Use of Dental Loupes and Its Association with Musculoskeletal Problems amongst Dentists in Pakistan

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Dear Editor,

Musculoskeletal problems represent a collection of significant occupational diseases marked by discomfort and impairment impacting the musculoskeletal system, encompassing nerves, tendons, muscles, and intervertebral discs. Their prevalence is notably elevated, leading to heightened disability rates among healthcare professionals [1]. Musculoskeletal problems and neck and back pain are gifts in disguise associated with the dental profession. Over the years there has been an alarming increase in the number of dentists who are suffering from cervical problems regardless of their age in the profession. This has been because the dental profession is quite a demanding profession in terms of long working hours and awkward postures so that dentists can have proper vision and accessibility of the oral cavity [2].

In a recent study conducted in Lahore, Pakistan, it was discovered that 83% of the dentists suffered from cervical pain and were mainly from a younger age group (20-35 years) mainly due to faulty posture [3]. In another study, the severity of neck disability was calculated amongst practising dentists from different age groups. The study revealed that only 16.6% of the sample had no neck disability, the rest 83.4% suffered from neck disabilities ranging from mild to complete disability of the neck [4]. These alarming statistics give us an idea of how the lifestyle of dental professionals might be affected at an early age just because they neglect certain ideal working protocols or are unaware of them. However, these challenges can be overcome by educating and emphasizing ergonomics and chair positioning at undergraduate levels, so that dentists do not feel the need to modify their practice later on. In the long run, adopting an indirect vision with appropriate posture and allowing ample time during procedures proves more beneficial than hastily altering positions to achieve a direct vision and expedite tasks.

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The introduction of dental loupes over the years has helped to subdue the challenges faced by dentists by providing accurate magnified vision without bending their neck or back. It helps to maintain the posture and provides superior treatment outcomes as well. In recent findings, it has been established that dentists who used loupes experienced significantly lower MSPs compared to their counterparts [4]. A study conducted by Ehab *et al*., in 2020 stated that 83% of those who used dental loupes did not experience neck pain while 70% of those who did not use loupes had MSPs [5]. Not only the use of loupes and knowledge of ergonomics should be promoted but limiting long working hours along with breaks and exercises should be incorporated in dental practice.

Even in modern dentistry, less than half of the dental community uses loupes this is mainly due to their expensive nature and lack of training to use them [6]. Moreover, as dentistry is advancing all over the world, it is deemed necessary to evolve the dental practice with the use of loupes, hence making them readily available and accessible to dental professionals with adequate training, assuring favourable treatment outcomes in the future with limited failures.

CONFLICT OF INTERESTS

The authors declare no conflict of interest.

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