

Back Quality Ergonomics, LLC Your Body, Your Choice

by Keverly Sugden, RDH, BASDH

You start your dental hygiene day comfortable, relaxed and ready to work. Somewhere around lunchtime you feel a twinge of pain and by the end of the day your neck, shoulder and back muscles ache, and you wonder how you can finish the week. Compared to the average woman worker, female dental professionals might experience two to four times more musculoskeletal pain. The National Institute of Safety and Health (NIOSH) indicates a strong relationship between neck and shoulder disorders and static muscle contractions and postures maintained by the dental hygienists. The statistics are in and dental hygienists need to be aware of proper ergonomics and prevention of musculoskeletal disorders.

Prevention of musculoskeletal disorders (MSDs) requires an understanding of them. They are caused by muscle imbalances, which is a lengthening of one muscle and a shortening of an opposing muscle. The top three MSDs found in hygienists are tension neck syndrome, trapezius myalgia and chronic low back pain. Hygienists are often temporarily or permanently disabled due to these MSDs. The factors that cause MSDs are prolonged and awkward positions, poor posture and poor flexibility as well as weak core muscles, stress, infrequent breaks and improper equipment.

Dental professionals who are aware of proper posture will reduce muscle strain and pain. Remember those constant reminders in dental hygiene school from your instructors to position your patient and yourself correctly? The operator chair should be adjusted first and then the patient chair can be adjusted. Proper posture is achieved by sitting erect with the operator seat's lumbar support giving support to the back. Hygienists need to position their feet flat on the floor and the thighs should slope downward slightly, with the hips slightly open and tilting slightly forward. This position is called "active sitting" and will cause no lumbar disc loading and alleviate pain. Passive sitting occurs in many of the improperly designed chairs with no lumbar support. Passive sitting puts a load on the lumbar discs and eventually causes pain due to flattening of the lumbar curve and discs. A good operator stool must be small enough for the hygienist to fit snugly against the back of the chair. An ergonomically designed operator chair will help assure proper spinal alignment and prevent flattening of the lumbar curve and the associated pain and disability.

Back Quality Ergonomics, LLC, (BQE) designs and manufactures dental office and operator chairs that are custom fitted to the individual dental professional. BQE was founded by Dutch physical therapist Ernst Haakma. BQE offers specialized knowledge of the human body with specific products and custom-made advice. The CorrectSit and the Dynamic are both models that help dental professionals achieve proper posture. The Dynamic ergonomic stool has a saddle-shaped seat, which facilitates opening of the hip angle and maintaining the lumbar curve. The lumbar support moves forward and the seat surface adjust automatically to the active and passive seating position. This automatic tilting is individually set. The back support is adjustable in height and depth and is ideal for dental professionals. The CorrectSit is an ergonomic work stool with the manual adjustment of the tilting mechanism and has an adjustable back support. Check out www.bqergonomics.com for more information about the company's philosophy and products.

The hygienist can enjoy a more pain-free career by practicing proper posture, and choosing good equipment. Pilates exercises and stretching are also imperative for the dental professional. Take care of yourself, and you can take care of your patients. ■

