How is orthodontics faring in the Islamic Republic of Iran? A considerable segment of Iran’s population of more than 70 million is seeking orthodontic treatment. Despite the uncertain environment resulting from political changes over the past decades, world-class orthodontics is available from Iran’s well-trained and intellectually able professionals. For example, Hamid Adeli-Nadjafi has a paperless solo private practice in Tehran (see photographs). He starts about 450 patients per year and, due to his special expertise, about 20% of them are orthognathic surgical cases. He has long-term records on 3,000 orthognathic patients. He has served as president of the Iranian Dental Association, executive director of the Iranian Association of Orthodontists, president of national and international congresses, and regent of the International College of Dentists. Adeli-Nadjafi is a fellow of the American College of Dentists, International College of Dentists, and Pierre Fauchard Academy.

Over a thousand years ago, Persian mathematicians developed decimal fractions, algebra, and trigonometry, and chemists studied alcohol and sulfuric acid. Before the Islamic revolution in 1979, Iran’s secular government established outstanding technical universities and institutes. However, the Islamic revolution forced closure of the universities for 4 years. Further stagnation in higher education occurred during the Iran-Iraq war of the 1980s and subsequent economic sanctions. Moreover, during the 1980s, religion and science became intertwined in an era that some scientists call the period of “Islamic physics.” Yet, in the early 1990s, Iranian science enjoyed a resurgence in scientific activities that included collaboration with international scientists. With the election of the Mahmoud Ahmadinejad regime in 2005 and replacement of a moderate government with a radical group of leaders, a new movement has begun to remove secularism from universities and return religious constraints to academia. Mahmoud Ahmadinejad appointed a cleric as Chancellor of Tehran University and in 2006 the Chancellor implemented “forced retirement” of 40 members of the university faculty to eliminate dissent. Further calls to eliminate moderate and liberal instructors have been made. According to the Associated Press in 2006, sophisticated Internet filters installed by the government are used throughout the country, and individuals who subscribe to Internet service providers sign a promise not to access non-Islamic sites.

In the early 1990s, important progress began to occur in Iranian orthodontics. A cleft lip and palate team was formed at the University of Medical Sciences in Tehran. As the number of orthodontists increased, the Iranian Association of Orthodontists became influential. The Fifth International Congress of the Iranian Association of Orthodontists took place November 15–17, 2006, at Tehran’s Razi Congress Center. International speakers and vendors addressed the needs of Iran’s orthodontists, who were educated not only in Iran, but other countries such as England, France, Lebanon, the United States, and Egypt. Orthodontic supplies and technology were readily available for purchase. Iranian orthodontists also participated in the 2005 meeting of the World Federation of Orthodontists in Paris. Postgraduate orthodontic students
are active in research and are well read. For example, in the Dental Research Center of Tehran University of Medical Sciences, faculty and students conduct research on orthodontic materials, biomechanics, new orthodontic techniques, and diagnostic methods.

In 2003, a controversial ban on publications from Iran, Cuba, North Korea, and Sudan was issued in the United States. The US Department of Treasury ruled that scientific journals based in the United States could not edit papers submitted by authors from Iran unless they had the government’s permission. This action followed regulations prohibiting US trade with Iran. Fortunately, in 2004, the ruling was reversed with language stating that international scientific communication should be unobstructed by such restrictions (Kennedy, 2004). Even so, the World Journal of Orthodontics editors still receive inquiries from Iranian authors asking if their articles would be rejected because they are from Iran.

In 2006, conflicts exist between religion and science. The Iranian government has aspirations to be a regional geopolitical power and has considerable revenue from exports such as oil, copper, and pistachios. Iranian orthodontists continue to practice within the dichotomy between radical hardliners who oppose reforms and liberal young people who see the outside world via the Internet, satellite television, and Western music.

According to the World Health Organization, about 67% of Iranian dentists are male and 80% work in private practice. In 2004, it was estimated that there were 13,000 dentists (1/5,500 people), who were assisted by dental hygienists, chairside assistants, denturists, laboratory technicians, and auxiliary health workers. In 2004, there were 18 dental schools offering a 6-year curriculum and requiring a thesis for graduation. Some foreign diplomas and degrees are accepted in Iran. Postgraduate education is required for specialty designation and specialty practice. Most specialists are located in the large cities.

The national health system provides for free treatment in public clinics for children under 6 years of age, school-age children (6 to 12 years of age) who are referred, and mothers after pregnancy. Workers who are employed in offices, factories, and educational institutions have obligatory insurance. Basic treatment visits, scaling, extraction, radiography, and fissure sealant treatment are covered under the national health system. No fluoride is added to the water, but some areas have naturally occurring fluoride. In addition, the 0.2% sodium fluoride mouthrinse program in primary schools has been effective in reducing caries in Iranian children, but additional preventive care including fluoridated drinking water is recommended by experts.

REFERENCES

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