

Bending Over Backward: Musculoskeletal Disorders & Dental Providers

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QUESTION

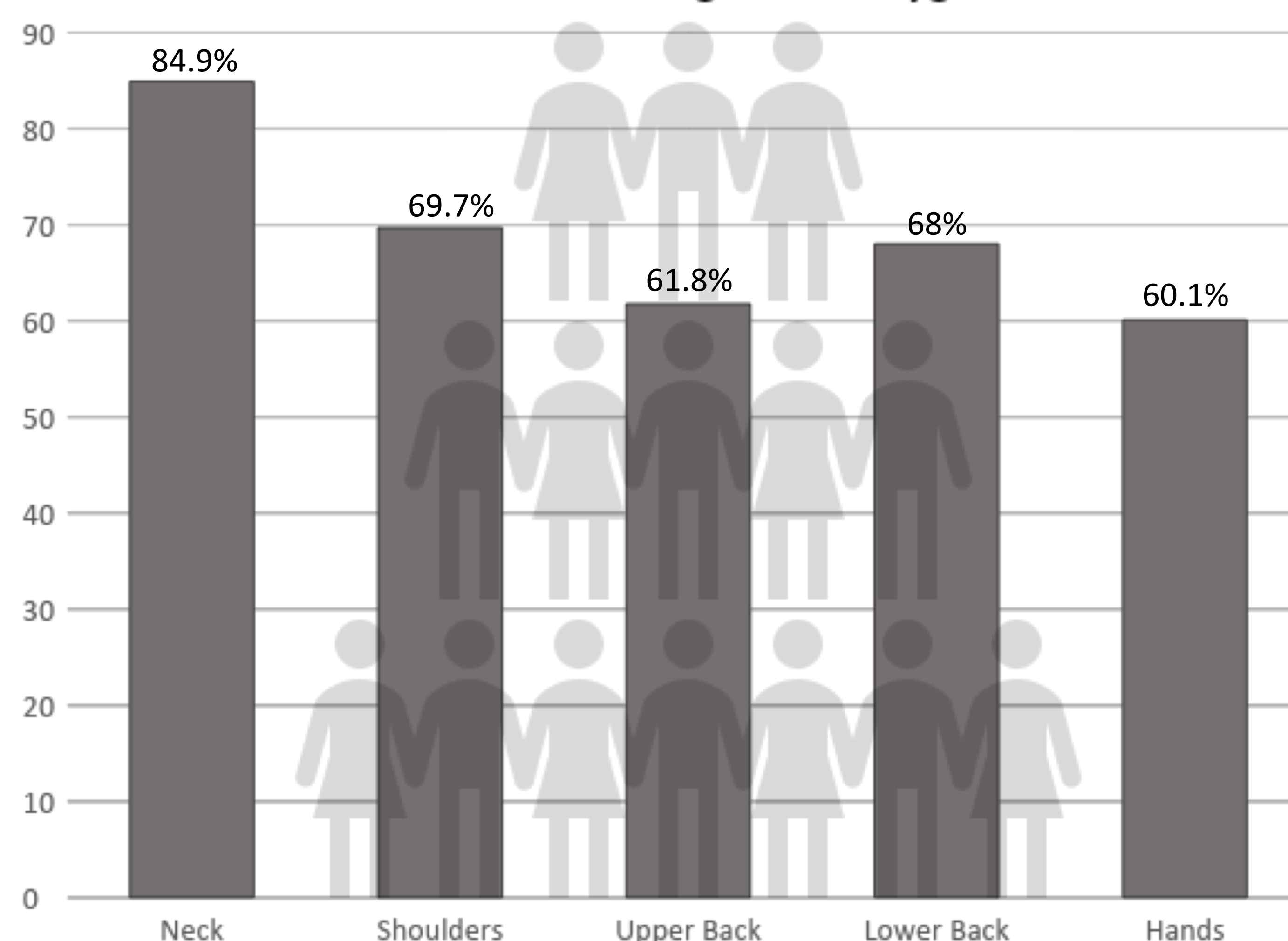
For dental healthcare providers, what preventative measures can be taken to avoid the development of musculoskeletal disorders (MSDs)?



INTRODUCTION

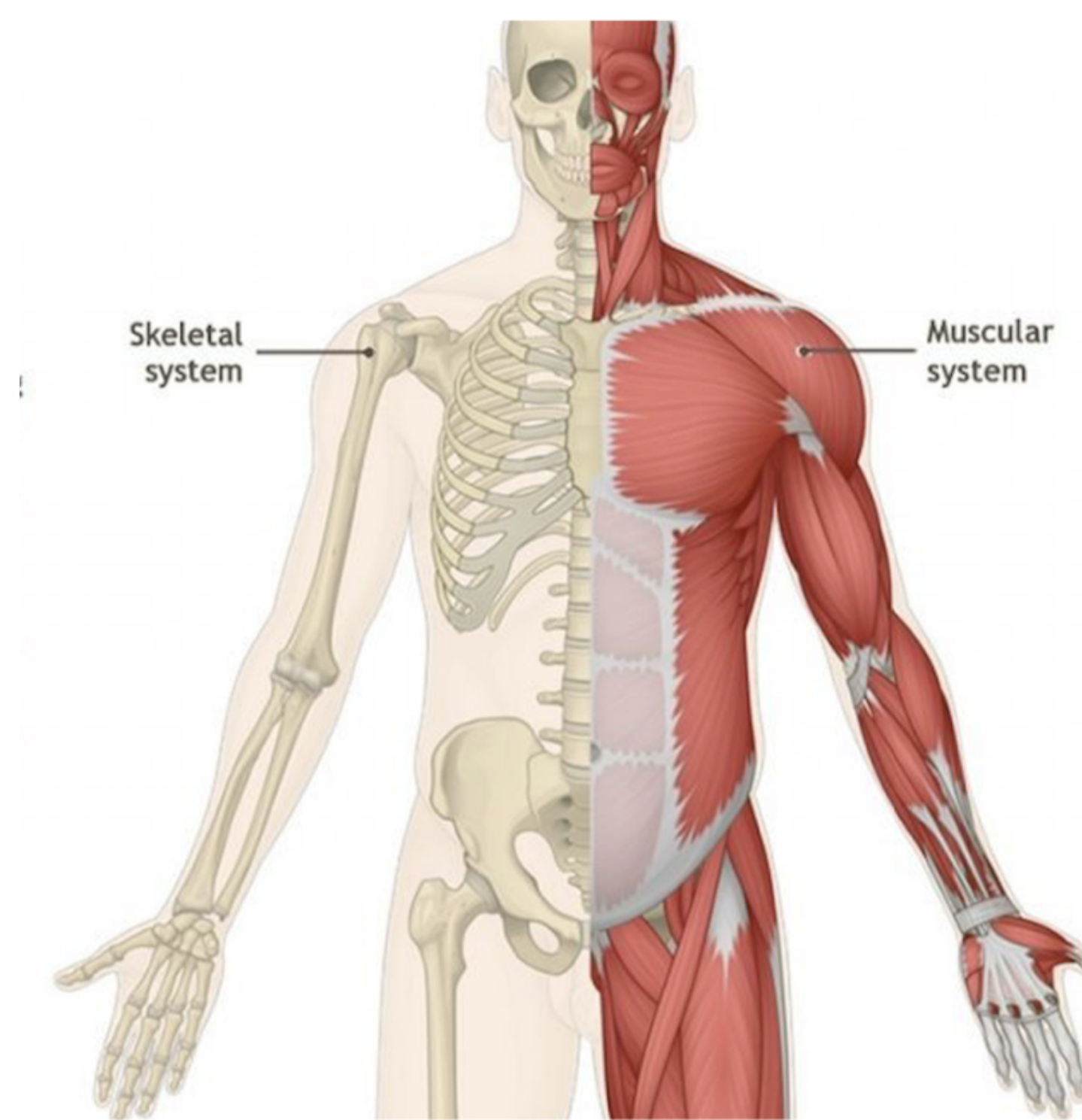
- Pain and work-related **MSDs damage the careers and quality of life** of dental practitioners
- The prevalence of MSDs is reported as high as **93% among dental practitioners**
- MSDs are multifactorial and the **symptoms appear very early, even during educational training**
- As many as **68% of students** reported MSDs.
- **Preventative measures** are imperative in avoiding MSDs
- Common areas: neck, shoulder, and lower back

Common MSDs Among Dental Hygienists



RISK FACTORS

- **Repetitive motions**, prolonged **static posture**, and **continuing to work** despite injury
 - Muscle imbalances and **awkward working positions**
 - Forceful **pinching** during scaling
 - Less flexibility and core strength
 - **Stressful workplace** environment
 - Occupational stresses such as **high volume of patients**, shortage of dental staff, **time pressures** and poor working conditions
- These RISK FACTORS lead to MICROTRAUMA MUSCLE TEARS**



PREVENTATIVE MEASURES

EDUCATION

Throughout school learn appropriate working postures.
"Adopt the ergonomics culture"

ERGONOMICS

Posture, positioning, ergonomic chair design, improved magnification and lighting (loupes)

EXERCISE

Dental professionals **fitness routine: Aerobic, Stretching, & Strength** training exercises

INSTRUMENTS

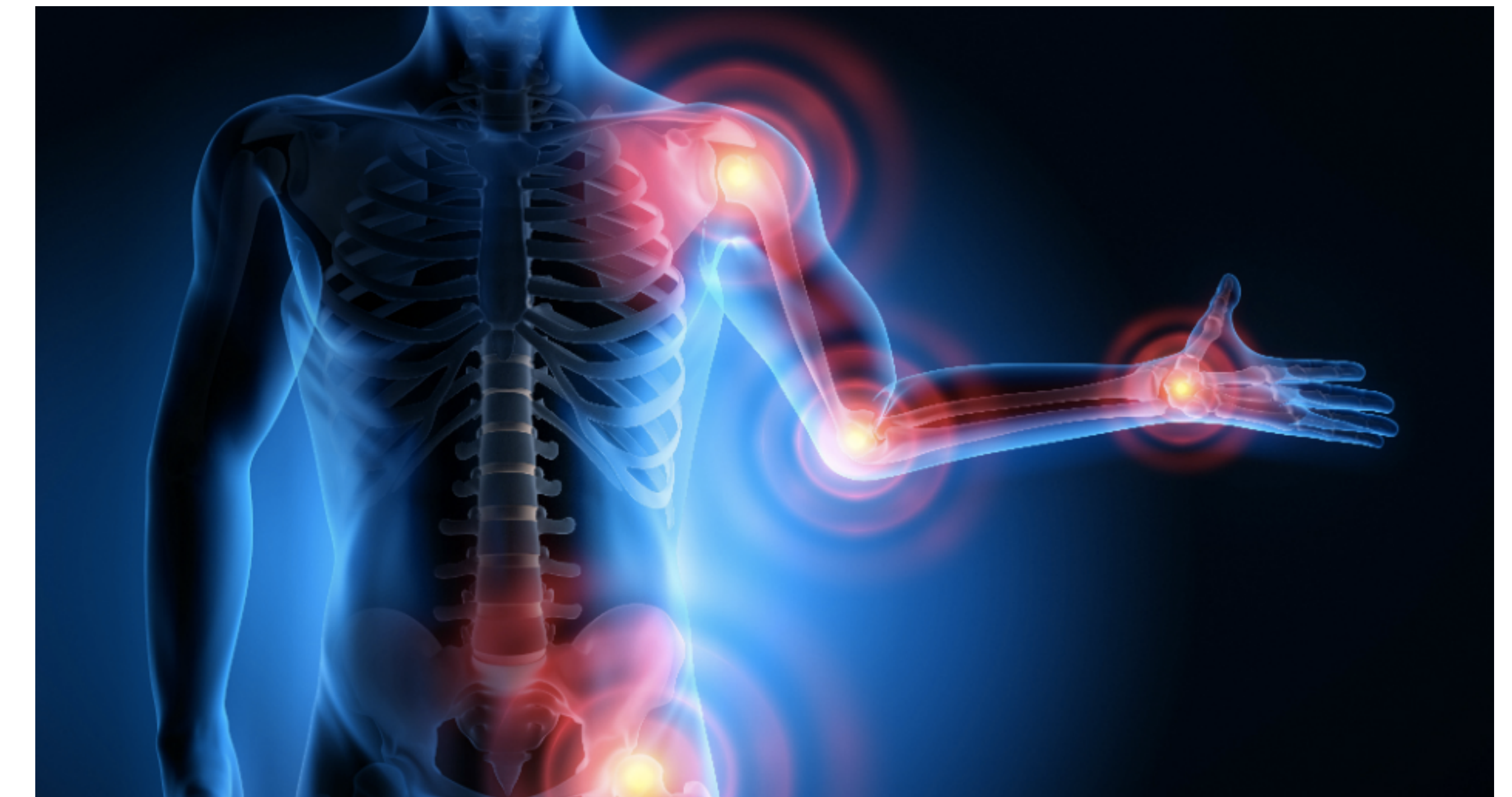
Best is tapered, **round shape** and a **10-mm diameter minimum & cordless**

STRESS REDUCTION

Prioritize a healthy workplace environment and implementation of **stress management**

CONCLUSION

- **Early diagnosis** and treatment will result in the best long-term outcomes
- There are effective ways to **prevent MSDs**, thus increasing the **longevity** of oral care providers' careers and increasing **quality of life**



ADDITIONAL INFORMATION

- Of 206 dentists, the **major causes of missing work** were the presence of **symptoms in the neck, shoulders, and lower back**
- MSDs are found more frequently in women
- There is a **direct correlation** between MSDs and age, **high body mass index**, the total number of **daily patients**, and **sedentary time** with MSDs

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