**Feasibility Analysis of Yoga to Prevent a Musculoskeletal Disorder in the Dental Workplace**

For

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**Introduction**

In the dental industry, there is a high risk for developing occupational musculoskeletal disorders (from now on referred as an MSD). Estimated population of dental professionals that suffer from MSDs is 79%; these include: dentists, dental hygienists, dental assistants, and receptionists. MSDs is mainly caused by the prolonged time of maintaining a static posture or producing repetitive movements in the dental setting.

Aerobic exercise is said to be the best in prevention of an MSD. It is recommended to be practiced three to four times a week for at least twenty minutes to increase blood flow to the tissues in the body and improve their ability to use oxygen. Complimented with a stress-reduction technique such as breathing techniques, meditation, or massage it will create everlasting health for body and mind.

The purpose of this study is to determine the interest and restrictions of implementing an extracurricular yoga class. Additionally, it will be looking at the effectiveness of regular aerobic exercise on preventing an MSD.

**Data Section**

Primary and secondary data were meticulously researched to find the most current and non-bias articles that related to aerobic exercise in preventing an MSD. Surveys to the dental team were distributed to assess the impact of an MSD, the limiting factors of attending aerobic exercise for prevention, and the accessibility of implementing a yoga class on people who work in the dental field. Interviews of the Periodontist and surrounding yoga studios were distributed to assess the accessibility of a space, cost, and feasibility of implementing a yoga class to prevent an MSD.

**Primary and Secondary research articles**

Musculoskeletal pain in the dental field is the most prevalent cause of years lived with disability(2). The most common cause of an MSD is from static posture in the workplace affecting various regions of the body from certain duties. It was found that 90% of workers suffered from some type of pain that was work related. The most common area of an MSD in the dental profession is the neck, shoulders, and back (4). Worldy, MSD’s have been a national health problem with more than 1,000,000 workers missing time from their jobs at a cost of more than $50 billion a year(5).

**Dental Team Feedback**

Research still in progress.

The data that I wanted to gather was the interest for people in the dental field to prevent an MSD. The biggest set back that people face is time and accessibility. Only 23% of respondents said that they work out outside of work.

* To see the importance

**Visuals**

62% of WRMSD cases reported between 2013-2017 involved younger workers, aged between 21 to 40 years old. This is an area of concern as these “young workers” today may require long term medical care in future if their WRMSD is undiagnosed or untreated.

**Chart

Description automatically generated**

**Figure 1: Number of WRMSD Cases, Year 2013-2017**

*Source: WSH National Statistics Report 2017*

Respondents are pending, and visuals will be added when the data is collected.

Figure 2: Graph on interest in taking an extracurricular class.

Table 1: Table of cost and accessibility of implementing an MSD in the dental field.

Table 2: Table on type of yoga class and time of day.

**Conflicting Studies**

It is difficult to assess the percentage of the population with a diagnosed MSD because it could be associated with any type of bodily pain. The highest response that studies had to a type of MSD was pain, whether it was undiagnosed, acute, or chronic.

It was undetermined whether aerobic exercise reduces musculoskeletal pain in the lower extremities. Although there is a high success rate in reducing pain the upper extremities, which is the main location in the dental field.

**Proposed Recommendations (Conclusion)**

With the high interest of dental team wanting to maintain a healthy body it would be a great asset to have a yoga class specific for those people who need it.

* Once a week directly after work
* Possible locations (one yoga studio out of four has shown interest when they’re open in September.
* Some dental team members have expressed interest in holding yoga at the dental clinic after work (this would be most cost effective).
* Pilot 1 month trail of an evening yoga class, either in the dental clinic or at a yoga studio, alternating with one morning and one evening class.

**References**

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