



Surgery in Iran

Dear Editor,

The field of maxillofacial surgery is widely regarded as one of the most challenging and complex areas of medical sciences. Oral & maxillofacial surgeons are responsible for performing a range of surgeries related to oral and facial disorders, including trauma, pathology, esthetic, and reconstruction procedures. However, the prevalence and characteristics of maxillofacial disorders can vary significantly across different countries, making it difficult to localize this field in a particular region. As a result, treatment systems must adapt to the unique conditions of each area over several years.

Oral and maxillofacial surgery (OMFS) is a specialized field that combines both medical and dental expertise. In countries like the United States and many European nations, practitioners must obtain a "Double Degree" by completing medical and dental school before practicing in this field. In other countries, such as Iran, dentistry students are required to complete certain medical school subjects during their residency program to gain a deeper understanding of this complex area.

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OMFS originated during World War I in response to the pressing need to repair severe injuries to soldiers' faces and heads caused by advancements in modern warfare. Initially established in England, OMFS gained popularity and was adopted in other countries. Prior to its emergence, "Oral Surgery" was merely a small part of dental treatment (Lee, and Chuang, 2021, p. 6; Haider, and Latif, 2018, p. 225).

During the traditional medicine period, there needed to be more coherent knowledge of oral & maxillofacial surgery, with most writings related to oral and dental surgery techniques. However, surgical knowledge has always been an important part of traditional medicine. The starting point of this knowledge can be traced back to ancient Iran and Jundishapur University, continuing through post-Islamic medicine.

Some surgeons during this period provided detailed descriptions of oral surgery methods and techniques, demonstrating an independent and clear understanding of treatment methods. Efforts were made to establish fixed principles for surgeries, with a wide range of special surgical tools with different shapes being developed for patient treatment (Karbasi Kheir, 2014, p. 141; Shariatpanahi, 2016, p. 121; Azizi, 2008, p. 118; Daneshfard, Naseri, and Ghaffari, 2022, p. 4270).

During the contemporary era, Tehran University's founders recognized the importance of oral and maxillofacial surgery worldwide. As a result, the curriculum at the Faculty of Medicine included this field of study for medical, dental, and pharmacy students. Because of the reasons mentioned above, the major was associated with dentistry, which means that dental students and dentists have had knowledge of maxillofacial treatments since the inception of the major.

The first maxillofacial surgery department in Iran was established in Razi Hospital in Tehran and managed by Dr. Hashem Hanjan. However, Dr. Hossein Mahdavi became known as Iran's first professional maxillofacial surgeon since Dr. Hanjan only managed the department and did not perform surgeries himself.

Dr. Mahdavi traveled to France and England from 1949 to 1951 to complete courses in maxillofacial surgery (a French-trained maxillofacial surgeon who was trained under the supervision of Dufourmentel, the famous French plastic surgeon). In 1958, a generous benefactor named Hasanali Alborz rented a four-story building near Amir A'lam Hospital in Tehran to house Dr. Mahdavi's department, which remained operational until its closure in 1971.

In 1954, the "Society of Plastic and Maxillofacial Surgeons of Iran" was founded. Two years later, the Amir Alam Hospital bought Kourosh Clinic and became the first center for plastic and reconstructive surgery in Iran. A few years later, with the help of Dr. Mahdavi a new department for craniofacial surgery was added to Kourosh Clinic, which made it the "Clinic of Craniofacial and Plastic Surgery".

The Faculty of Dentistry at Tehran University, originally known as the Department of Oral Surgery, was established in 1937 and functioned autonomously alongside Dr. Mahadavi's department at Amir A'lam Hospital. During this period, dental students received instruction from both departments. Dr. Mahmoud Siasi served as the first head of the Oral and Maxillofacial Surgery Department at the Faculty of Dentistry. From 1942 to 1951, students in the Surgery Department primarily performed tooth extractions and minor surgical procedures.

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In the years following 1961, Iranian dentistry students were awarded scholarships to study in the United States, and as a result, the major became known as "maxillofacial surgery." Specialized dentistry education in Iran, referred to as "residency," began in 1955. However, this training needed a well-established framework and was mostly limited to additional work in specific fields after obtaining a dentistry doctorate. The residency method was discontinued in 1970 but reinstated in the maxillofacial surgery field in 1975.

Dr. Nikzad Javid arrived a year later and introduced specialized training in different fields of dentistry, including maxillofacial surgery, in a modern way. During this transitional period, some individuals had completed OMFS courses in Europe or the U.S., with some holding double degrees in medicine and dentistry while others had single degrees in dentistry. However, their area of expertise was not yet titled OMFS since the program had yet to be renamed from maxillofacial surgery.

Of the many outstanding Iranian maxillofacial surgeons of the 60s and 70s, Dr. Hekmatnejad, Dr. Sodat, Dr. Javid, and Dr. Farshid held double degrees, while Dr. Sadr-ameli, Dr. Malakooty, Dr. Safinia, Dr. Farhad Sedigh, and Dr. Raiesi had single degrees.

At the beginning of this century, the efforts of Dr. Mahdavi in Sina, Amir A'lam, and Razi hospitals helped revive the field of maxillofacial surgery in Iran. Thanks to him, residents have been studying and practicing in this field. Since focused courses were adopted, this field has become more coherent. In 1975, it was renamed Oral and Maxillofacial Surgery; however, this change took a few years to be implemented in Iran.

During the 1960s and 1970s, maxillofacial surgery in Iran experienced significant growth and development. The establishment of the Iranian Society of Oral and Maxillofacial Surgeons in 1967 was a significant milestone in the field. The society aimed to promote education, research, and professional development among maxillofacial surgeons in Iran. In addition, the society organized conferences and workshops to share knowledge and experience among its members.

After completing his OMFS course in the U.S., Dr. Hasan Mortazavi returned to Iran in 1978. He worked tirelessly to have the field renamed in Iran as well - which eventually happened in 1980.

Following the Cultural Revolution of 1980, the first entrance exam for postgraduate courses (the first OMFS specialty board) was held. Since then, eleven universities have added this major to their program.

The department of maxillofacial surgery at Shariati Hospital was established in 1986 under the management of Dr. Mesgarzadeh on the hospital's fourth floor where it has offered extensive medical services over the years; many great surgeons have graduated from Tehran University's program as a result of its success (Kalantar-Hormozi, 2013, p. 205).

In the 1980s, the Iran-Iraq war significantly impacted maxillofacial surgery in Iran. Many soldiers were injured in combat, resulting in a high demand for maxillofacial surgical services. Iranian maxillofacial surgeons gained valuable experience treating war injuries, which helped to advance the field further (Hennocq, Q., et al, 2019, p. 1451; Akhlaghi, and Aframian-Farnad, 1997, p. 928).

In recent years, the five-year residency program in Oral and Maxillofacial Surgery (OMFS) has become one of the most comprehensive courses in both dentistry and medicine. The new program structure involves spending the first two years as stagers to gain more familiarity with medicine, followed by six months of internship rotations in various medical departments. Finally, residents will focus on the specialized operations of OMFS during the program's last two and a half years.

A review of the history of this field reveals that Oral and Maxillofacial Surgery is the only specialty that deals with specialized treatments for the face. By studying the anatomy, diseases, and treatments of the oral and maxillofacial area, specialists in this field gain expertise to provide advanced treatment options.

Today, maxillofacial surgery is a well-established specialty in Iran, with many highly trained professionals practicing nationwide. The field continues to evolve, with new technologies and techniques being introduced regularly. Iranian maxillofacial surgeons are active participants in international conferences and collaborations, contributing to the global advancement of this important specialty.

Conflict of Interest

None.

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