# Ergonomic Policy for Pickwick Dental

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**Purpose**

An ergonomic policy at Pickwick Dental is intended to prevent and raise awareness of musculoskeletal pain and disorder (MSDs) by ensuring that employees are ergonomically supported, allowing them to work safely and to maintain long-term physical health. As Moodley et al. (2018) states, "[m]usculoskeletal disorders remain the most researched occupational health-related problems in dentistry," with prevalence rates of 60% to 90% among dental professionals. Yet, ergonomic protocols are often inconsistent, revealing a gap in knowledge that needs to be addressed to promote a healthier and more sustainable workplace at Pickwick Dental.

**Scope:** An ergonomic policy applies to all employees and management.

**Identification of Hazards/Issues at Pickwick Dental**

- The lack of ergonomic training and formal policy presents a hazard. Without guidelines, employees are more likely to engage in harmful practices that can cause MSDs. Implementing an ergonomic safety program in the workplace is cost-effective and boosts productivity by minimizing worker injuries, mistakes, and absenteeism (2025). Therefore, this hazard contributes to economic concerns that increase "indirect and direct costs" (Kelloway, 2021, p. 10), such as direct costs from incident investigations due to occupational injuries and indirect costs from absenteeism and mistakes.
- Poor equipment design, such as lack of ergonomic chairs, instruments, and eye loupes, is a hazard that contributes to MSDs. For instance, not wearing dental loupes can lead to poor posture, reduced visual clarity, and a higher risk of developing MSDs (Anshasi et al., 2022). Also, a poorly designed instrument, such as one with "a smooth, round-handled instrument requires more pinching force to keep the handle from spinning

in the hand" (Gupta et al., 2014), this increased force can lead to MSDs as "pinch gripping is the greatest contributing risk factor in the development of MSDs among dental hygienists" (2012). Whereas when the chairs cannot be lowered or adjusted, individuals have to work in awkward postures or stand while working (Crawford et al., 2005). These awkward positions "stress neurovascular structures and ligaments," (2012) increasing the likelihood of long-term injury. That is why investing in ergonomic equipment minimizes issues for employees' musculoskeletal health.

- Work processes are a hazard as there are limited breaks and back-to-back tasks. These tasks involve frequent repetition, which results in concerns such as "fatigue, tissue damage, discomfort, and eventually injury" (2012). Over time, the lack of recovery periods while doing demanding work can harm employees' physical health.

## Prevention and Intervention Strategies

### Proactive Measure (Primary and Secondary Intervention):

- Implement a formal ergonomic program to enhance safety culture. This vision should be communicated throughout the office using "[p]osters and signs...to promote safety awareness" (Kelloway, 2021, p. 102). Also, incorporating educational initiatives will help immerse this vision into the employees' daily routine. For instance, a more engaging strategy would be to have an occupational therapist, or a dental ergonomics expert visit the dental office (Anshasi et al., 2022), this will encourage open discussion about MSDs and promote health-conscious work environment through continued training, staff engagement and expert guidance. Additionally, providing "regular refreshers"

(TheCDHA, 2025) helps reinforce proper ergonomic practices and supports long-term safety awareness.

- Provide individualized ergonomic assessments, such as personalized fitting of eye loupes and equipment modification like adding lumbar support to dental chairs. Those who implemented these interventions noted improvements, stating that, “the use of the ergonomic dental chair with magnification was more suitable and produced a better working posture” (Lietz, 2020). Additionally, light weight dental instruments with wider handles were supplied as part of the intervention, which “significantly reduced symptoms of shoulder pain” (Lietz et al., 2020). Therefore, supplying ergonomically supported equipment will reduce physical strain on employees.
- Implement micro-breaks within the work schedule. This can include a mandatory 5-minute break after a 1-hour cleaning appointment where repetitive motion occurs. Specifically, doing stretching exercises at the chairside during the workday “can help correct any muscle imbalances, restore full range of motion and safely prepare your muscles for strengthening” (Valachi, 2022). Therefore, normalizing micro-breaks and chairside stretching are techniques to improve physical comfort.

**Reactive Measures (Tertiary Interventions):**

- Conduct a post-injury ergonomic assessment. Once an employee reports an injury, perform a “risk assessment” (Kelloway, 2021, p. 83) by evaluating their working stations to identify any hazards and risks. If they work at multiple dental locations, assess each environment to ensure consistent ergonomic standards are met.

- Incorporate access to “physical rehabilitation” (Kelloway, 2021, p. 64). Employees with MSDs symptoms should be referred to physiotherapist and be accommodated for a consultation and initial treatment to help them regain full or partial recovery.
- Implement “return-to-work planning” (Kelloway, 2021, pp. 347) as employers have a “duty to accommodate” (Kelloway, 2021, pp. 339). This can include “light-duty work” through training to do other tasks such as reception duties and “gradual work exposure” (p. 348) through reduced hours until full recovery.

## Roles and Responsibilities

**Management (Owner of the Organization – The Dentist):**

- Oversees budget and finalizes purchasing ergonomically supported equipment.
- Acts as a “transformational leader” (Kelloway, 2021, p. 270) to inspire others to embrace a culture of safety. Hense, must provide ergonomic training and resources.
- Supports the lead occupation health and safety officer in enforcing ergonomic standards and takes action in managing the confidential reports.

**Employees (Dental Assistants, Hygienists, Dentists):**

- Should maintain “safety compliance” (Kelloway, 2021, p. 260) by following ergonomic protocols, attending training and reporting ergonomic concerns. They also have a “right to refuse dangerous work” (Kelloway, 2021, p. 32), reinforcing their moral duty to act on potential hazards to contribute to creating a safe workplace.

**Occupational Health and Safety Officer (Dental Assistant):**

- Be heavily involved in monitoring and evaluation tasks. This includes making sure standards are met regarding tracking reports’ data after it has been coded to prevent

identification. Conduct a yearly ergonomic inspection that includes both "pre-intervention and post-intervention assessments of the out-come factors" (Kelloway, 2021, p. 382). Incorporating staff feedback after training sessions also aids in continually improving ergonomic policy as there is a baseline to assess growth.

**Monitoring and Evaluation Methods**

- Include symptom monitoring report in a secure file under management's control. Use tools like the "Disabilities of the Arm, Shoulder and Hand" and the "Nordic Musculoskeletal Questionnaire" (Lietz et al., 2020), to assess if MSDs symptoms are progressing among staff. Data should be submitted using an "evaluation identification number" to protect employees' confidentiality (Kelloway, 2021, p. 382).
- Anshasi et al (2022) used "Kotter's eight-step change model" that was used to improve ergonomic changes in the dental industry. As part of the evaluation process, a 12-item yes/no checklist should be included. This report will be printed and stored in the dental office's quality assurance logbook, with each entry showing the checklist along the corresponding dates. A yearly comparison of pre- and post-interventions results will help assess the success of specific ergonomic changes.
- A sickness and absences report are vital to evaluate the direct impact before and after ergonomic changes (Anshasi et al., 2022). In addition to analyzing existing medical records, new data should be collected, stored, and handled in the same way as the symptom monitoring report to respect Ontario's privacy laws.
- Include feedback mechanisms in the dental office's quality assurance logbook. Anshasi et al. (2022) article suggested, "[t]he staff's deposition or testimonial about

the course and impact of a musculoskeletal problem and sharing their personal stories is a powerful option to create such a sense of importance." Collecting personal feedback highlights the "internal responsibility system" for creating change "to improve health and safety" (Kelloway, 2021, p. 39). Ultimately, supports ongoing assessment and improvement of an ergonomic policy as all parties are involved.

**Reflection:** I selected Pickwick Dental because I work there and have personal insight and strong motivation for this assignment. This policy topic was important to me, as there is currently no recognition of ergonomics at my workplace. I have experienced and witnessed others suffer from physical strain due to poor ergonomic practices, and I hope to share my policy brief to help promote positive change. Throughout my paper, I relied on research to highlight effective interventions and address specific ergonomic hazards along with their associated issues. I also included monitoring and evaluations of methods from other dental offices to explore proven ergonomic strategies used in similar settings. Pickwick Dental emphasizes "Determined Safety," (Fong, 2024) highlighting its commitment to infection control and sterilization under CDA, OHS, and CDC guidelines. This approach aims to "protect patients and ourselves" (Fong, 2024) from the risk of infection and cross-contamination, reinforcing a safe work environment in preventing biological and chemical hazards. However, while patient safety is clearly prioritized, extending this commitment to include employees through an ergonomics policy that focuses on physical hazards is also essential to sustain high-quality care. The ergonomic policy also aligns with Pickwick Dental's best practices, as they note, "[w]e give you the best possible service and results and are committed to continual education and learning" (Fong, 2024), demonstrating their

dedication to patients, as well as ongoing staff improvement. Therefore, to consistently provide effective care to patients, it is crucial to ensure staff are physically supported and continually educated to do so. Challenges I have encountered included research and organizing my paper. Initially, I struggled to find relevant information in the healthcare industry, but narrowing my focus to dentistry helped tailor my research. Formatting was also difficult, as online examples included additional aspects that would have made my paper too lengthy, so I followed the assignment guidelines to stay on track. Finally, selecting which research to include was challenging, but I prioritized the most essential points to support my policy.

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