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Applicant details

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Why I would consider a career in periodontology.

Systemic health is mirrored by the oral cavity, illuminating the general well-being of patients to clinicians. A career in periodontology presents exciting opportunities for me to directly impact individuals' health combined with reducing the global prevalence of periodontitis. It is shocking that in 2010 severe periodontitis (SP) was the sixth-most prevalent condition of mankind, (Figure 1) affecting 10.8% people worldwide (Kassebaum et al., 2014) and that SP is the worst form of periodontitis, meaning many other degrees of periodontitis are underrepresented. Yet, media attention remains low, failing to promote awareness that reducing modifiable risk factors can potentially prevent periodontitis and associated devastating diseases.

Figure 1 (Kassebaum et al., 2014) Age standardised prevalence (proportion) of severe chronic periodontitis in 2010 worldwide.

Periodontology is a diverse discipline of dentistry where the impact of successful treatment can prevent and stabilise periodontitis, and contribute to mitigating diseases of known association. Substantial evidence supports a close association between diabetes and periodontitis (Taylor et al., 2013), whilst rheumatoid arthritis patients have an increased prevalence of periodontal attachment loss compared to non-diseased individuals (Pischon et al., 2008). In addition, periodontitis is associated with low birth weight and preterm birth effects (Teshome and Yitayeh, 2016), and imparts increased risk for future cardiovascular disease (Tonetti and Dyke, 2013). This range of medical issues emphasises the importance of managing periodontitis, underlining my motivation to promote periodontal health.

My enthusiasm for periodontology is founded in the grass roots of patient care. Periodontology forms the foundation of a treatment plan, excluding urgent procedures, accentuating its fundamental importance in oral health. Ensuring sound foundations is essential in order to consider more advanced treatments, helping the patient through their care pathway. When assisting senior students caring for periodontal patients, identifying patients who are not progressing is vital. Adjusting the treatment plan accordingly, encourages dental professionals to look beyond the oral health, and provide a holistic style

of care. I enjoy observing periodontal susceptible patients improve their oral health whilst providing a whole-body approach of medical care. For instance, patients with periodontitis and undiagnosed diabetes may require referral for a blood test or nutrition advice. Presenting many opportunities which require an imaginative and problem-solving approach, such as motivating the patient to enact change, giving a career in periodontology engaging and stimulating characteristics.

I want to increase awareness of oral hygiene using motivational interviewing (MI) to help patients achieve periodontal stability. The MI approach is collaborative, non-confrontational, aimed at increasing intrinsic motivation and respecting autonomy (Murphy et al., 2013). Links to diabetes (Taylor et al., 2013) and cardiovascular disease (Tonetti and Dyke, 2013) would allow me to promote a healthy lifestyle and provide integrated care with medical professionals to project a powerful universal message of a healthy lifestyle, which is more likely to be adhered to by the patient.

I believe education is crucial to reducing future prevalence of periodontitis, and have already made efforts in this area, actively participating in a healthcare student-led society. We visit schools and organisations to provide interactive, integrated care sessions informing children of the importance tooth brushing and overall health. These sessions raise awareness of oral health and emphasise medicine & dentistry put the patient first, whilst helping children to become accustomed to a healthcare setting, attempting to impact health, attendance and compliance in adult medical environment.

There is growing awareness of periodontology amongst my peers, due to an overriding expectation that we will maintain our natural teeth, yet periodontitis remains a major cause of adult tooth loss worldwide (Jin et al., 2011). I would like a career in periodontology to influence policy and heighten awareness of periodontitis across all generations and socioeconomic backgrounds to improve population-wide health. Periodontology counterpoints the aesthetic influence of the 'selfie' generation because it offers the opportunity to help care for people suffering from a disease, as opposed to fields of aesthetic dentistry, which despite having desirable outcomes for patients, do little in terms of improving health.

I would champion an internet based undergraduate dental and hygiene/therapy student led European Federation of periodontology (EFP) committee, with ambassadors from participating countries, to raise the profile of periodontology amongst the undergraduate dental professionals. The remit of this group is 3-fold; a focus group for the EFP to gain

undergraduate feedback, for students to articulate ideas with 1 student sitting on the EFP undergraduate committee, and for the EFP to distribute tasks to undergraduates. This would improve pedagogy, have a lasting impact on managing patients and drive change. These European undergraduate students could interact over an online idea-sharing platform, influencing curriculum change across Europe. They could share video clips, arrange live videos between global experts and institutions, giving students insight into the best available evidence. Combined with the flipped classroom method, which generates a larger increase in motivation scores compared to traditional teaching methods (Baris, 2016). Uniting these ideas would encourage undergraduates, including myself, into periodontology as it integrates technology and a keen interest in periodontal health.

Pursuing a career in periodontology would allow me influence European countries where dental hygienists are not permitted to practice (Austria, Belgium, Croatia, France, Greece, Luxembourg, and Turkey), their role being critical to supportive periodontal therapy (König et al., 2010). Patients in these countries may benefit from this additional care, as a profession we must grasp opportunities to provide integrated care given healthcare professionals to improve patient experience and the treatment outcome.

Active innovative research is a further reason why I am interested in a career in periodontology. If biomarkers became available as a diagnostic test, the future could include chair-side tests using saliva or blood from finger sticks to diagnosis and monitor periodontitis (Stathopoulou et al., 2015). Evidenced-based research will pave the way for clinical procedures to improve my patient care.

Overall, a career in periodontology provides a plethora of opportunities for me, spanning from localised care to global research. There are great prospects to collaborate and share information amongst oral healthcare professionals striving to provide the best patient care, whilst raising awareness and links to systemic conditions.

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