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# **Original Research**

### Prevalence of back and neck pain amongst dentists in Saudi Arabia

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#### ABSTRACT:

**Introduction:** Prevalence of musculoskeletal disorders (MSD) was found very high in dental surgeon at world level. Among these MSDs, neck pain and back pain are most common. **Aim and objectives:** A study was done to check the prevalence of back and neck pain amongst dentists in Saudi Arabia. **Materials and methods:** The survey was conducted on a sample of 102 dentists out of which 72 were males and 30 were females. The questionnaire used for the study consisted of 8 questions about general information and 16 questions about specific information on neck and lower back pain. **Results:** 82% of dentists complained of lower back and neck pain while 18% did not have lower back and neck pain. 62.18% of dentists opted exercise and yoga as treatment modalities to relieve the pain. **Conclusions:** It can be concluded that neck and back pain among dentists is not of severe nature. The neck and lower back pain is largely prevalent in dental practitioners. **Key words:** musculoskeletal disorders, back pain, neck pain, prevalence, dentists

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#### INTRODUCTION

Prevalence of musculoskeletal disorders (MSD) was found very high in dental surgeon at world level. Among these MSDs, neck pain and back pain are most common.<sup>1</sup> There were many contributing factors like long hours sitting work, faulty posture, and repetition of movements and use of heavy instrument during work leads to overexertion of cervical spine and lumbar spine. It is very important to maintain an adequate work posture and that the instruments and furniture that the dentist is working with have adequate working characteristics.<sup>2-4</sup> Furthermore, they are exposed to biomechanical risk factors, which indicate that work forced postures, would imply more risk of soreness and presence of skeletal muscle lesions. These lesions could begin to appear at the beginning of their clinical practice as students, by acquiring inadequate postures and working habits that will accompany them for the rest of their professional life, acquiring an unhealthy lifestyle in their work environment.<sup>5</sup> However, there is a lack of data regarding musculoskeletal pain among the Dentists in Saudi Arabia. Hence, the need was felt to conduct a study to check the prevalence of back and neck pain amongst dentists in Saudi Arabia.

#### MATERIALS AND METHODS

The survey was conducted on a sample of 102 dentists out of which 72 were males and 30 were females. The questionnaire used for the study consisted of 8 questions about general information and 16 questions about specific information on neck and lower back pain. The dentists were also enquired about any treatment modality opted. The participants had to complete the questionnaire. Incomplete questionnaires were rejected. The questionnaire included questions pertaining to three domains, demographic and professional characteristics, general medical history, and history of MSD before and after joining the dental profession.

#### RESULTS

It was seen that shows 82% of dentists complained of lower back and neck pain while 18% did not have lower back and neck pain. Also 52% Dentists complained of mild pain in lower back and neck region, 26% of moderate nature, 4% of severe nature, 18% did not complain of any pain. Results showed that 46.21% of dentist's professional life was affected. Figure 1 shows 23.86% had consulted physician. Figure 2 shows 83.54% dentists had taken precautionary measures while 16.46% did not take any precautionary measure. 62.18% of dentists opted exercise and yoga as treatment modalities to relieve the pain.

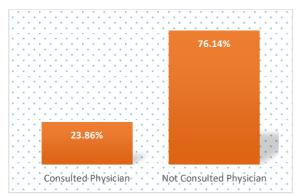


Figure 1: Frequency of Dentists who had consulted physician

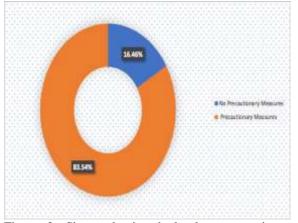


Figure 2: Shows dentists had taken precautionary measures.

#### DISCUSSION

A cross-sectional study was carried out to assess the prevalence of pain and risk factor associated with the MSDs among the dental surgeons of Saudi Arabia. The majority of the participants (82%) surveyed were found to be suffering from MSDS. Shaikh *et al.* also reported a high incidence (80%) of MSDS in their study in 30 dentists.<sup>6</sup> Various other studies also suggest high incidence of MSDS among dentists.<sup>7,8</sup> 65% of males and 35% of females suffered with neck and lower back. These results are similar to the results of study done by Al Wazzan *et al.*, with findings - 58.24% males and 41.75% females suffered with neck and lowered back pain.<sup>9</sup> The most common site for MSDS was lower back (42%), i.e., lumbar pain, 21% experienced cervical pain while 19% experienced pain

in both regions. These results are again consistent with other studies where the most common area involved was lumbar region.<sup>10</sup> On the contrary, Leggat and Smith reported high incidence of cervical pain as compared to lumbar pain.<sup>7</sup> The severity of pain encountered by dentists in our study varied from mild to severe. The majority of the dentist (52%) experienced mild pain which subsided with rest and 4% experienced severe pain. Khalid et al., in their study, reported that only 37% of those suffering back and neck pain sought medical treatment and concluded that these symptoms among dental personnel are not severe enough to ask for medications.<sup>9</sup> The majority of the dentist opted exercise and yoga as treatment modalities to relieve the pain and reported having used precautionary measures like periodic breaks, working in indirect vision.

#### CONCLUSIONS

It can be concluded that neck and back pain among dentists is not of severe nature. The neck and lower back pain is largely prevalent in dental practitioners. That brings along with it a considerable amount of discomfort, lost working time, and economic loss.

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