Don’t let pain end your career

One-third of dentists who retire early were forced to become of musculoskeletal injury

Are your aches and pains progressing to a point that you’re wondering if your days as a dentist, hygienist or assistant might be ending sooner than you had planned? Or maybe you’re just getting hints, especially at the end of the day, that with a few more years of this, things might start getting tricky?

It doesn’t have to be that way, according to Bethany Valachi, a physical therapist, dental ergonomic consultant and author of Practice Dentistry Pain-Free. Valachi speaks today and Saturday on two ergonomics-related topics, with the goal of making sure you’re not slowly destroying your ability to work.

Valachi runs a company that provides research-based dental ergonomic education, and she is an instructor of ergonomics at Oregon Health Sciences University School of Dentistry in Portland, Ore. She lectures internationally and has published more than 50 articles in dental journals worldwide.

She answered questions from Dental Tribune about what attendees can expect from her two PDC presentations, “Neck, Back & Beyond: Preventing Pain for Peak Productivity” and “Fitness 101 for Dental Professionals: Secrets for Comfort & Career Longevity.”

Why is this education important?

Two out of three dental professionals report occupational pain, which if left unaddressed can lead to injury or early retirement. In fact, one-third of dentists who retire early are forced to, due to a musculoskeletal injury.

Unfortunately, most team members think that work-related pain is an unavoidable consequence of their careers. Not so! With current, research-based interventions, most team members can effectively reduce or eliminate their discomfort.

If somebody is able to attend only one of your two decisions, how would you help them decide?

Because most pain and injuries in dentistry originate from poor operator ergonomics, I would recommend “Neck, Back & Beyond: Preventing Pain for Peak Productivity,” which focuses on proper ergonomics in the operatory.

I have seen too many dentists and hygienists spend a plethora of money on chiropractors, exercise programs, etc., only to return to the scenario (the dental operatory) that created the problem in the first place.

How does this lecture differ from other ergonomic and wellness lectures?

First, it’s research-based ... and fun. You won’t hear hand-me-down education in this lecture. What you will learn are the newest dental ergonomic and wellness interventions based on the latest research in dental ergonomics, kinesiology, seated biomechanics, exercise physiology, neck and back pain and much more.

Team members often comment, “I wish I had learned these techniques 20 years ago” or, “You’ve saved my dental career.” These are effective, practical and easy-to-apply concepts in the dental operatory and at home.

Are ergonomic needs of dentists and hygienists different?

Yes! Because of their very different hand movements, tasks, movement in the operatory and patient-positioning needs, dentists and hygienists are prone to slightly different musculoskeletal...
Scenes from Thursday

- It's a bright shiny day at the Sinclair Dental booth (No. 727) where team members are handing out yellow roses.

- Donny Chan and Esah Yip at the Malaysian Rubber Export Promotion Council booth (No. 345).

- Hygienist Allison Ransier, left, and dental assistant Marianne Beckett stopped to map out their plans for the day.

- Jennifer Murphy, Chadi Saade and Sara Jean Louis, at the Dental Savings Club booth (No. 1329).

- Jim Ball discusses technical details at the Instrumentarium booth (No. 1247).

- Barbara Cox at the Hands-On Training Institute booth (No. 552).

- PDC staff member Kristie Ritter at registration with daisies chosen to match the colour of this year’s PDC theme.

- The GSK booth (No. 835) with a lively crowd of visitors on Thursday.

- Arlene MacKinnon flashes a smile at the Shofu booth (No. 1430) while Dan Christiansen (brown jacket) discusses product details with booth visitors.

Photos by Robin Goodman, ‘today’ staff
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strressors and require different equipment and recommendations. Certain armrests, delivery systems, operatory layouts, HVE options, patient positioning techniques and exercises are more appropriate for hygienists than dentists and vice-versa.

Are you seeing any new trends in ergonomic problems in dentistry?
Yes. Recently I have seen an increase in two problems. First, in both my in-office consultations and at the dental school, I have seen an increase in the percentage of dental professionals and students with neck/back pain that is likely related to the use of non-ergonomic dental loupes. Most dentists and hygienists do not realize that loupes with poor declination angles can actually create or worsen pain. In Friday’s (Neck, Back & Beyond) seminar, I will discuss the three criteria for selecting loupes that will improve your health, not make it worse.

Second, dental professionals are prone to unique muscle imbalances and require specific exercise guidelines to prevent worsening of these imbalances and being thrown into the ‘vicious pain cycle’.

Recently, I have seen more and more team members seek the advice of personal trainers [with little experience] who give them the same routine they give everyone else; or they buy exercise DVDs designed for the general public. This can worsen their unique imbalances and create more pain. In Saturday’s (Fitness 101) seminar, I will be teaching an exercise program that I developed specifically to correct the painful muscle imbalances of dental professionals, based on current research.

What are dental professionals doing wrong when trying to manage their pain?
From a show of hands at my seminars, I calculate that at least 40 percent of team members have been to, or currently go to, the chiropractor. In the Fitness 101 seminar, we will review the etiologies of work-related pain in dentistry and take a careful look at which health-care professionals may be best suited to treat specific pain syndromes (i.e. trigger points, shoulder/arm pain, hand pain, postural asymmetries, trapezius myal-gia, back pain, etc.).

Many attendees have not heard of some of these specialists. Guess what? It’s usually not a chiropractor. Therapies aimed at immediate relief usually provide temporary results.

What’s a typical ergonomic problem an average practice can easily address?
In consultations, I consistently see one primary ergonomic problem that doesn’t cost a penny to resolve: Access in the 12:00 position. Obtaining easy access in the 12:00 position is critical to the long-term health of dentists and hygienists. Dental chairs often are installed with only 14 inch or so clearance between the end of the headrest (when reclined) and a fixed counter, forcing the operator to work in the 1:00 position, which is extremely hard on the body. The industry standard is 20–22 inches of clearance in the 12:00 position. To resolve this, a choice of two strategies may be used:

1) Move the patient chair toward the foot of the patient. This might be limited by an electrical box or plug. [You’ll need two or three strong helpers] If you are unable to gain the desired 12:00 clearance, you may combine this with Strategy No. 2.

2) Rotate the patient chair 20 degrees or so to gain access in the 12:00 position. There is usually a kick lever at the bottom of the chair that allows rotation of the chair.

How important are ergonomic/fitness habits away from the practice in supporting optimum health at work?
Extremely important. A combination of aerobic, flexibility and strengthening should be addressed. While most dental professionals realize that they should target the “stabilizing” or “postural” muscles in an exercise routine, most don’t realize that how they strengthen them is just as critical. In the Fitness 101 program, I will introduce the supportive research for the technique of muscular endurance training for dental professionals, as well as an exercise routine.

Also, because of their predisposition to unique muscle imbalances, certain exercises that dental professionals think are targeting the “correct” muscles simultaneously engage the tight, short and ischemic muscles that should not be strengthened.

Generic exercise routines, such as Pilates, need to be modified specifically for dental professionals to prevent the possibility of worsening of imbalances in the neck/shoulder.

We will also discuss which exercises and gym machines can actually worsen your health.

What’s the main thing you want attendees take away from your sessions?
Pain is not a necessary byproduct of dentistry. With current, accurate research-based interventions, most team members can learn to prevent, manage and reduce work-related discomfort or injury.

Dozens of dental professionals have emailed me after these lectures and informed me that they are either pain-free or significantly improved!