

Musculoskeletal Disorder Prevalence & Prevention in Dental Professionals: A Rapid Systematic Review

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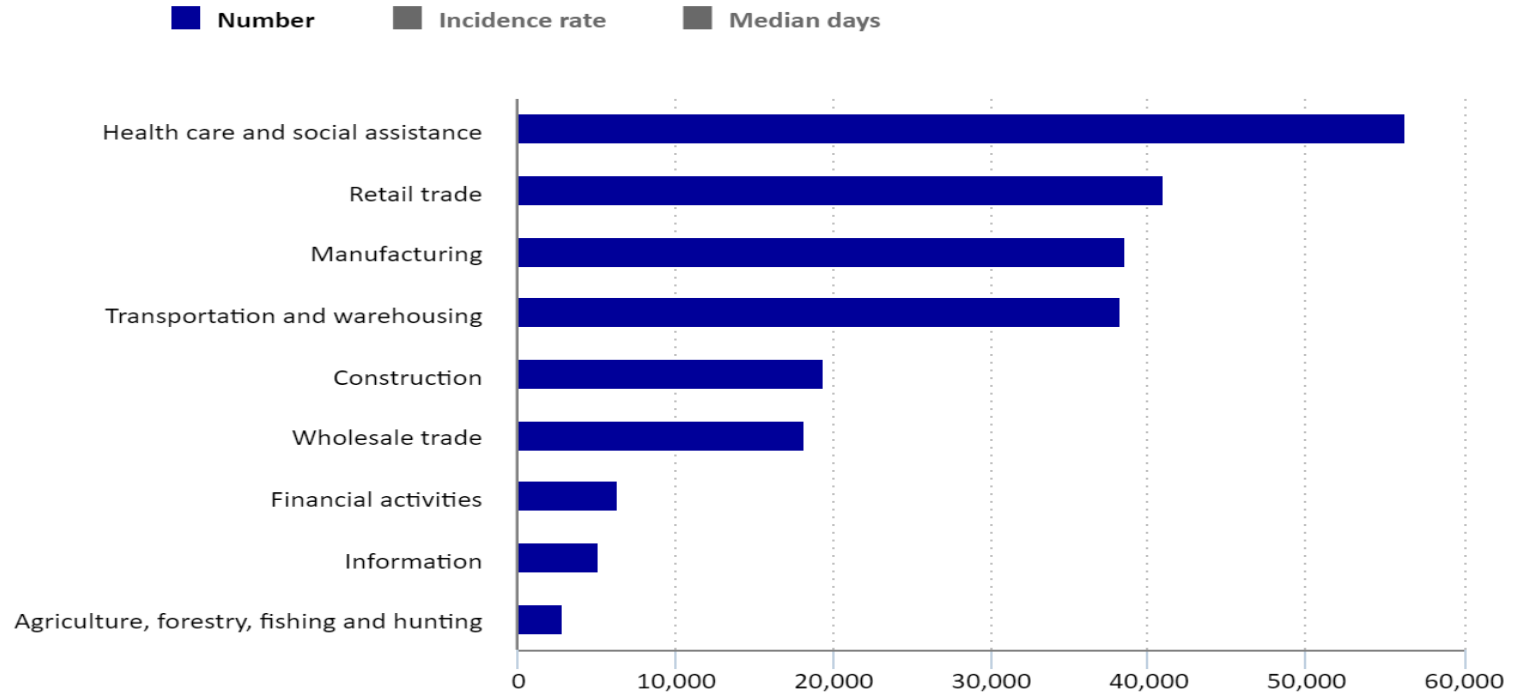
What preventative measures can dental hygienist take to prevent long term musculoskeletal disorders?

Methods

- Rapid Systematic Review
- 50 articles: Google Scholar, PubMed, Researchgate, ADHA, U.S. Bureau of Labor Statistics
- Appraisal Checklist:
 - ✓ Dental professionals suffering from MSDs
 - ✓ 2017 – current day
 - ✓ Scholarly

Background

Chart 2. Number, incidence rate, and median days away from work of injuries and illnesses involving musculoskeletal disorders by selected industries, U.S., private sector, 2018



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.



(U.S. Bureau of Labor Statistics, 2018)

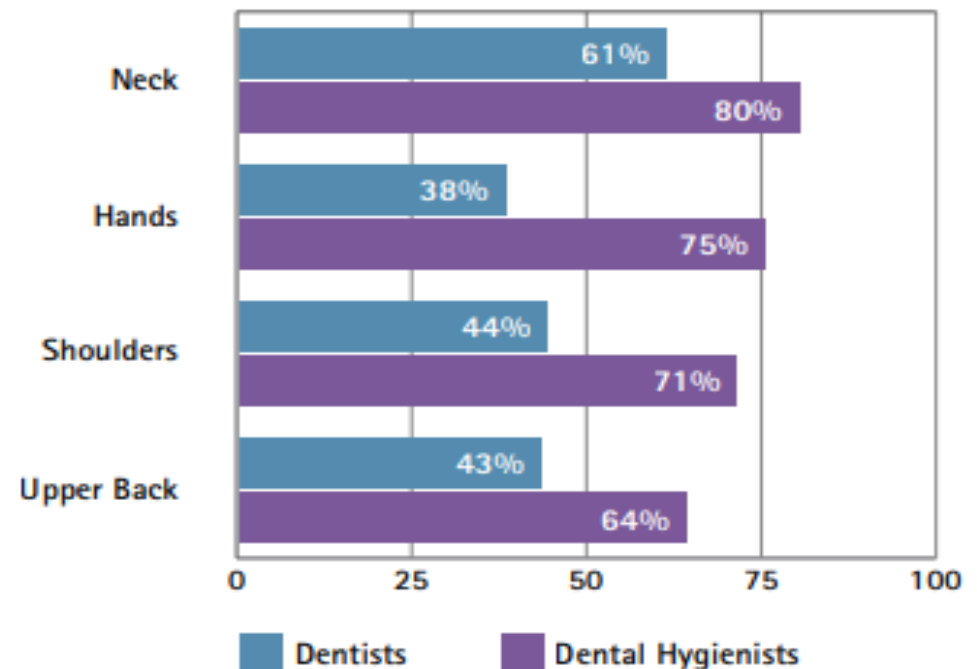
Results



Common causes

Where is the pain?

Figure 1. Prevalence of MSDs by anatomical region^a



(Johnson, Kanji, 2016)

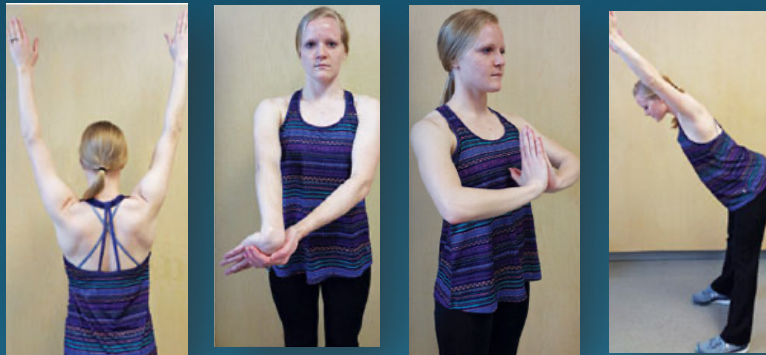
Results

Multiple preventative measures

- Figure 8 shoulder brace
- Loupes provide visual comfort
- Yoga & stretching manages pain



(Yoon, Tae-lim, et al., Nov. 2020)



(Bell, Coplen, et al., 2019)

Discussion

- **Causes and solutions of MSDs in the dental field**
- **Ergonomic implementation**
- **Chair-side stretching, yoga and other physical activities**

Conclusion

Wide scale curriculum changes

Assess

Virtual Reality

Apply preventative techniques