



Editorial

The dental workforce in Libya: an overlooked research topic

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According to American Dental Education Association (ADEA), Dentistry is one of the oldest health professions, dating back to 7000 BC, passing through Greek civilization and the Middle ages to the present day.¹ Dentistry was of interest to many ancient Arab physicians and surgeons.² However, the first book devoted entirely to dentistry was issued in 1530 by Aristotle and Hippocrates, including all diseases of mouth and teeth.³ In 1723, Pierre Fauchard, known as the Father of Modern Dentistry, published his influential book, *The Surgeon Dentist, a Treatise on Teeth*, which described a comprehensive system for dental care, including the idea of dental fillings and the use of dental prostheses, and sugary acids as part of caries process, for the first time.

The first dental college-Baltimore College of Dental Surgery- opened in 1840 in the United States, Alabama led the way by enacting the first dental practice act in 1841, and nearly 20 years later, the American Dental Association (ADA) was formed. The first university-affiliated dental institution, the Harvard University Dental School, was founded in 1867.⁴ In the UK, the first Licence of Dental surgery examinations was in March 1860, and 43 dentists were awarded the qualification.⁵ In the Arabic countries, the importance of dental education emerged early in the 19th century, as the first group of dental students were accepted into the Faculty of Medicine at Damascus University in 1921, and the first dental school was opened at the Faculty of Oral and Dental Medicine at Cairo University in 1925. The first dental school in all of the Arabian Gulf countries was established at King Saud University in Riyadh in 1975. These schools were mainly public institutions until the early nineties before private schools appeared in the 21st century in different Arab countries.^{6,7}

In Libya, there are 15 dental schools. One dental school in the southern province, five dental schools in the north-eastern province, and the rest are located

in the midlands and the North-western province.⁸ The faculty of dentistry of the University of Benghazi is the oldest dental school in Libya which was established in 1974. All dental schools follow almost the same education system in which students finish high school then enrol in a one-year pre-dental education program. This is followed by four years of dental education, including the traditional two years of pre-clinical dental education and two years of clinical dental education. All students are expected to complete a one-year internship to get a bachelor's degree in dental surgery.⁹ Most dental education in Libya is provided free by the public universities, with the increasing establishment of private dental schools.¹⁰

Libya has a significant health workforce, but there is a critical shortage of allied health workers in many health facilities. This shortage occurred due to many reasons, such as insufficient numbers and skills mix of persons being trained or maldistribution of health workforce.¹¹ Tackling this issue needs leadership, multisector collaboration, a long-term commitment and development policies at the country level to bridge the gap between providing qualified health teams with proper training to meet the current health system goals. Above all, this requires coordination between health and higher education ministries.

One of the most significant challenges facing the Libyan health care system is the increased number of dental schools that admit large numbers of students. This, in turn, overburdens the education system that suffers from insufficient teaching staff, insufficient resources and limited capacity of dental schools.¹² The faculty of dentistry of the University of the Benghazi (UoB) is not an exception, although UoB has a long-term reputation for good standards and high-quality graduates. More than 2,000 dentists in Benghazi for nearly 1.2 million inhabitants in 2019 (figure 1).

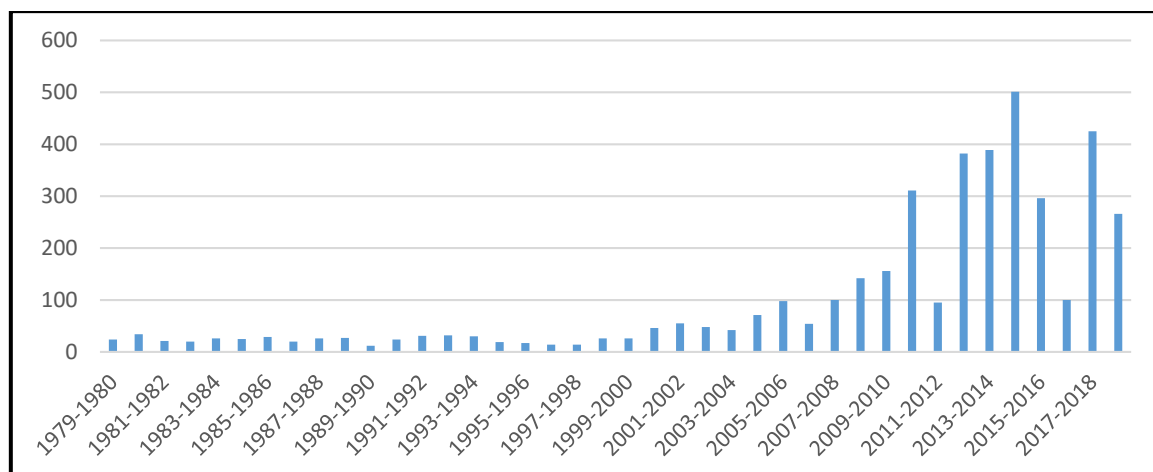


Figure 1-1: Numbers of dental graduates at the UoB between 1979 and 2019

Source: Registrar's office, faculty of Dentistry, University of Benghazi

According to this number, it can be speculated that Benghazi has a dentist-population ratio of 1 for every 400 individuals, which is way higher than the World Health Organization (WHO) recommendation (1:7,500).¹³ This figure raises concerns about the quality and postgraduate pathway of these dentists in the light of anecdotal evidence suggesting many recent dental graduates are either without a job or work in non-dental health sectors such as pharmacies or representatives of Health companies. However, it is well known that career choices are shaped by several factors such as intentions to engage in a particular activity, job positions in the community, financial factors, self-esteem and job opportunities.¹⁴ Therefore, career selection also depends mainly on career goals and varies from one person to another according to needs, self-awareness, skills, abilities, ambitions, resources, and social history.^{14,15} Therefore, it is essential to understand the reasons for choosing dentistry as a career and what happened to this large number of dentists after graduation. So far, no previous studies have investigated the dental workforce in Libya. The available information is based on anecdotal evidence and governmental reports. Libya went through several political and economic calamities since the February uprising in 2011. Social, political, and economic transformation influence the healthcare staff, which is recognized as 'critical' for healthcare systems.¹⁶ Also, the performance of health systems is closely linked to the skills, motivation and commitment of its workforce.¹⁷ In addition, a generational effect resulting in changes in the professional expectations of the emerging workforce compared to older generations which lead the profession, is well documented.¹⁸ Therefore, researching the health workforce is crucial to provide evidence to inform health workforce planning and policy development.¹⁹

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