To: Dr. Erika Paterson From: Erin Mungham Date: October 10, 2020

Subject: Proposal for Improving Ergonomics and Pain Management of the Employees at Viewmount Dental Centre

Introduction

The majority of dental hygienists, dentists and dental assistants will experience a high degree of joint or muscle pain throughout their career. The reason the employees at Viewmount Dental Centre have poor ergonomics and significant joint and muscle pain is because of the fast-paced work environment, no time for breaks, repetitive movements when performing procedures, and lack of medical benefits. These factors combined cause the deterioration of musculoskeletal health and reduce career longevity.

Statement of Problem

Poor ergonomics and physical pain will negatively impact the dental professional's career because they will become mentally and physically exhausted. The major implications for this problem are three: first, dental professionals will have to seek alternative career opportunities; second, the business will suffer due to disability leave and trying to find replacements for employees; third, the constant pain and lack of health benefits will be destructive on the employees mental health and work productivity.

Proposed Solution

One possible solution to the problem of poor ergonomics and physical pain of the employees at Viewmount Dental Centre is to have small breaks after each appointment. Most appointments are 60 minutes and if there is a 10-minute fallow time for each appointment that will give the employee the chance to rest their muscles and stretch. Knowing that they have this extra time will also help them feel less stressed during the appointment and be able to focus on proper posture. During the COVID-19 pandemic, a new guideline was proposed that required a 15-minute fallow time after any aerosol-generating-procedure. Dental professionals found this extra time significantly reduced the stress of their mental and physical well-being. Adding this extra time for the employees will not put the business at risk financially. If anything, it would be beneficial to the business to have their staff be less stressed and to encourage pain management.

Scope

To improve the ergonomics and pain management of the employees at Viewmount Dental Centre. I plan to pursue eight areas of inquiry:

- 1. What have other dental professionals done to help with pain management?
- 2. What products are on the market to improve ergonomics (chairs, dental instruments, etc.)?
- 3. What are the prices for these ergonomic products?

- 4. What is Viewmount Dental Centre's budget for implementing ergonomic products?
- 5. How many dental office employers offer medical benefits for their employees?
- 6. Does going to a chiropractor, physiotherapist or massage therapist help reduce joint and muscle pain?
- 7. What is the average career span for dental professionals?
- 8. Will more frequent breaks throughout a shift help with pain management?

Methods

My primary data sources will include consultations with Dr Irina Smirnova, Dentist and owner of Viewmount Dental Centre, and Melanie Barbeau, Registered Dental Hygienist. I will also conduct surveys on the Ontario Dental Hygiene Network Facebook group and interview fellow Registered Dental Hygienists as well.

Secondary sources will include publications on ergonomically designed dental equipment and a literature review of the prevalence of musculoskeletal diseases and pain among dental professionals by Lietz et al.

My Qualifications

I have been a Registered Dental Hygienist for 2 years. I am currently enrolled at the University of British Columbia and will receive a Bachelor of Dental Science in April 2022. I have had firsthand experience with back and neck pain since starting my career. I have tried many different pain relief therapies and understand the importance of proper ergonomics for a sustainable career. My association with Dr. Irina Smirnova and Registered Dental Hygienists across Ontario gives me the opportunity for an in-depth study and formal report.

Conclusion

Action is needed to improve the ergonomics and pain management in dental professionals at Viewmount Dental Centre. By addressing the seven areas of inquiry mentioned earlier, I can determine useful recommendations to increase career longevity and promote physical and mental health of the dental professional. With your approval, I will begin research at once.