

BACK TO THE ISSUES

In the first of three articles, Sarah
Bradbury from Dentists' Provident
takes a look at accidents and
musculoskeletal issues, when and
how they occur and what could
be done to prevent them.

Introduction

Dentists of every age reading this will remember the ups and the downs of being a dental student, whilst others will filter out the lows and only remember the good times; being young, fit and healthy away from the pressures of the 'real world'. But when you are going through the five or so years of toil, you feel there is enough on your plate keeping up with the late-night studies, passing exams and learning how to deal with patients to take on any more strains and stresses.

Dentistry is considered by many to be a stressful profession; you are extremely reliant on your physical and mental wellbeing, from the excellent functioning of your eyes, back, hands and feet to your patient, calm considered nature and quick thinking. This pressure never really relents throughout your career.¹

Accidents do happen

When you are young you never think anything will happen to you but the statistics tell a different story. Dentists' Provident 2018 claims statistics show that the age of the youngest claimant was 27, and that isn't unusual.² And even while at dental school you hear stories of peers having to take time off, whether it's for a trip on an evening out, a slip on the ski slope or a clash with an opponent in rugby. If there is minimal impact these can be amusing stories to tell friends, but what about when these tales turn into horror stories? Horrors like having to retake your fourth year, not keeping up with your clinic's targets, failing to make the grades in your finals or not even being able to become a dentist.

Injuries, however big or small can have a huge impact on your life and studies, so taking action to protect yourself as early as possible could help to minimise the inevitable impact you'll encounter later on.

A third-year dental student from a London dental school unexpectedly injured his wrist and shared his experience. 'Having to take a few months out of my studies because of an injury has been extremely challenging. Seeing your colleagues develop their clinical skills, and not be allowed into clinics to manage your patients makes you feel powerless to say the least. I had to work exceptionally hard to catch up with all my university work. For much of the time I couldn't even type, write or even concentrate because of the pain following surgery. I realised that in order to have a long-lasting career in dentistry, you have to look after your body. Without your body there is no dentistry.'

Musculoskeletal issues

Musculoskeletal disorders (MSDs) are potentially more of a longer term consideration, and there are many studies and papers about dental students and dentists suffering from them throughout their careers. The primary cause of them can be the prolonged static postures while working around a patient, or even a phantom head. Static postures, for example, put a greater strain on your body than dynamic postures, requiring you to contract more than 50% of your muscles just to maintain your position. Relying on static postures could lead to muscle imbalances that can perpetuate, as the more

pain you experience to correct these imbalances the less you are likely to be able to. The way a dental professional moves can mean overarching the lumbar spine, potentially leading to postural imbalances, mal-coordination and inevitably pain.³

Reading through scientific papers it is clear that this is a worldwide problem. A study in 2016 in an Australian dental school noted that 85% of students from all years reported MSDs, specifically in their necks and lower backs, and this study concluded that ergonomic education was a key requirement as part of the curriculum.⁴

A research paper in the *British Dental Journal* from research undertaken at Bristol Dental School supported the same statistic, finding that 85% of dental students suffered from MSDs due to poor posture, causing both fatigue and injuries. In the future this could potentially lead to reduced working hours or even early retirement. They also noted that females seemed to have an increased susceptibility to pain associated with posture and that posture was worst with the second year students. They concluded that it was important to obtain and maintain a good posture from a young age; alternating sitting with standing and regularly using loupes. Their recommendations were for all clinical years to have more structured postural training and assessments.5 Clinical training is now undertaken from the first year at Bristol as well as many other dental schools, so these issues could present themselves from a very young age and that has implications for the future.

Whatever stage you are at in your career now, take the time to think about whether you have a preventive approach to your physical health and wellbeing, and that you try to spot early signs of discomfort or pain. If you look after yourself and protect what is important now, you could be set for a long, fulfilled and pain-free career.

References

- Collin V, Toon M, O'Selmo E, Reynolds L and Whitehead P. A survey of stress, burnout and wellbeing in UK dentists. Br Dent J 2019; 226: 40–49.
- Dentists' Provident Claims statistics. Available online at: https://www.dentistsprovident.co.uk/media/1470/ claims-statistics-2018.pdf (Accessed March 2020).
- Moodley R, Naidoo S and van Wyk J. The prevalence of occupational health-related problems in dentistry: A review of the literature. J Occup Health 2018; 60: 111-125.
- Ng A, Hayes M J and Polster A. Musculoskeletal Disorders and Working Posture among Dental and Oral Health Students. Healthcare 2016; 4: 13.
- McLaren W and Parrott L. Do dental students have acceptable working posture? Br Dent J 2018; 225: 59–67.

Sarah Bradbury

Vol 27 | Issue 2

https://doi.org/10.1038/s41406-020-0122-1