of the mandibular advancement device proving to be a viable alternative when compared to surgical procedures in the treatment of snoring and obstructive sleep apnea.

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## Using low level laser as a therapeutic treatment of disorders of the inferior alveolar nerve after sagittal ramus osteotomy

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Every day we are faced with a greater amount of patients with either functional or aesthetic reasons require surgical procedures to resolve problems, orthognathic surgery being one of the most used.

The sagittal ramus osteotomy is one of the techniques used in Chile and the world, the correction of dentofacial anoma-