

ISSUE 11: IN-SERVICE BRIEF ERGONOMICS IN DENTISTRY

MUSCULOSKELETAL DISORDERS OR MSDS ARE INJURIES AND DISORDERS THAT AFFECT THE HUMAN BODY'S MOVEMENT OR MUSCULOSKELETAL SYSTEM (I.E. MUSCLES, TENDONS, LIGAMENTS, NERVES, DISCS, BLOOD VESSELS, ETC.).

Musculoskeletal disorders (MSDs) among dental practitioners is cited as the main reason for early retirement.¹

The prevalence of these MSDs among dentist and dental hygienists can range from 64-93%, with chronic hand and wrist pain prevalence at 40-75 %.^{2,3,4}

Work-related musculoskeletal disorders (WRMSDs) generally affect the muscles, nerves, blood vessels, ligaments, joints, and tendons. Most WRMSDs develop over time and they can progress from mild to severe disorders. These disorders are seldom life threatening but they impair the quality of life of a large proportion of the adult.



HAND AND WRIST WORK-RELATED RISK FACTORS FOR DENTISTS:⁵

- Exerting excessive force
- Excessive repetition of movements
- Awkward postures or unsupported positions
- Static postures or positions that a worker must hold for long periods of time; compression which can concentrate force on small areas of the body
- Inadequate recovery time due to overtime, lack of breaks, and failure to vary tasks
- Excessive vibration, usually from vibrating dental tools/drills, which can decrease blood flow, damage nerves, and contribute to muscle fatigue

PHYSICAL IMPACT OF WEARING GLOVES

Increased thickness, reduced elasticity and subsequent rigidity may cause hand fatigue and potential MSDs in dental providers' when these gloves are worn for long periods of time due to increasing:

- Muscle activity
- Wrist deviation whilst reducing hand grip strength
- Forearm torque strength
- Touch sensitivity



EVOLUTION OF ERGONOMICS AND MEDICAL GLOVES

New innovative ergonomically designed and certified glove solutions have proven to help reduce muscle strain and improve muscle performance in the hand, wrist and arm. They can minimize the risk of injury, meet regulatory compliance, improve practice performance and increase safety. An easy hand injury prevention strategy to implement!



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➔ Please read InTouch Issue 11: Ergonomics in Dentistry for more information on this topic

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