

Clinical chills

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Starting the clinical side of dentistry can be a daunting experience; you may not know what to expect and find it difficult to apply theory to clinics. Frantically scaling away at a phantom head whilst holding back my tears will undoubtedly be my most memorable clinical experience. Getting to grips with the practical side challenged me the most, but I've found ways to deal with this and created a short guide based on my experience to help.

## Stop stressing too much

I know – it's much easier said than done, but we must stop excessively stressing to perform better. The Yerkes-Dodson law highlighting how inordinate stress (i.e. arousal) levels can impair performance.

Although this law has some limitations, more recent statistically significant evidence from a cross-sectional descriptive study shows that stress impairs clinical performance by decreasing concentration and problem-solving activities. Furthermore, simulation studies demonstrate that stress can debilitate psychomotor activities. Furthermore, simulation studies demonstrate that stress can debilitate

# Don't negatively compare yourself to others

Why couldn't I work as effortlessly, quickly, or even neatly? I find these thoughts stress-inducing, so you may find them triggering too. To combat them, I tell myself that everyone works at their own pace and that I'll reach my desired level of mastery if I consistently put in the effort to progress. I also remind myself of my clinical strengths, e.g. communication, and celebrate small achievements, such as improving my scaling technique.

#### Be optimistic

My other root of stress was attending my sessions with pessimism. If you expect a situation to have a bad outcome, you will perceive it as more stressful, making it harder to overcome. For example, I used to find it challenging to follow instructions during demonstrations as my higher stress levels would degrade my ability to learn

and concentrate. However, after adopting a positive mindset, I found it easier to push through clinical sessions.

#### **Create anecdotes**

I think of any clinical mishaps I have as anecdotes I can share in the future. The good thing about this is it makes my mistakes memorable, so I'll avoid making them in the future without feeling bad about myself. For example, I forgot to spray adhesive on my custom tray and surfactant on my phantom head before taking master impressions. The result: a strength test ending up with me snapping the handle off my tray. Yes, it went wrong, but at least I'll avoid making this mistake again, thus improving my clinical performance.

### Note feedback

Ask your clinical tutor for feedback and advice, and then note these after clinical sessions. Writing more notes on top of our already busy schedules may be tiresome, but it is beneficial as it gives you a better idea of what to do next time. In addition, if you learn better theoretically, knowing the reason behind specific steps helps a lot when remembering them.

## References

- Ye Y, Hu R, Ni Z, Jiang N, Jiang X. Effects of perceived stress and professional values on clinical performance in practice nursing students: A structural equation modeling approach. Nurse Education Today 2018: 71: 157-162.
- Bajunaid K, Mullah M A, Winkler-Schwartz
   A, et al. Impact of acute stress on psychomotor bimanual performance during a simulated tumor resection task. J Nuerosurg 2017; 126: 71-80.
- 3. Russ S J, Morrison I, Bell C, Morse J C, Mackenzie R K, Johnston M K. Relationship between acute stress and clinical performance in medical students: A pilot simulation study. *BMJ Simulation and Technology Enhanced Learning* 2018; 4:

## Getting to know you

- Cats or dogs? Dogs
- Favourite ice cream? Solero
- Guilty pleasure TV show? 90 Day Fiancé
- Does pineapple belong on pizza? Absolutely, but not on mine. I'm allergic to it.
- You want to become a dentist because... I don't trust anyone else with my teeth. I've only visited the dentist four times in my life!



WTF! What the Fluoride

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Dental caries is a common oral disease that affects individuals of all ages worldwide. Various preventative measures have been implemented to address this issue, including the use of fluoride. This article aims to explore the effectiveness of fluoride as a preventative measure for caries.

Dental caries is a bacterial disease that damages the structure of the tooth by demineralising the enamel hydroxyapatite in numerous steps. The prevalence of dental caries in five-year-olds in the UK is at 29% in 2019. The prevalence of dental caries in adults was last recorded in 2009 with 31% of all adults having at least one decayed or filled tooth. Due to the increasing prevalence of dental caries in the UK, it is a significant public health issue, that must be addressed by preventative measures.

Dental caries is a multifactorial disease that contributes to its aetiology, with it being the most prevalent oral disease globally, affecting individuals of all ages.<sup>3</sup> These factors can be categorised into three main categories: host factors, microbial factors, and environmental factors.<sup>4</sup>

Fluoride helps to prevents caries by disrupting all three categories in the multifactorial disease. Fluoride enhances the resistance of the enamel to acid attack by incorporating Fluoride ions into the crystal lattice of the enamel, making it more resistant to acid dissolution.<sup>5</sup> Fluoride can also inhibit the growth and metabolism of cariogenic bacteria in the mouth, such as *Stretococci Mutans* and *Lactobacilli*.<sup>4</sup> Local fluoride application in the form of varnish, toothpaste or mouthwash can provide a localised protective effect on the tooth surface.<sup>6</sup>

Administering fluoride as a dental professional can be done through a number of routes, such as high fluoride toothpaste, fluoride varnish and fluoride mouthwash.<sup>7,8</sup> Another controversial way that fluoride is being 'administered' is through fluoridated water. Although this way ensures that this would benefit the entire community and in turn reduce the number of patients that have caries, it has some ethical issues involved. One of the ethical issues

It is important for dental students to understand the effects of preventing caries,