

Professional Quality of Life, Moral Distress, and Turnover Intent of Healthcare Providers
Working within the Context of Medical Assistance in Dying

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Preface

Ethical Approval Obtained to Conduct Research:

This study received ethical approval from Ottawa Health Sciences Network Research Ethics Board and administrative approval from the University of Ottawa Research Ethics Board.

Statement of Contributions and Co-Authorship: Multiple authors contributed to this thesis. I have outlined the contributions of each author below:

1. Alysha Hemsworth, BScN RN, School of Nursing, Faculty of Health Sciences, University of Ottawa. This research was completed for partial fulfillment of the requirements of my Master's thesis. I am the primary author of this study; I designed, conducted, analyzed, and wrote all chapters of this thesis.
2. Dr. Brandi Vanderspank-Wright, PhD RN CNCC(C), Associate Professor, School of Nursing, Faculty of Health Sciences, University of Ottawa and Affiliate Investigator, Ottawa Hospital Research Institute. Dr. Vanderspank-Wright has been my thesis supervisor, providing ongoing support, feedback, and guidance throughout the development, progression, and completion of the study. She also provided input and critically revised every chapter of this thesis.
3. Laura Wilding, MHS RN ENC(C), Laura was a thesis committee member and offered expertise regarding practice, policy, and legislation specific to MAiD. She contributed to the research design, data collection, and analysis. She critically revised every chapter of this thesis.

4. Dr. Michelle Lalonde, PhD RN, Associate Professor, School of Nursing, Faculty of Health Sciences, University of Ottawa. Dr. Lalonde was a thesis committee member and offered expertise specific to study design, data collection, and analysis. She acted as an expert in quantitative measures and critically revised every chapter of this thesis.

Abstract

Background/Aim: Since the integration of MAiD in Canada, we are still limited in what is known of the providers who foresee the procedure. This research aimed to explore the experiences of providers caring for patients undergoing MAiD as well as the relationships between the concepts of Moral Distress (MD), Professional Quality of Life and Intent to Turnover (TO). **Design/Participants:** This explorative/descriptive study consists of self-reported surveys distributed to nurses and physicians within a Canadian MAiD network. **Results:** The averages of our measured constructs showed below-average levels of MD, TO, BU, STS, TO and higher levels of CS. Significant positive correlations were found between MD, BU, and STS, and between BU and TO. Significant negative correlations were also found between CS and TO. **Conclusion:** The findings of this study have implications for healthcare practice, management/project logistics, and suggestions for future areas of research.

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Chapter 1: Introduction

On June 17th, 2016, Canada joined the Netherlands, Belgium, Luxembourg, Mexico, Columbia, France, New Zealand, and Australia along with eight US states (California, Colorado, Oregon, Vermont, Maine, New Jersey, Hawaii, and Washington) as a pioneer in the decriminalization of euthanasia/assisted death (Dierckx de Casterlé et al., 2010; Health Canada, 2017). The premise of voluntary euthanasia and MAiD are comparable in that a person makes a conscious decision to seek help in expediting their death; though laws, patient criteria, organizational involvement, and procedure differ globally (Dierickx et al., 2020; Government of Canada, 2021). Based on Canadian legislation (C-14), those requesting Medical Assistance in Dying (MAiD) in Canada were required to meet the following criteria: (a) the person is 18 years or older and capable and competent to make a voluntary request in writing; (b) suffering from an irremediable medical condition in a state of decline; (c) a natural death is foreseeable; and, (d) must be eligible for healthcare in Canada (not open for medical tourism) (Government of Canada, 2021).

Current complex circumstances that have undergone a judicial or parliamentary review for MAiD during the timeframe of this thesis are 1) requests made by mature minors; 2) advance care planning requests for MAiD (e.g., those with dementia); 3) requests where a mental disorder is the sole underlying medical condition; and, 4) individuals who have debilitating diseases but death is not imminent or reasonably foreseeable (Department of Justice, 2020; Health Canada, 2019; Okninski, 2021).

In October 2020, Bill C-7: An Act to amend the Criminal Code (medical assistance in dying) was tabled in the House of Commons (Department of Justice, 2020). As of March 2021, the revised version of Bill C-7 was passed by the Canadian Senate, expanding access to MAiD.

Now, those Canadians intolerably suffering, who are not near the natural end of their lives can request MAiD. Additionally, MAiD will be carried out for those who have lost the capacity to consent at the time of the procedure and who had entered a prior agreement with a medical practitioner. For now, the Government rejected a Senate amendment to allow people who fear losing mental competence to make advance requests for an assisted death; though it is to be re-evaluated in future parliamentary meetings along with other unresolved matters such as minor's access to MAiD (Parliament of Canada, 2021).

Initial reports of MAiD utilization throughout Canada showed that from 2015-2018 approximately 1.14%, or 6,749 of Canadian deaths, were attributed to the procedure (Health Canada, 2019). In a more recent report by Health Canada (2021), there was a 34.2% growth from 2019 (5,660 MAiD deaths) to 2020 (7,595 MAiD deaths), accounting for 2.5% of all Canadian deaths (Health Canada, 2021). In the next decade, there is an anticipated upward trend suggesting that MAiD could account for between 1-4% of all deaths in Canada (Health Canada 2019; Trachtenberg & Manns, 2017).

Background

As Western Society's population demographics shift toward supporting the elderly, so has our focus on autonomy, quality of life, and personal choice towards death and dying (Berghs, et al., 2005; Quaghebeur, et al., 2009). Despite a longstanding debate regarding personal choice towards death and dying (inclusive of voluntary euthanasia), this changing societal focus led to a movement toward legalizing MAiD in Canada (Health Canada, 2017; Quaghebeur et al., 2009). However, despite its legalization, it has not been without contentious debate. Before MAiD was implemented, data from 2015 (n=1,035) polling indicated that 79% of the Canadian public was in favour of having medically assisted death as an option (Insight West, 2015). In contrast,

healthcare professionals, who are expected to deliver this end-of-life care were less supportive, with only 45% of these respondents n=5000 favouring the legalization of MAiD (Canadian Medical Association, 2016). Internationally, healthcare providers have expressed mixed feelings toward legalized MAiD, including personal conflict, moral uncertainty, frustration, fear, secrecy, and guilt (Pesut, et al., 2019; Quaghebeur et al., 2009). Some resistance has also been seen from palliative care providers who maintain that Canadian MAiD legislation conflicts with palliative care philosophy, namely by taking part in acts that unnaturally hasten death (De Lima et al., 2017; World Health Organization, 2016). Further, arguments have been made that MAiD will be taken advantage of and become a ‘slippery slope’ to unnecessarily ending lives (Lerner & Caplan, 2015). Numerous groups have been identified as vulnerable concerning the misuse of MAiD including the elderly, the disabled, the poor, minorities, and people with psychiatric impairments (Lerner & Caplan, 2015).

Healthcare providers are uniquely positioned within the context of the MAiD experience. Healthcare providers, including nurses and physicians, are directly and indirectly, involved in the provision of care to both individuals and families receiving MAiD. Depending on a nurse’s scope and jurisdiction of practice, they can aid in the provision of MAiD in many ways. Appendix A outlines some of the key nursing contributions suggested by the Canadian Nurses Association (2017). Physicians also assume a primary role and are, in many instances, the healthcare provider that directly determines eligibility and administers MAiD (Ontario Ministry of Health, 2018).

As MAiD has evolved, several concepts and constructs have been identified within the literature that is useful in both exploring and understanding the experiences of healthcare providers specific to end-of-life care and end-of-life care in the context of MAiD. For this thesis, the following are described and incorporated into the research questions and in the research design. Briefly, a concept can be defined as “an abstract idea” or “a general notion” (Merriam-Webster, p. 1. 2020). In this tablestudy, concepts include *Moral Distress* and *Turnover*. A construct is “an idea or theory containing various conceptual elements, typically one considered to be subjective” (Oxford Lexico, p.1, 2020). In this proposed study, *Professional Quality of Life* (ProQol) is a third concept that will be explored but it is made up of two primary constructs: 1. Compassion Fatigue (CF) – further broken down into two sub-constructs Burnout (BU) and Secondary Traumatic Stress (STS); and, 2. Compassion Satisfaction (CS). A visual representation of these concepts and constructs is provided in Appendix B.

Literature Review

To understand what is known about the PQL, MD, and TO of healthcare providers working within the context of MAiD existing literature was reviewed. Three databases, CINAHL, Embase, PubMed were accessed using a layered search. Firstly, MAiD specific literature related to the concepts was conducted to substantiate the research gap. With the scarcity of MAiD literature being identified, the next area of the search was through end-of life care research; inclusive of palliative care units, hospices, and community settings. This gave some insight into what end of life care providers were experiences as a potential comparator. Finally, a general search exploring the study’s concepts amongst healthcare providers was carried out intending to offer a thorough conceptual overview and acknowledgement of the possible relationships between concepts.

Inclusion criteria included full-text, peer-reviewed, English-language literature, using the specific concepts within the intended instruments. Both nursing and medical literature, particularly that which included physician's experiences was included with time limits set as within the last 20 years to secure any foundational literature.

Exclusion criteria included populations using: medical students, medical assistants, personal support workers, or family care providers. Other exclusion criteria included articles that used different concepts, being particularly cognisant of those terms using similar words with different meanings such as quality of life, wellbeing stress and distress. Articles where full text was not included were also excluded.

The mnemonic PICO (population, intervention, comparison, and outcome) was used to help organize the search. In the individual databases MeSH headings were used when available to maximize results. The Boolean operators "OR" as well as "AND" were used to combine the results of MeSH headings and manual search terms. Abstracts were scanned for articles meeting the criteria and then imported into the program Mendeley to organize the citations and for a further in-depth review of the selected articles. Additional literature was also imported as COVID-19 became a known variable over the course of this research to make sure literature remained current.

Moral Distress

Moral distress (MD) is experienced by healthcare professionals when their moral beliefs fall out of alignment with those of their practice and policy environments (Corley, 2002). When one's moral integrity is violated, it can have devastating impacts, leading to poor coping, decreased self-esteem, decreased job satisfaction, increased rates of job turnover, Burnout, and ultimately the inability to provide good patient care (Austin et al., 2017; Corley, 2002; Davis et

al., 2012). MD has been identified as occurring in many different conditions, including decision-making at the end-of-life (Abbaszadeh et al., 2014; Borhani et al., 2014).

First identified by Jameton (1984), the term Moral Distress was coined to articulate the phenomenon he observed while teaching nursing students. He defined it as "arising when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action." (Jameton, 1984, p.6) The first empirical research on this concept was conducted by Wilkinson (1987), where she identified situations that gave rise to MD (e.g. providing care that is perceived to be futile). Wilkinson found that not only do nurses experience MD from what they fail to do, but they also suffer from acting in a way perceived as being morally wrong. Since Wilkinson's early work, many adaptations of the definition and different ways to operationalize MD have been developed (McCarthy & Gastmans, 2015). One of the most utilized adaptations was presented by Corley (2002) where MD is described as "the psychological disequilibrium, negative feeling state, and suffering experienced when nurses make a moral decision and then either do not or feel that they cannot follow through with the chosen action because of institutional constraints" (p. 643). Corley operationalized this definition by developing the Moral Distress Scale, which was later revised by Hamric et al. (2012).

There is a consensus within the literature regarding the specific conditions that lead to MD; they can be classified into inter-professional, institutional, and patient/practice-based. Concerning inter-professional care, nurses tend to be the caretakers spending the most time at the bedside, yet a healthcare hierarchy continues to exist within the system whereby physicians hold positions of power and authority over nurses (LeBaron et al., 2014). Certain conditions are created via these inter-professional interactions/decisions, concerning patient care that have become major sources of MD. For nurses, these primary sources of MD include aggressive

treatment without perceived benefit for the patient, inaccurate/incomplete information presented to patients and families by physicians, and an inability to alleviate the patient's suffering in situations where the physician disagrees with providing what is advocated (e.g., by a nurse) as an acceptable treatment, providing what has been perceived as futile care and the medical prolongation of dying (Bosshardt et al., 2018; Brazil, Kassalainen et al., 2010; De Boer et al., 2016; Rice et al., 2008). Healthcare providers also consistently face unfavourable conditions brought forth by institutional constraints such as limited resources, lack of support systems, inadequate staffing, organizational pressures, and the treatment of patients as objects when meeting institutional requirements (Borhani et al., 2014; Corley, 2002; De Boer et al., 2016). Finally, patient/practice-specific conditions also contribute to care providers' experiences of MD including patient symptom assessment, symptom management, and unexpected deaths (Borhani et al., 2014; Brazil et al., 2010; Hylton-Rushton et al., 2015). Other practice-specific circumstances involve perceived inappropriate patient resuscitation decisions or other advance directives, that cause healthcare providers to enact life-saving actions they identify as being harmful, futile, or prolonging suffering (e.g., performing CPR on a frail elderly patient without a DNR) (Brazil et al., 2010; Hylton-Rushton et al., 2015). Within our current context, the impact of the COVID-19 pandemic has arguably had major impacts on Canadian healthcare providers. New challenges such as shortages of personal protective equipment (PPE), distribution of limited resources, isolations, visitor restrictions, increased workload, increased acuity, and social distancing; are only a few examples of what our healthcare system has and continues to face amidst the pandemic (Emanuel et al., 2020; Fusi-Schmidhauser et al., 2020; Livingston et al., 2020; Rosa et al., 2020; White, 2020). A study by Tremblay-Huet et al. (2020) provided an overview of the impact COVID-19 public health mandates have had on the provisions of MAiD

within Canada. These authors outlined four distressing themes MAiD practitioners are experiencing including, witnessing the increased suffering of their patients resulting from public health restrictions, a decrease in the rapport between practitioners and their patients on account of the change from in-person to virtual assessments, managing how the new restrictions have made the logistics and access to MAiD more difficult and attempting to mitigate the fear/anxiety surrounding the spread of COVID-19. It is important to acknowledge that these context-specific impositions may provide additional Moral Distress to the MAiD providers within our study.

Within the healthcare industry, many predictors of MD have been identified, such as type of professional, type of clinical environment, as well as experience, and education level. Professionally, it has been found that nurses report significantly higher levels of MD when compared to physicians (De Boer, 2016; Dodek, 2016). De Boer (2016) suggests that this might be due to a power imbalance in decision-making surrounding patient care and that nurses are more directly exposed to patient suffering for long periods. A literature review conducted by Oh and Gastmans (2015) concluded that nurses generally experience low frequencies of MD at a moderate level of intensity and noted that although their exposure to MD may be infrequent, it has a highly significant impact when encountered. A study of Iranian hospital physicians concluded that physicians also experience moderate to high levels of MD intensity with low to moderate frequency (Nejadsarvari et al., 2015). It is important to note that while there is an abundance of nursing research relating to MD, there is minimal investigation completed of solely MD in physicians, the studied population is almost always accompanied by nurses. Hylton-Rushton et al. (2015), suggested that MD may have a cumulative impact that may crescendo over time. Studies conducted on MD reveal its high prevalence in different clinical environments (Borhani et al., 2014). Research has shown that there is a much higher level of MD where both

physicians and nurses have an increased responsibility caring for more acute patients (e.g., in special care units such as critical care, oncology, pediatric, neonatal, and palliative care) (Borhani et al., 2014; Dodek 2016; LeBaron et al., 2014). Experience level was also found to have an effect whereby healthcare providers with ten or more years of experience reported higher levels of MD, potentially indicating that MD may have an accumulated effect (Hylton-Rushton et al., 2015). Additionally, in nurses and physicians with higher levels of education in palliative care, higher levels of MD are also reported. The rationale is believed to be because those educated providers are more aware of the appropriate management of palliative care patients, any hindrance enabling them to provide this care could be morally distressing (Bosshardt et al., 2018). Healthcare providers' responses to MD have been manifested in both psychological and physical symptoms and have been known to impact both a practitioner's personal and professional life (Corley, 2002). MD is often accompanied by feelings of anger, frustration, guilt, loss of self-worth, depression, shame, embarrassment, and grief has led both nurses and physicians to experience stress – causing low energy, headaches, gastrointestinal upset, heart palpitations, and anxiety (Chae et al., 2017; Cooley, 2002; NejadSarvari et al., 2015; Wilkinson, 1987). Professionally, MD eventually leads care providers sometimes to object/disagree with participating in certain types of patient care such as palliative sedation (Lokker et al., 2018). These avoidance behaviours have been equated to care providers' inability to modulate their MD, leading to them evading ethically challenging situations and becoming emotionally numb (NejadSarvari et al., 2015; Wolf et al., 2019). Nurses have expressed a lack of empowerment to properly advocate on behalf of their patients, and therefore the quality of care suffers (Bosshardt et al., 2018; Cooley, 2002; Davis et al., 2012; Heilman & Trothen, 2020). Unfortunately, many studies have concluded that unresolved MD ultimately leads to healthcare providers leaving the

profession (Austin et al., 2017; Borhani et al., 2014).

Moral Distress and MAiD

As more countries move towards the legalization of medically assisted death, practitioners are now experiencing a shift in practice and a potential redefinition of their own personal and professional values (Heilman & Trothen, 2020). Dorman and Bouchal (2020) identified a concern regarding situations where despite requests for MAiD being justified, feelings of guilt and MD may be elicited when faced with the potential moral dilemma of partaking in or rejecting, ending a life. Another article reviewed MAiD and the role of conscientious objection indicating that the ambiguity of MAiD policies today has left practitioners feeling uncertain regarding balancing their values and their obligations to patients thereby leading to MD (Heilman & Trothen, 2020). Despite claims that morally distressing situations may arise by exposure to assisting in death, little is known about the frequency or intensity of MD amongst healthcare workers in Canada in the context of MAiD.

Professional Quality of Life.

Professional Quality of Life (PQL) within the context of healthcare, refers to the quality one feels concerning their work as a caregiver (Stamm, 2009). When PQL is regarded as high, it is associated with increased team cohesiveness, healthier habits (e.g., exercise and sleep), and above all, increased quality of patient care (Alkema et al., 2008; Lee et al., 2019; Salimi et al., 2020). Alternatively, when it is perceived to be low, it is associated with job dissatisfaction, death avoidance, exhaustion, apathy, depersonalization, depression, Moral Distress, and Turnover Intent (Klein et al., 2018; Lee et al., 2019; Mason et al., 2014; NejadSarvari et al., 2015). Austin et al. (2017) have suggested that caring for those at the end-of-life can have a significant impact on healthcare professionals. Professionally, healthcare providers who are

continuously exposed to the physical, psychological, existential, and emotional symptoms experienced by patients (especially at the end-of-life) are at greater risk of developing a diminished quality of life as evidenced by increased levels of Burnout, Secondary Traumatic Stress, and diminished Compassion Satisfaction (Samson & Shvartzman, 2018). Improving the physical and mental well-being of healthcare providers is crucial in ensuring quality patient care, the retention of staff, and professional wellbeing (Gribben et al., 2019; Samson & Shvartzman, 2018).

According to Stamm (2009), PQL is defined as "the quality one feels in relation to their work as a helper" (p.8). PQL encompasses the feelings and perceptions that healthcare professionals have with their workplace, and is measurable via a questionnaire also developed by Stamm (2009). The Professional Quality of Life Scale Version 5 (ProQol-5) is a commonly used tool to measure the quality of life of caregivers. The ProQol is composed of two main constructs: Compassion Fatigue, which measures the negative aspect of quality of life (further conceptualized into sub-constructs: Burnout and Secondary Traumatic Stress), and Compassion Satisfaction, which measures one's pleasure to help others (Stamm, 2009). These constructs are described in more detail in the following paragraphs.

Compassion Fatigue

Compassion Fatigue (CF), defined as the "cost of caring for others in emotional pain" (Figley, 1995, p. 16), arises from a rescue-caretaking response, often occurring suddenly, and is related to the profound physical erosion that results when healthcare providers are unable to decompress (Wu et al., 2016; Yu et al., 2016). CF has been shown to harm both physicians' and nurses' health in the form of anxiety, depression, anger, insomnia, weight loss, headaches, gastrointestinal upset, loss of empathy, and increased self-social isolation – often due to the

cumulative stress as a result of intense workloads and complex patient needs (Joinson, 1992; Sinclair et al., 2017). Research has also shown that healthcare providers with higher levels of education and experience levels frequently experience increased levels of CF (Potter et al., 2013; Wu et al., 2016). As a result, CF also has been shown to lead to absenteeism and job turnover (Al-Majid et al., 2018). CF represents the negative component of PQL. Predictors of CF include physical exhaustion, emotional depletion, distress about the physical work environment, and recent personal loss (Gribben et al., 2019; Kase et al., 2019).

Burnout. Maslach and Jackson (1981) defined Burnout (BU) “as a psychological syndrome involving emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment that occurred among various professionals who work with other people in challenging situations.” (p. 106). BU is a term relating to a psychological state describing long-term fatigue and decreased interest in work that progresses over time and is associated with a person’s tendency to sacrifice personal needs to fulfill the needs of their patients (Jang et al., 2016; Wu et al., 2016; Yu et al., 2016). It develops from the perceived demands from work, outweighing the perceived resources available in the work environment (Potter et al., 2010; Wu et al., 2016; Yu et al., 2016). BU influences the effectiveness of professionals in their work, as well as potentially disrupting their family and social life by precipitating depression, lethargy, and sleeping difficulties among other consequences mentioned below (Giorgi et al., 2018; Maslach et al., 2001; Rizo et al., 2018). With broad repercussions, BU can be seen as one of the widest institutional, public health, and economic problems facing society (Maslach et al., 2001; Rizo et al., 2018). Concerning nurses, occupational exposure to death or routine/chronic exposure to human suffering has been shown to precipitate BU (Maslach et al., 2001; Rizo et al., 2018). Consequences of healthcare provider BU have been reported to decrease empathy,

increase sleeping difficulties, increase emotional exhaustion, increase depression, decrease one's ability to work effectively, increase avoidance behaviours, diminished compassion satisfaction, increase medical errors, increase risk of malpractice, reduce patient satisfaction, and can lead to substance misuse, absenteeism, and turnover (Fu et al., 2018; Hylton-Rushton et al., 2015; Potter et al., 2010; Samson & Shvartzman, 2018). Studies have also shown that the treatment of BU starts with the removal of the stressor (if possible) and having a proper support system in place (Fu et al., 2018; Sabo, 2011).

Secondary Traumatic Stress. Secondary Traumatic Stress (STS), also referred to as 'vicarious trauma', is defined as "the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995, p. 10). Stamm (2009) reports that caregivers have expressed feelings related to STS, including "being trapped, on edge, exhausted, overwhelmed, and infected by other's trauma" (p. 21). Negative effects of STS may present similarly to post-traumatic stress disorder with: sleep difficulties, intrusive images, and avoidance behaviours (Potter et al., 2013; Stamm, 2009). STS has been studied more extensively in critical care, oncology, emergency rooms, and palliative care units where patient suffering is most prevalent (Al-Majid et al., 2018; De Boer et al., 2016; Jang et al., 2016). Those who work exclusively with dying patients have been found to experience higher levels of STS. Kaur et al. (2018), who surveyed hospice professionals (physicians, nurses, counselors, psychologists, social workers, pharmacists, and physiotherapists), found their levels of STS to be significantly higher than other hospital departments (though these departments were not specified). Another cross-sectional study found that approximately 60% of palliative care participants had a clinical dissociation (which is a tendency to avoid stressful events within their practice), which correlated with significantly higher levels of STS (Samson & Shvartzman, 2018).

Compassion Satisfaction

Compassion satisfaction (CS) is the positive subscale construct of PQL and is defined as "the pleasure one derives from being able to do one's work well" (Stamm, 2010, p. 12). Research has identified that CS fosters a care provider's sense of responsibility and control over a patient's health, which gives them a feeling of being understood and heard (Hemsworth et al., 2018). CS is increased by the use of interventions that strengthen self-efficacy; mindfulness training has also been identified as an effective intervention strategy to foster CS (Wu et al., 2016; Yu et al., 2016). CS has been associated with lower levels of anxiety, BU, STS, and depression, and may potentially act as a buffer to reduce levels of MD and turnover in MAiD practitioners (Hemsworth et al., 2018).

In multiple studies, there has been a significant negative correlation between CF and CS, and a strong positive correlation was observed between CF and BU (Slocum-Gori et al., 2013; Kaur et al., 2018; Jarrad & Hammad, 2020). A recent meta-analysis conducted by Zhang et al. (2018), looked at the prevalence of ProQol in nurses belonging to various departments including neurology, psychiatry, gynecology, oncology, critical care, palliative care, and intensive care. Their results rated CS 47.55%, CF 52.55%, and BU 51.98%, meaning that nurses are experiencing moderate levels of both positive and negative aspects of PQL. Unfortunately, no similar comprehensive study was conducted for physicians. Given that MAiD discussions frequently coincide with the end-of-life stage, I chose to focus my review of the literature on the experiences of healthcare providers' PQL in palliative care settings, such as palliative care units and hospices. While caring for the unhealthy and dying, healthcare providers are frequently exposed to and often live with the suffering experienced by their patients (LeBaron, et al., 2014). PQL has been studied within the end-of-life context all across the lifespan over a variety of

different healthcare providers and settings, including ICU, oncology, and hospices. Levels of CS for those professionals working with patients at the end-of-life have been comparable to the meta-analysis results reported by Zhang et al. (2018) while results for CF have been sporadic, ranging from high to low. In one study looking at Canadian oncology personnel, nurses experienced moderate levels of PQL (CS 41%, BU 46%, and STS 48%) (Wu et al., 2016). Findings from a survey of nurses delivering palliative care in the urban setting found that 48.4% had moderate to high CS, over a quarter of the sample (26.8%) recorded high BU scores and over half (51.6%) had reported moderate STS (Frey et al., 2018). Seeing as death and dying can already be a sensitive and challenging area, assessing the PQL surrounding those practitioners facilitating MAiD, especially in its early stages of integration, would be beneficial in their future support.

Professional Quality of Life and MAiD

There is currently no research on healthcare providers' Professional Quality of life when it comes to facilitating MAiD or Euthanasia. With the potential levels of PQL amongst end-of-life workers being inconclusive/sporadic ranging from high to low, it would be valuable to know baseline levels within our frontline providers as they navigate the practical and moral terrain while facilitating MAiD (Zhang et al., 2018).

Moral Distress and Professional Quality of Life

Published literature specific to end-of-life care and MAiD has been limited primarily to bivariate correlational analyses. The following represents a summary of the literature relating to the inter-relationship of these constructs. *MD and CF*: Maiden et al. (2011) found a significant correlation between MD and CF ($r=-.21, p<.001$) while studying critical care nurses. *MD and BU*: A few studies found a relationship between MD and BU. Shoorideh et al. (2015) found a

positive relationship between MD and BU (no values reported). Dalmolin et al. (2014), found a weak significant relationship between MD and BU ($r=.1, p<.05$). Austin et al. (2017) study found a significant correlation between MD and BU specifically in nurses ($r=-.21, p<.001$). *MD and STS*: Austin, et al., (2017) found that MD was significantly correlated with STS ($r=.3, p<.001$). Austin et al. (2017) found that MD and STS were significantly related ($r=.33, p<.001$). Thus, although there are no specific research studies involving the impacts of MAiD on the relationships between MD and BU, STS, and CF, the literature does indicate that, from a general standpoint, relationships do exist and impact nurses and potentially other healthcare providers.

Turnover

Competent, committed, and motivated employees are foundational to the delivery of quality healthcare to Canadians, yet organizations still struggle to maintain this essential workforce (O'Brien-Pallas et al., 2010; Unruh & Zhang, 2014; Willard-Grace et al., 2019). In 2019, there were 439,975 regulated nurses with active licenses (CNA, 2019). The Canadian Institute for Health Information (CIHI) has stated that for 2019, "the nursing workforce (those who are employed) has diminished by 1.5% from 2018-2019". This is unfortunate, considering that there may be increased demands on healthcare as the Canadian population has grown by 1.8% (based on 2021-2022 data) (Statistics Canada 2022). Thus due to the increased population and potential increased strain on the system, retention of current nurses is essential and should continue to be assessed and addressed. Further, given the COVID-19 pandemic, we are only beginning to realize its devastating impact on the nursing shortage. A recent report from the International Council of Nurses has indicated that globally a shortage of 13,000,000 is estimated as a result of the pandemic (International Council of Nurses, 2022).

In contrast to nursing workforce data, there is a lack of information regarding physician

turnover rates worldwide; despite not knowing the specifics on retention and those leaving the profession, we know that maintaining the current workforce is incredibly important. In 2019, Canada was deemed one of the most expensive universal healthcare systems amongst Westernized societies, yet the number of physicians relative to the population ranks well below the global average; Canada has approximately 2.41 physicians per 1,000 citizens in comparison to places like Russia (Rated 8th) that have 4.3 physicians for 1,000 citizens (Globerman et al., 2018; Loudermilk, 2018). With the scarcity of licensed physicians and an increasing population in Canada, determining physicians' position and potential TO, especially in new and ethically challenging circumstances such as MAID merits investigation.

Several contributing factors increase turnover rates among healthcare providers. These factors include role conflict, emotional exhaustion, heavy workloads, dissatisfaction with promotional opportunities, improper training, inequality of work, inadequate pay, lack of recognition, lack of management support in morally distressing situations, and decreased PQL (Hayes et al., 2012; Yang & Kim 2016). The latter two, in the context of MAiD are of particular interest and the focus of investigation within this proposed study. If these antecedents are left unmitigated, healthcare providers will continue to leave their positions and, in doing so, have an ongoing negative impact on an organization's ability to operate efficiently and effectively – not to mention the negative implications for quality patient care. At the nursing unit level, high turnover rates affect the morale of nurses and the productivity of those who remain (Hayes et al., 2012). Increased rates were also associated with lower job satisfaction, a higher probability of medical errors, malpractice suits, and increased overtime hours (Canadian Nurses Association 2009; Hamidi et al., 2018). Lower turnover rates and more experience are related to fewer patient falls with injuries and better quality of patient care (Canadian Nurses Association, 2009). At the

organizational level, the loss of a registered nurse can cost anywhere between 10,000-60,000\$ when considering costs of recruitment, orientation, specialty training, preceptor-ships, and the loss of productivity (Canadian Nurses Association, 2009; Hayes et al., 2012). An equivalent evaluation of the cost of turnover within hospitals is unavailable for physicians.

Turnover and MAiD

There is currently no research on healthcare providers' experiences with MAiD or euthanasia and a possible relationship to TO. Many difficulties follow when caring for patients reaching the end-of-life; practitioners face supporting grieving families, delivering bad news, and witnessing patient suffering, amongst many other emotionally distressing scenarios. With it already being known that there is increased MD and decreased PQL already experienced amongst palliative care workers, it would be valuable to know if MAiD may be a pinnacle for increased TO in this area (Carson et al., 2013; Frey et al., 2018; Samson & Shvartzman, 2018). Seeing as the implementation of the legislation is still relatively new, understanding how providing MAiD impacts healthcare providers is essential to the optimal delivery of MAiD. Despite these concerns, there has still been evidence to suggest that caregivers are finding MAiD/ voluntary euthanasia to be personally and professionally rewarding (Pesut, et al., 2020; Quaghebeur et al., 2009). Seeing as these healthcare providers are the ones to facilitate these procedures, having a better overall understanding of any deleterious effects of such a decision would be beneficial; particularly when it comes to the psychological impacts professionals may experience such as MD, PQL, and TO.

Turnover and Moral Distress

Individuals make decisions based on what they perceive to be the most acceptable action or behaviour when faced with ethical circumstances. MD ensues if healthcare providers are

unable to act in accordance with their values due to personal/organizational constraints (Blackwood et al., 2013; Jameton, 1984). It would be valuable to know if an outcome of MD could cause healthcare provider turnover. Thus far, there have been mixed results noted as to whether there is a correlation between MD and TO. For example, in one study by Blaževičienė et al. (2020) with 612 participants, 32.3% of nurses reported a low level of MD, 33.9% a moderate level of MD, and 33.8% had a high level of MD. Nurses who had a high level of MD were three times more likely to consider leaving their position compared with those who had low to moderate amounts of MD (Blaževičienė et al., 2020). Another study surveyed 200 critical care nurses and determined no significant association between MD intensity and frequency and nurses' TO, instead found significant associations between age, years of nursing experience, years of critical care experience, and turnover intention (Abumayyaleh et al., 2016). A final study looked at both physicians' and nurses' relationship between MD and intent to turnover, approximately 22% of physicians and 35% of nurses have left a position in the past or are currently considering leaving their position due to MD. Scores of MD were significantly higher among physicians, considering leaving their positions now compared to those who were not considering leaving (Austin et al., 2017).

Turnover and Professional Quality of Life

Supporting an environment conducive to improving a professional's quality of working life is critical for healthcare organizations to attract and retain qualified, committed, and motivated employees. As mentioned, the ProQol scale is composed of CS and CF (with STS, and BU subscales). BU is one of the most studied reasons why physician and nurses leave their jobs. One study examined the association between physician BU and subsequent turnover within the Stanford medical center; conclusions indicated that 26% of physicians reported symptoms of

BU and 28% reported an intention to leave within the next two years, and by 2015, 13% of those physicians surveyed had indeed left (Hamidi et al., 2018). Hamidi also concluded that physicians who experienced BU are more than twice as likely to leave their practice. Another study looking at CF and CS in oncology nurses found that BU was correlated, and contributed to, nurses' TO thereby increasing the financial issues for the healthcare organization and creating safety concerns for patients and nurses; while CS was associated with a significant protective influence against TO (Giese et al., 2019).

Considerations Specific to COVID-19

COVID-19 is an illness caused by the novel SARS-CoV2 virus. COVID-19 first reached Canada in January 2020 and has since resulted in a global pandemic, an abrupt crisis within our healthcare system, and an academic disruption of research worldwide (Blumenthal et al., 2020; Weiner et al., 2020). It is important to acknowledge that this study is taking place amid this global pandemic, and this has the potential to put unavoidable external stress on the participants of this study. To account for this variable, the study as designed will consider the influence of the COVID-19 pandemic. Details are provided within the methods section of this protocol.

Problem Statement and Relevance to Healthcare

Although both MD and PQL have been investigated, there is limited research that examines the relationship between MD, PQL, and their relationship with TO. Further, an exploration of the relationships of these contexts is absent within the context of MAiD provision. With respect to the caregiver type, the majority of this literature is nurse-focused compared to physicians. Concerning specialty, the majority of research pertaining to MD, PQL, and TO is evident within areas the areas of neonatal, pediatric, critical care, and oncology; less attention has been devoted to in-patient palliative care units or hospices, and even less concerning MAiD

(De Boer et al., 2016; Jang et al., 2016; Al-Majid et al., 2018). This study will focus on nurses and physicians directly involved in MAiD through a volunteer Regional Network. This study will allow us to challenge or affirm in the context of MAiD; what is already known from other related end-of-life research and to expand our understanding of end-of-life care that is idiosyncratic to MAiD about the experiences of healthcare providers specific to the concepts and constructs previously described: Moral Distress, Professional Quality of Life, and Turnover Intent. By focusing on this highly specific population (described in detail in Chapter 3), there is a unique opportunity to explore and understand the involvement of healthcare providers who have chosen to work in a clinical context that is designed/centered on MAiD.

Thesis Layout

In Chapter 2, I describe the study design and research methods, beginning with the establishment of my professional and pragmatic approach as well as the research methods employed for participant recruitment, data collection, and data analysis. The third chapter is an unpublished empirical findings manuscript prepared for submission to Palliative Medicine. The thesis concludes with Chapter 4, wherein I present a detailed discussion of averages, correlations, COVID-19 considerations, recommendations for practice, strengths, limitations, and areas for future research.

Chapter 2: Study Design and Research Methods

As MAiD continues to establish its place within Canadian healthcare, it is valuable to analyze the impact it has on healthcare providers. This chapter provides an overview of this study's design and methods which have been incorporated in an attempt to explore the experiences of the nurses and physicians who volunteer as part of a Regional Network as well as to evaluate their rates of Moral Distress, Professional Quality of Life, and Turnover Intent. First, I outline my professional and pragmatic approach and then provide an introduction to the population/context as well as the research objectives. I continue with a description of the analytical overview of the validated tools used within our online questionnaire. This section includes the study's: sample and recruitment strategies, data collection instruments (Moral Distress-Revised, ProQol-5, and Turnover Intent Scale), data analysis, and open-ended questions. I conclude the chapter with a description of the ethical considerations of the study.

Researcher's Stance

As a nurse, I worked in the palliative care field for 2 ½ years, in that time, MAiD was introduced and I was one of the first nurses in my hospital to take part in this new procedure. I found the experience to be beautiful, rewarding, and very fulfilling. It does take a personal toll on me to be a part of an assisted death, but it is well worth the self-sacrifice to honor a patient's final wish. Interactions with patients' families for myself were mixed; most were extremely positive and supportive of the decision, with a select few not agreeing and being challenging to work with. Nurses in the palliative care unit were also divided, the majority were in favour of MAiD, but a select few refused to care for a patient or even be present on the unit during the time of the procedure. It has been valuable to listen to the ethical concerns of others, but overall I

wholeheartedly believe in the administration of MAiD and its allowance for patient autonomy and personal choice during the death and dying process.

Paradigmatic Stance

The post-positivist paradigm is the worldview that I ascribe to and that I used to guide this research study. This paradigm can be best understood by reviewing its' ontological position (view of reality) as well as its epistemological standpoint (its theory of knowledge) (Broom & Willis, 2007). The ontological tenets of post-positivism assume that reality exists but is not absolute and that specific outcomes have a probability of uncertainty, but cannot be 100% proven (Creswell & Creswell, 2017). The post-positivists' epistemological view values concepts of objectivity which aim to reduce bias by critically analyzing data and critiquing pre-existing knowledge; and dualism, the belief that knowledge exists in forms beyond the physical body (Guba & Lincoln, 1994). As mentioned, my stance/opinions regarding MAiD have been expressed, this self-awareness hopes to minimize bias by implementing a value-neutral approach throughout the study. As well the descriptive portion of the research was predominantly used to support the quantitative findings to produce a holistic understanding of the context in question.

Population and Context: The Regional Network

The target population included a Regional MAiD Network operating within a tertiary/quaternary care hospital in Canada. The Network is comprised of both nurses (registered nurses and nurse practitioners) and physicians who are regularly involved with MAiD across the region. The structure of the Regional Network is such that it facilitates its members to connect, find resources, and support its practitioners throughout the MAiD process in both home and hospital settings. The Regional Network draws from a variety of areas of expertise, ultimately creating a more holistic assessment and comprehensive plan of care for the patient and their

family. The base of this network is an Academic Health Science Centre and members' participation is strictly voluntary. Within the Health Science Centre, those regional members situated there are part of the hospital's MAiD network and may be available to consult on MAiD cases referred to them from other areas within the region. Through the Regional Network, it is also possible for healthcare providers who may otherwise not be able to contribute to MAiD within their community to volunteer and participate in a variety of ways, for example, registered nurses can be assigned to help start intravenous catheters and assist MAiD practitioners in the Region. Approximately 6 months prior to data collection, one out of three MAiD referrals resulted in the procedure being completed. Referrals: April-September 2021, n=378 (Statistics received from Network Correspondent).

Research Aim/Objectives

The Regional Network provides a unique opportunity to conduct research specific to the experiences of healthcare providers (specifically nurses and physicians) who work with patients and their families at the end-of-life within the context of MAiD. All members of the Regional Network were involved voluntarily; therefore, findings have been examined within this context, and this underlying context has been considered.

Research Aim

This research aimed to explore the experiences of healthcare providers (nurses and physicians) caring for patients undergoing MAiD as well as to explore the relationship(s) between the concepts of MD, PQL, and TO.

Objectives:

1. To describe the concepts/constructs: MD, PQL, and TO within the context of MAiD through self-reported surveys.

- a. To explore the relationships between the identified concepts/constructs of MD, PQL, and TO where possible.
2. To describe how the COVID-19 pandemic has been experienced by the Regional Network concerning the identified concepts and constructs.

Research Design

This study consisted of a self-reported survey comprised of scale items and open-ended questions. This study was both explorative and descriptive.

Sample and Recruitment

All 62 nurses and physicians who were currently part of the Regional Network were invited to participate. Surveys were distributed electronically by email and were available for participants through an electronic link to the online survey platform - Survey Monkey. Given the confidential and voluntary nature of the Network's composition, emails were sent out by the network's program manager (See Appendix C, for recruitment email). Recruitment followed a modified version of Dillman's (1978) *Total Design for Survey Research*. Data were collected during November and December 2021. Two weeks after the first electronic distribution, a follow-up email thanking those who had already participated in the study and inviting non-respondents was sent. A final email was sent another two weeks later following the same format as the initial follow-up email.

Data Collection

The survey was composed of two sections, demographics/descriptive and construct measurement. Each construct measurement section was concluded with an open-ended question that enabled consideration of the COVID-19 context.

The following demographic data was collected: sex, gender, age, highest level of education, professional group/class (e.g., nursing or medicine; registered nurse or registered practical nurse), length of time spent total in the profession/ current area, the number of MAiD procedures involved in, primary area/specialty of work, employment status (e.g., full-time, part-time casual), post-registration qualifications, additional training in palliative care, ethnic/racial background, and religious/spiritual affiliation. Additional demographics included roles assumed during the provision of MAiD (e.g., assessment, MAiD preparation [e.g., IV insertion], MAiD provision, post-mortem care, bereavement support, and/or follow-up with families). These were selected based on the needs of the study as well as, frequently reported characteristics (e.g., age) from similar research publications

Construct Measurement Instruments

Three scales were used *Revised Moral Distress Scale (MDS-R)*, *The Professional Quality of Life Scale Version 5 (ProQol-5)*, and the *Turnover Intent Scale*.

Revised Moral Distress Scale. The *Revised Moral Distress Scale (MDS-R)* (See Appendix D) adapted by Hamric, Borchers, and Epstein (2012) was the tool used to measure MD. The original MD scale was designed by Corley (2002) to assess MD among healthcare professionals, it was comprised of 38 questions that were measured on two dimensions: 1) intensity of MD and 2) frequency of MD; each was rated on a 5-point scale, 0 being no MD and 4 being a significant amount of MD. The higher the collective score indicated, the higher the degree of MD. Reliability analysis was conducted by Corley et al. (2001) on the original scale using the determination of inter-item correlations as well as the internal consistency estimates. All factors had acceptable levels of internal consistency (0.82-0.97), thus it was concluded to be a valid and reliable tool (Corley et al., 2001).

Hamric et al. (2012) revised the instrument (MDS-R), condensing it to 21 questions while still measuring the intensity and frequency of MD on a scale ranging from 0-4 (0 being no MD and 4 being a significant amount of MD). The tool was developed to measure MD among healthcare professionals based on their professional perception of specific healthcare situations and has been tested and proven useful to many different populations and settings globally. The revised scale was chosen for this study to reduce the cognitive load on the respondents and because its use with both physicians and nurses has already been proven in prior studies (Hamric et al., 2006). The psychometric properties have been tested many times and in various translations including, English, Turkish, Iranian, and Italian; establishing proper convergent and discriminant validity (Badolamenti et al., 2017; Karagozoglu et al., 2017; Lamiani et al., 2017). Additionally, the original authors of the MDS-R demonstrated its content and construct validity in their original paper (Hamric et al., 2012). Multiple studies investigated the scale's reliability including Austin et al. (2017), where Cronbach's alpha, measuring internal consistency (reliability), was 0.88 in physicians and 0.89 in nurses. In conclusion the MDS- R is considered a valid and reliable tool to use. It is important to acknowledge that even though we have tried to preface answering the MD questions based on the participant's experiences within the MAiD context; this tool is not MAiD specific and therefore there is potential to be measuring the MD imposed on the practitioners through their other areas of practice (i.e., Emergency, Medicine, Anesthesia, etc.).

The Professional Quality of Life Scale Version 5 Scale. *The Professional Quality of Life Scale Version 5* (ProQol-5) was used to operationalize CS and CF (Appendix E). The ProQol 5 instrument was composed of three subscales measuring the three constructs – CS, BU, and STS. The ProQoL-5 utilizes 30, 5-point scale items to measure each of these three subscale

components (ten items each) ranging from 1-*Never* to 5-*Very Often*. Higher scores indicate higher amounts of measured BU, STS and CS. Although ProQoL-5 was originally developed for emergency personnel and trauma counselors, the scale has been utilized internationally and has been psychometrically validated in different studies for various target populations including nurses and physicians (Stamm, 2009). As stated in the ProQoL Manual, Stamm (2009) established reliability with internal consistency coefficients for CS, BRN, and CF, being 0.87, 0.72, and 0.80, respectively. The construct validity of the ProQOL-5 has also been substantiated by over 200 peer-reviewed articles (Stamm, 2009). A recent study by Hemsworth et al. (2018), evaluated the psychometric properties of the ProQOL-5 concluding that the compassion satisfaction construct showed adequate validity with some minor concerns/recommendations regarding the BU and STS scales. Despite these minor criticisms, this tool was still seen as being acceptable in evaluating the professional quality of life (Hemsworth et al., 2018).

Turnover Intent Scale. *Turnover Intent Scale* was measured using an English version of the Mobley et al. (1978) scale, which evaluated the precursors of hospital turnover in three domains for practitioners: thinking of quitting, searching for new employment, and intending to leave (Appendix F). This model had been used in a variety of different occupations including the military, addiction councillors, bank clerks, nursing administrators, physicians, and nurses (Castle, 2006; Galletta et al., 2013; Hongvichit, 2015; Miller et al., 1979). This scale developed by Mobley et al. (1978) consisted of seven questions/items rated on a 5-point Likert scales, ranging from *strongly disagree* to *strongly agree*. The Three domains were encompassed within the questions as follows: thinking of quitting (Questions 1, 2, and 3), searching for employment (Questions 4, 5, and 6), and intention of leaving (Question 7). The higher the combined average

of the seven questions, the higher the turnover intention. The reliability of this tool was reported as 0.86 (Cronbach's alpha) (Castle, 2006).

To consider the impact that the COVID-19 pandemic may have on respondents, we prefaced the survey, asking the participants to try *as best as possible* to answer the survey questions using a mindset they would have had before the pandemic. In addition, open-ended questions following each concept section were included, asking the participants if their experiences related to the concepts *had changed due to COVID-19* (Appendix G).

Open Ended Questions

The open-ended questions intended to lend support and context to the quantitative measures so that a more comprehensive understanding of the Professional Quality of Life, Moral Distress, and Turnover Intent of MAiD facilitators could potentially be captured. Open-ended questions pertaining to MAiD also provided some opportunity for respondents to consider how the COVID-19 pandemic has intersected with the experiences of MAiD within the Regional Network they are described in the manuscript below.

Data Analysis

The data was first imported/entered into Microsoft Excel for preprocessing, reverse coding, data cleansing, and determination of scale composites. IBM SPSS version 27 was used for the descriptive statistical analyses and determination of the relationships among the concepts/constructs. Values for each of the constructs were calculated by averaging each scale item within the scale measuring the relevant construct. Relationships between each of the constructs were established by calculating the Pearson correlation between the values of the construct. Open-ended questions were analyzed using a basic content analysis approach as articulated by Hsieh and Shannon (2005).

Ethics

Ethical approval for this study was sought and subsequently received from both the requisite site Research Ethics Board (REB) and the University of Ottawa Health Sciences REB. Appropriate measures were undertaken to ensure that the study met the necessary ethical criteria of all the institutions including a virtual participant information letter and consent form and an electronic survey. Privacy and confidentiality were maintained; surveys were assigned with a participant number and all identifying data in the open-ended questions were redacted. Data collected through the uOttawa licensed Survey Monkey was transferred from the Survey Monkey database to the uOttawa secure SharePoint. Data storage was consistent with the requirements of the REBs and included safe storage of data, maintenance of confidentiality, privacy, and anonymity. Informed consent was obtained before survey completion and was included in the anonymous online survey. Data will be disposed of in a manner consistent with the REB guidelines.

Rigour

Our study employs a reliable design, sampling, and analytical methods with validated instruments, for which the subsequent results were therefore considered to be valid and reliable. The written responses in the qualitative portion of the study were trustworthy in that they represented the unsolicited thoughts and ideas of a representational sample of practicing healthcare providers as evidenced by the inclusion of a variety of participant quotes.

Chapter 3: Unpublished Manuscript

Professional Quality of Life, Moral Distress, and Turnover Intent of Healthcare Providers

Working within the Context of Medical Assistance in Dying

This chapter is an unpublished manuscript prepared for submission to Palliative Medicine.

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Abstract

Background: Despite a longstanding debate regarding personal choice towards death and dying, MAiD was legalized in Canada on June 17th, 2016. Since its integration into the healthcare system, there has been a dearth of literature surrounding providers' experience with the procedure. Healthcare providers are uniquely positioned within the context of the MAiD experience.

Aim: To explore the experiences of health care providers (nurses and physicians) caring for patients undergoing MAiD as well as to explore the relationships between the concepts, Moral Distress (MD), Professional Quality of Life (Burnout (BU), Secondary Traumatic Stress (STS) and Compassion Satisfaction (CS)), and Intent to Turnover (TO).

Design: This explorative and descriptive cross-sectional study consisted of a self-reported survey that uses both scale items and open-ended questions.

Setting/ Participants: The target population included all nurses and physicians who were active members of a targeted Regional MAiD Network practicing within a designated geographical location within Canada.

Results: N=38 Questionnaires completed. The averages of our measured constructs include Moral Distress (Composite) $x= 2.9$ (SD 2.03), Moral Distress (Frequency): $x= 1.18$ (SD .102), Moral Distress (Intensity): $x= 1.61$ (SD .28) Burnout: $x= 2.08$ (SD 0.5), Secondary Traumatic Stress $x= 2.22$ (SD 0.48), Compassion Satisfaction $x= 4.18$ (SD 0.43) and Turnover Intent: $x= 2.22$ (SD 0.77). Significant positive correlations were found between inter-scale constructs of Moral Distress (Composite, Frequency, and Intensity), Moral Distress, Burnout, and Secondary Traumatic Stress, and between Burnout and Turnover Intent. Significant negative correlations were also found between Professional Quality of life Inter-Scale constructs of Compassion Satisfaction and Burnout as well as between Compassion Satisfaction and Turnover Intent.

Conclusion: MAiD providers in our study expressed feelings of their work being "rewarding" and "deeply satisfying", further reflective in their below-average rates of Moral Distress, Burnout, Secondary Traumatic Stress, Turnover Intent, and higher-than-average rates of Compassion Satisfaction. Although the procedure remains controversial, these participants expressed enjoying their work. These reported positive aspects of their roles persisted despite the challenges the COVID-19 pandemic presented.

Background

As Western society's population demographics shift toward supporting the elderly, so has our focus on autonomy, quality of life, and personal choice towards death and dying (Berghs, et al., 2005; Quaghebeur, et al., 2009). Despite a longstanding debate regarding personal choice towards death and dying and a changing societal focus led to a movement towards legalizing Medical Assistance in Dying (MAiD) in Canada on June 17th, 2016 (Dierckx de Casterlé et al., 2010; Health Canada, 2017; Quaghebeur et al., 2009). Health Canada (2021) reported that there was a 34.2% growth from 2019 (5,660 MAiD deaths) to 2020 (7,595 MAiD deaths), accounting for 2.5% of all Canadian deaths. In the next decade, there is an anticipated upward trend suggesting that MAiD could account for between 1-4% of all deaths in Canada (Health Canada 2019; Trachtenberg & Manns, 2017).

Despite the legalization of MAiD in Canada, it has not been without contentious debate. From a Canadian perspective, data from 2015 polling indicated that 79% (n= 1,035) of the public were in favour of having medically assisted death as an option (Insight West 2015). In contrast, healthcare professionals were less supportive with only 45% (n= 5000) of these respondents favouring the legalization of MAiD (Canadian Medical Association, 2016). Internationally, healthcare providers have expressed mixed feelings towards legalized MAiD/euthanasia, including personal conflict, moral uncertainty, frustration, fear, secrecy, and guilt (Pesut, et al., 2019; Quaghebeur et al., 2009). Healthcare providers are uniquely positioned within the context of the MAiD experience; nurses and physicians are directly involved in the provision of care to both individuals and families receiving MAiD. Taking on roles such as providing the proper resources for a person inquiring about or requesting MAiD, recognizing/respecting and promoting a capable person's right to be informed and make decisions, documentation,

preparation of appropriate set up for the procedure (e.g. inserting IV's), preparing the body; physicians also assume a primary role and are, in many instances, the healthcare provider that directly determines eligibility and administers MAiD medications (Canadian Nurses Association 2017; Ontario Ministry of Health, 2018). As MAiD has evolved, several concepts and constructs identified within the literature are useful in both exploring and understanding the experiences of healthcare providers specific to end-of-life care in the context of MAiD This study will investigate Moral Distress (MD), Professional Quality of Life (PQL), and Turnover (TO) amongst MAiD providers.

Literature Review

Moral Distress

Moral Distress (MD) is experienced by health care professionals when their moral beliefs fall out of alignment with those of their practice and policy environments (Jameton, 1984). Dorman and Bouchal (2020) identified a concern regarding situations where despite requests for MAiD being justified, feelings of guilt and MD may be elicited when faced with the potential moral dilemma of partaking in or rejecting, ending a life. Heilman and Trothen (2020) reported on the role of conscientious objection indicating that the ambiguity of MAiD policies today has left practitioners feeling uncertain regarding balancing their values and their obligations to patients thereby leading to MD. MD has been identified as occurring in many different conditions, including decision making at the end-of-life (Abbaszadeh et al., 2014; Borhani et al., 2014).

Professional Quality of Life

Professional Quality of Life (PQL) within the context of healthcare refers to the quality one feels in relation to their work as a caregiver (Stamm, 2009). This concept is comprised of

two constructs: Compassion Fatigue (CF) (consisting of Burnout (BU) and Secondary Traumatic Stress (STS)) and Compassion Satisfaction (CS). Definitions of ProQol-5 sub-constructs include, CF: “cost of caring for others in emotional pain” (Figley, 1995, p. 16). BU: “a psychological syndrome involving emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment that occurred among various professionals who work with other people in challenging situations” (Maslach & Jackson 1981, p. 106). STS: “the stress resulting from helping or wanting to help a traumatized or suffering person” (Figley, 1999, p. 10). CS: "the pleasure one derives from being able to do one's work well" (Stamm, 2010, p. 12). When PQL is regarded as high, it is associated with increased team cohesiveness, healthier habits (e.g., exercise and sleep), and above all, increased quality of patient care (Alkema et al., 2008; Lee et al., 2019; Salimi et al., 2020). PQL has been studied within the end-of-life context all across the lifespan over a variety of different healthcare providers and settings, including medicine, critical care, oncology, and hospice care (Wu et al., 2016; Zhang et al. 2018). In one study looking at Canadian oncology personnel, nurses experienced moderate levels of PQL (BU 46%, STS 48% and CS 41%) (Wu et al., 2016). Findings from a survey of nurses delivering palliative care in the urban setting found that 48.4% had moderate to high CS, over a quarter of the sample (26.8%) recorded high BU scores and over half (51.6%) had reported moderate STS (Frey et al., 2018). Levels of CS and BU for professionals working with patients at the end-of-life have been comparable to the meta-analysis results reported by Zhang et al. (2018) where, the prevalence rates of Compassion Satisfaction and Burnout have been estimated at approximately 48% and 54%, respectively.

Turnover Intent

Turnover Intent (TO) relays a healthcare professional's desire to leave their current role.

(Mobley, 1978). Several contributing factors increase turnover rates amongst healthcare providers. These factors include role conflict, emotional exhaustion, heavy workloads, dissatisfaction with promotional opportunities, improper training, inequality of work, inadequate pay, lack of recognition, lack of management support in morally distressing situations, and decreased PQL (Hayes et al., 2012; Yang & Kim 2016). Increased rates were also associated with lower job satisfaction, a higher probability of medical errors, malpractice suits, and increased overtime hours (Canadian Nurses Association 2009; Hamidi et al., 2018) whereas lower TO rates were associated with better quality of patient care (Canadian Nurses Association, 2009). At the organizational level, the loss of a registered nurse can cost anywhere between \$10 000 to -60 000 when considering costs of recruitment, orientation, specialty training, preceptorships, and the loss of productivity (Canadian Nurses Association, 2009; Hayes et al., 2012).

Published literature specific to end-of-life care has been limited to bivariate correlational analyses and there has been no MAiD literature on this proposed study's concepts. The relationship between MD and PQL remains an under-researched area. Significant positive relationships have been found between *MD and BU* (Austin et al. 2017; Dalmolin et al. 2014; Maiden et al. 2011; Shoorideh et al. 2015) and between *MD and STS* (Austin, et al., 2017). Thus far, there have been mixed results noted as to whether there is a relationship between *MD and TO*. For example, in one study by Blaževičienė et al. (2020) (n= 612) 32.3% of nurses reported a low level of MD, 33.9% a moderate level of MD, and 33.8% had a high level of MD. Nurses who had a high level of MD were three times more likely to consider leaving their position compared with those who low to moderate amounts of MD (Blaževičienė et al., 2020). Another study (n=200) of critical care nurses and determined no significant association between MD intensity and frequency and nurses' TO, instead found significant associations between age, years

of nursing experience, years of critical care experience, and turnover intention (Abumayyaleh et al., 2016). A relationship between PQL and TO has been identified, with BU being one of the most studied reasons for which physicians and nurses leave their jobs. One study examined the association between physician BU and subsequent TO within the Stanford Medical Center; conclusions indicated that 26% of physicians reported symptoms of BU and 28% reported an intention to leave within the next two years, and by 2015, 13% of those physicians surveyed had indeed left (Hamidi et al., 2018). Hamidi also concluded that physicians who experienced BU were more than twice as likely to leave their practice.

Problem Statement and Relevance to Healthcare

There is currently no research on healthcare providers' experiences with MAiD or euthanasia and a possible relationship to MD, PQL or TO. Many difficulties follow when caring for patients reaching the end-of-life; practitioners face supporting grieving families, delivering bad news, and witnessing patient suffering, amongst many other emotionally distressing scenarios. With it already being known that there is increased MD and potentially decreased PQL already experienced amongst palliative care workers, it would be valuable to know if MAiD may be a cause leading towards increased TO in this area (Carson et al., 2013; Frey et al., 2018; Samson & Shvartzman, 2018). Seeing as the implementation of the legislation is still relatively new, understanding how providing MAiD impacts healthcare providers is essential to the optimal delivery of MAiD.

Considerations Specific to COVID-19

It is necessary to acknowledge that this study took place amid the global COVID-19 pandemic, and this has the potential to put unavoidable external stress on the participants of this study. To account for this variable, the study as designed considers the influence of the COVID-

19 pandemic through the incorporation of open-ended questions in the study design.

Study Aim and Objectives

Although both MD and PQL have been investigated, there is limited research that examines the relationship between MD, PQL, and their relationship with TO. Further, an exploration of the relationships of these contexts is absent within the context of MAiD provision. This study will focus on nurses and physicians directly involved in MAiD. This research aimed to explore the experiences of health care providers (nurses and physicians) caring for patients undergoing MAiD as well as to explore the relationship(s) between the concepts of MD, PQL, and TO. Specific objectives included:

1. To describe the concepts/constructs: MD, PQL, and TO within the context of MAiD through self-reported surveys.
 - a. To explore the relationships between the identified concepts/constructs of MD, PQL, and TO where possible.
2. To describe the ways in which the COVID-19 pandemic has been experienced by the participants.

Study Context

A Regional MAiD Network operating within a tertiary/quaternary care hospital in Canada was the target population; members' participation in the program is strictly voluntary. The Network is comprised of both nurses (registered nurses and nurse practitioners) and physicians who are regularly involved with MAiD across the region. Approximately 6 months prior to data collection, 1/3 of referrals resulted in a MAiD procedure being completed; Referrals: April-September 2021, n=378 (Statistics received from Network Correspondent).

Research Design

This study was a cross-sectional study consisting of a self-reported survey that uses both scale items and open-ended questions. This study was both explorative and descriptive in nature.

Population and Recruitment

All 62 nurses (registered nurses (RN) and nurse practitioners (NP)) and physicians who were part of this Network at the time of data collection were invited. Surveys were distributed electronically through email and were available for participants through an electronic link to the online survey platform (Survey Monkey). An online written consent form was included in the survey prior to completing the survey. Recruitment followed a modified version of Dillman's (1978); three emails were sent at two-week intervals, the first one was the initial recruitment email, and the second and third emails thanked those who had already participated and invited non-respondents to consider participation. Survey data was collected between November and December 2021.

Self-Reported Instruments

The survey was composed of three sections: demographic data, construct measurement, and open-ended questions. Thirteen demographic questions were asked (See Table 1 for a list and values). To consider the impact that the COVID-19 pandemic may have on respondents, we prefaced the survey items, asking the participants to try *as best as possible* to answer the survey questions using a mindset they would have had before the pandemic. In addition, open-ended questions following each concept section were included asking the participants if their experiences related to the concepts had changed due to COVID-19. Construct measurement consisted of the following.

Revised Moral Distress Scale (MDS-R)

The Moral Distress Scale (Appendix D) developed by Hamric et al. (2012), uses 21 questions, measuring the intensity and frequency of MD on a 4-point scale (0 being no MD and 4 being a significant amount of MD). Multiple studies investigated the scale's reliability including Austin et al. (2017), where Cronbach's alpha, measuring internal consistency (reliability), was 0.88 in physicians and 0.89 in nurses. In conclusion the MDS- R is considered a valid and reliable tool to use.

Professional Quality of Life Scale Version 5 Scale (ProQol-5)

The Professional Quality of Life Scale Version 5 Scale (Appendix E) was used to operationalize CF (composed of BU and STS) and CS. The ProQoL utilizes 30, 5-point scale items to measure each of these three subscale components (ten items each) ranging from *Never (1)* to *Very Often (5)*. Higher scores indicate higher amounts of measured BU, STS and CS. As stated in the ProQol Manual, Stamm (2009) established reliability with internal consistency coefficients for CS, BRN, and CF, being 0.87, 0.72, and 0.80, respectively. The construct validity of the ProQOL-5 has also been substantiated by over 200 peer-reviewed articles (Stamm, 2009).

Turnover Intent Scale

The Turnover Intent Scale (Appendix F) was measured using the Mobley et al. (1978) scale. This scale consisted of seven items rated on a 5-point Likert scale, ranging from *Strongly Disagree (1)* to *Strongly Agree (5)* The three domains were encompassed within the questions as follows: thinking of quitting (Questions 1, 2, and 3), searching for employment (Questions 4, 5, and 6), and intention of leaving (Question 7). The higher the combined average of the seven

questions, the higher there is intent to turnover. The reliability of this tool was reported as 0.86 (Cronbach's alpha) (Castle, 2006).

Open-Ended Questions

Lastly, we included four open-ended questions with the intent of lending support and context to the quantitative measures, so that a more comprehensive understanding of the PQL, MD, and TO of MAiD facilitators was captured (Appendix G). Open-ended questions provided some opportunity for respondents to consider how the COVID-19 pandemic has intersected with their experiences within the Network with respect to the measured concepts and constructs.

Data Analysis

Data were analyzed using SPSS version 27. To determine whether the missing values were missing at random (systematically missing) the MCAR test was undertaken. The results showed the Little's MCAR test: Chi-Square= 108.969, DF= 282, Sig. = 1.000. Thus, the missing values were determined to be completely random. As such, two methods for dealing with missing data were used. First, pairwise deletion was incorporated to utilize as much of the sample as possible. Second, for random missing values in the inferential data (3 surveys were missing 4 scale values) item means were substituted, per the ProQol-5 manual (Stamm, 2010). Items 1,4,15, 17, and 29 of the BU scale were reverse-coded as directed by the ProQol-5 Manual (Stamm, 2010). Item 18 of the ProQol scale (measuring CS) was missed in data collection and therefore the analysis proceeded with the remaining 29 items. Given the sample size, the Shapiro-Wilk test was used to test the scale's data for normality; in this sample, constructs MD ($p = .3$), BU ($p = .11$), STS ($p = .11$), CS ($p = .62$), TO ($p = .06$) have a $p > 0.05$, and therefore we can conclude that the data is not significantly different from a normal distribution (SPSS tutorials, 2022). Frequency tables were calculated for demographic items and the means and

standard deviations for descriptive items. Pearson's correlations and the Cronbach alpha reliability measure were calculated for all inferential scales. It is important to note the composite of MD was then calculated to give a more accurate reflection of the actual MD of the MAiD providers, we provided the averages as opposed to the sum (Hamric et al., 2012). The score was calculated by multiplying the MD_F X MD_I (for each of the 21 items) and averaging, the number will range between 0-16 (results shown in Table 3).

Results

Demographic/Descriptive Statistics

The survey response rate was 61.3% (38/62 members). The resulting sample consisted of 38 respondents: 11 nurses (RN and NP), and 27 physicians (Table 1). All respondents identified as being current members of the Network. To maintain the anonymity of participants some demographic information has been combined into an *other category. The majority were female (65.8%), the age range was 45-54 years, and 81.6% of respondents identified as being white. 55.2% identified as being religious/spiritual with the most common religions being Catholicism, Judaism, and Protestantism, though 23.7% of people expressed religion as not being very important. The average number of years worked in their primary specialties was 12.1 years with the most common areas being medicine (23.7%), emergency (18.4%), and anesthesia (15.8%); 81.6% of respondents worked full-time in their primary roles. Finally, 28.9% reported formal palliative training.

Table 1

Online Survey Demographics (n= 38)

N and (%)

Sex	N and (%)
Male	13 (34.2)

	N and (%)
Female	25 (65.8)
Gender	
Man	13 (34.2)
Woman	25 (65.8)
Other	0
Age	
25-34	6 (15.8)
35-44	9 (23.7)
45-54	15 (39.5)
55-64	6 (15.8)
65+	2 (5.3)
Race	
White	31 (81.6)
*Other	6 (15.8)
Prefer Not to Say	1 (2.6)
Profession	
Nurses	11 (28.9)
Physician	27 (71.1)
Area Worked	
Family Medicine	2 (5.3)
Medical	9 (23.7)
Intensive Care	3 (7.9)
Emergency	7 (18.4)
Mental Health	2 (5.3)
Surgery	3 (7.9)
Palliative Care	3 (7.9)
Anesthesia	6 (15.8)

N and (%)	
*Other	3 (7.8)
Employment Status	
Casual	2 (5.3)
Part-Time	5 (13.2)
Full-Time	31 (81.6)
Palliative Training	
Yes	11 (28.9)
No	27 (71.1)

The respondents were involved in the MAiD procedures in a variety of ways: 47.3% in the administration of the final MAiD medications, 47.3% preparation/setup, 71.1% evaluate patient competency, 65.8% provide family support, 71.1% provide consultation with the patient, 47.3% additional support at the bedside and 26.3% provide post-mortem care. The option was given to report other areas of involvement; respondents added documentation, patient education, advocacy for access, arrangement of assessments/ procedures, and orientating as other avenues of participation. Respondents also provided the range relating to the closest number of MAiD procedures they believe to have been involved in; 68.4% reported being involved in 30 procedures or less (Table 2).

Table 2

General Descriptive Statistics related to respondents' involvement in MAiD (n= 38)

MAiD Involvement	N and (%)
Administration of the Final MAiD Medications	18 (47.3)
Prepare/Setup	18 (47.3)
Evaluate Patient Competency	27 (71.1)
Provide Family Support	25 (65.8)
Provide Consultation with Patient	27 (71.1)
Additional Support at the Bedside	18 (47.3)
Post-Mortem Care	10 (26.3)
Number of MAiD Procedures	N and (%)
No Procedures	2 (5.3)
1 to 5 Procedures	5 (13.2)
6 to 10 Procedures	6 (15.8)
11 to 20 Procedures	7 (18.4)
21 to 30 Procedures	6 (15.8)
31 to 40 Procedures	0
41+ Procedures	12 (31.6)

Inferential Statistical Analysis

Mean Statistics of Concepts

Construct means, standard deviations, and confidence intervals were conducted (Table 3). Concept means that fell below the scale midpoint were described as below-average (lower); mean values above the scale midpoint were above-average (higher). Mean measurements of MD (n=34) were as such, MD (Composite) $x= 2.9$ (SD 2.03), MD (Frequency): $x= 1.18$ (SD .102),

and MD (Intensity): $x = 1.61$ (SD .28). This lends to the interpretation that these practitioners are experiencing lower levels MD given ratings of the frequency and intensity of distressing events. Concerning PQL averages ($n=38$), BU rated $x = 2.08$ (SD .5) and STS $x = 2.22$ (SD .48). Both BU and STS representing the negative aspects of PQL displayed below-average scores. While CS, which exemplifies the positive aspect of PQL was rated higher by our practitioners $x = 4.18$ (SD .43) potentially suggesting fulfillment from their work. Finally, the average level of TO ($n=33$) was $x = 2.22$ (SD .77), with 95% of respondents falling below the scoring midpoint, suggesting that providers are experiencing lower-than-average intent to leave this area of their practice. Further comparison of averages will be included in the discussion. T-tests were also performed to look at the differences of means between nurses and physicians as supplementary contextual data. Results showed no significant differences between the two groups.

Table 3*Variable Means*

Variable	Range	Mean	Standard Deviation	Mean Confidence Interval 95% (Upper and Lower)
MD <i>(Composite Average)</i>	1.11-3.69	2.9	2.03	2.22- 3.64
MD_F <i>(Frequency)</i>	1.14-3.32	1.18	.102	1.14 - 1.21
MD_I <i>(Intensity)</i>	1.09-4.10	1.61	.28	1.51- 1.71
BU	1.1-3.28	2.08	.5	1.92- 2.24
STS	1.5-3.5	2.22	.48	2.04- 2.37
CS	3.11-5	4.18	.43	4.04- 4.35
TO	1-3.71	2.22	.8	1.96- 2.51

Correlations

Results reported in correlations below can be seen in Table 4.

Moral Distress Inter-Subscale Correlations. Results showed significant positive correlations between all inter-subscale items, MD composite and MD_F ($r(34) = 0.89, p > 0.001$), MD composite and MD_I ($r(34) = 0.96, p > 0.001$), and MD_F and MD_I ($r(34) = 0.72, p > 0.001$).

Moral Distress and Professional Quality of Life Correlations. Results showed significant positive correlations were found between MD composite and BU ($r(34) = 0.40, p$

=0.05), MD_F and BU ($r(34) = 0.36, p = 0.05$), and MD_I and BU ($r(34) = 0.37, p = 0.05$); as well as between MD composite and STS ($r(34) = 0.35, p = 0.05$), and MD_F and STS ($r(34) = 0.39, p = 0.05$).

Professional Quality of Life Inter-Subscale Correlations. As seen in Table 4 the relationship between BU and STS was found to be a significantly positive correlation ($r(38) = 0.61, p < .001$). A second relationship was also found between BU and CS being a significantly negative correlation ($r(38) = -0.64, p > 0.001$). These results are expected as suggested by the ProQol-5 manual by Stamm (2009).

Professional Quality of Life and Turnover Intent Correlations. All subscales of ProQol-5 were significantly correlated with TO. Significant positive correlations were found between BU and TO ($r(33) = 0.51, p = 0.001$). A significant negative correlation was found between CS and TO ($r(33) = -0.37, p = 0.05$).

Table 4*Pearson's Correlations and Reliabilities*

	MD (Composite)	MD_F	MD_I	BU	STS	CS	TO
MD	$\alpha = \text{N/A}$						
MD_F	0.893** (n=34)	$\alpha = 0.862$					
MD_I	0.955** (n=34)	0.720** (n=34)	$\alpha = 0.927$				
BU	0.397* (n=34)	0.362* (n=34)	0.374* (n=34)	$\alpha = 0.710$			
STS	0.355* (n=34)	0.389* (n=34)	0.292 (n=34)	0.609** (n=38)	$\alpha = 0.737$		
CS	-0.186 (n=34)	-0.160 (n=34)	-0.182 (n=34)	-0.638** (n=38)	-0.198 (n=38)	$\alpha = 0.83$	
TO	0.246 (n=33)	0.309 (n=33)	0.177 (n=33)	0.507** (n=33)	0.279 (n=33)	-0.376* (n=33)	$\alpha = 0.735$

 α = Cronbach's Apha**. Correlation is significant at the $p < 0.001$ level (2-tailed).*. Correlation is significant at the $p < 0.05$ level (2-tailed).

Qualitative Content Analysis

Open-ended questions were analyzed using a basic content analysis approach as articulated by Hsieh and Shannon (2005). Responses were categorized based on their answers into 1. Positive Responses: where only positive opinions were provided related to study's concepts MD, PQL, TO. 2. Neutral Responses: where no stance or change was taken on the subject. 3. Negative Responses: where undesirable issues directly impacted their MD, PQL or TO. 4. No Answer: question left blank or provided an unrelated response to questions (not included). Qualitative data ranged from single word answers to no more than 3-4 sentences, below gives a representation of the content for each question. Qualitative data was used to support inferential statistics, provide insight to COVID-19 specific struggles and to provide guidance for future recommendations for practice.

Question 1: "In your experiences of caring for patients and families pursuing/receiving MAiD during the COVID-19 pandemic, is there anything you have found to be distressing?" Of the 38-person sample, 22 provided responses. Four respondents reported there was no change in moral distress. The remainder provided examples of distressing experiences: restrictive COVID protocols, lack of homecare resources, overworked homecare, visitor restrictions, witnessing the treatment of those un-vaccinated, the worry of practitioner exposure, healthcare worker turnover, speed of MAiD provisions and care providers having to limit their in-person assessments.

Question 2: The open-ended question following completion of the ProQol scale was, "In your experiences of caring for patients and families pursuing/receiving MAiD during the COVID-19 pandemic, is there anything you have found that increases or decreases your perceived professional quality of life?" There were 24 respondents, categorized into neutral responses and those experiences that increase and decrease PQL. Two participants gave neutral

responses to their impact on PQL (e.g., “nothing”, “not that I can think of”). Circumstances expressed that may contribute to decreased PQL include too many restrictions, and barriers to care (e.g., mandatory personal protective equipment), working with difficult patients or families, and being disconnected with both patients and the MAiD team. Others expressed feelings of increased PQL including, having a multidisciplinary team with clear roles, experiencing gratitude from patients and families, seeing the MAiD process “enabling nice deaths”, feeling “peace” from patients and family, participating in a “journey”, experiencing MAiD work being “deeply satisfying”, and feeling like the practitioners “make a difference”.

Question 3: The open-ended question following the Turnover Intent scale was “In your experiences of caring for patients and families pursuing/receiving MAiD during the COVID-19 pandemic, is there anything you have found to cause you to consider leaving your current role?”. There were 16 respondents. Of those 11 commented having no intent to turnover “I plan to stay with oncology and the MAiD team long term”, and “I find my role working on the MAiD team to be something that "fills my cup". The remaining commented-on contributors to potential turnover including workload affecting family time, having inadequate support 24/7, and being frustrated with new technologies taking time from the patient care experiences.

Question 4: The final open-ended question provided in the survey was “Is there anything else you would like to share about your experiences working within the Regional MAiD Network?”. Seventeen participants answered this question. The resounding theme was optimism and having an overall rewarding experience as a member of the MAiD network, comments included “It’s an excellent program and I am very glad that I am part of it and even more thankful to be helping these patients”, “I appreciate the support of the regional program without it my job would be much more challenging” “such an excellent program -- I feel fortunate to be

part of this amazing team”. A few comments were made by the respondents expressing some concerns, for example, “new legislation is not something that makes me want to continue”, and “It would be helpful to have a mentor within this program that I could call on”.

Discussion

This study contributes to the literature, measures/relationships of concepts: MD, PQL, and TO amongst MAiD providers, as well as expands our understanding of the practitioner experience. To our knowledge the results of this single study were the first to measure levels of the MD, PQL, and TO amongst MAiD providers.

Overall, the participants reported below-average levels of MD, BU, STS, TO with high levels of CS (Table 3). These results suggest that our practitioners are managing well with MAiD within this specific context. This interpretation is also supported through participant statements who express, experiencing “gratitude” from patients and families seeing the MAiD process, enabling “nice deaths”, feeling “peace” from patients and family, participating in a “journey”, experiencing MAiD work being “deeply satisfying”, and feeling like the practitioners “make a difference”. This avenue of end-of-life care provides patient self-determination where the practitioners can facilitate an outcome minimizing prolonged suffering—ultimately enabling a good death. In palliative care nurses have reported experiencing MD “some, most, or all of the time” when using protocols for caring for patients at the end-of-life in a general palliative care setting (N=205) (Bender et al., 2019). Studies have shown within palliative care that MD occurs when practitioners perceive patients are receiving non-beneficial care at the end-of-life, families are requesting aggressive care for a dying patient, and when there are delays in starting palliative care (Dodek et al., 2016; Hameric, & Blackhall, 2007; Henrich et al., 2016).

This current study demonstrates that these practitioners are on par with general palliative care providers when considering PQL. Within palliative care, PQL has been reported to be reported as practitioners experiencing an increased level of CS and low to moderate levels of BU and STS (Kaur et al, 2018; Samson & Shvartzman, 2018). Results may also be related to the voluntary nature of this type of work, being that the practitioners are choosing to take on this role and therefore are appreciating what they do, ultimately minimizing BU and subsequently TO.

These statistics also speak to how the network is being run; a recent study conducted with nurses in New Zealand shows that lack of organizational support and working with incompetent healthcare providers lead nurses to experience high MD (Woods, 2020). It appears that these practitioners are feeling supported by the organization/team in a way that is conducive to effectively facilitating the procedure, evidenced by participant quotes such as, “I appreciate the support of the regional program without it my job would be much more challenging” “such an excellent program -- I feel fortunate to be part of this amazing team”. Our significant correlational findings corroborate the existing general healthcare literature. Our results indicate that as MD amongst our MAiD providers increases, so does their BU; a finding that is consistent with available literature (Austin, et al., 2017; Johnson-Coyle, et al., 2016; Karakachian, & Colbert, 2019; Shoorideh, et al., 2015). We also found a strong positive correlation between MD and STS, suggesting that as morally distressing situations arise so does the practitioner’s experience of vicarious trauma; these results corroborate another study in the literature (Austin et al., 2017; Malliarou et al., 2021). In this current study and previous studies, CS was negatively correlated with BU and TO, this supports the idea that practitioners who receive satisfaction from their work are less likely to get burnt out or want to leave their positions (Austin et al., 2017; Stamm, 2010; Sung et al., 2012; Wells-English et al., 2019). Finally, we found that health-

care providers who experience higher levels of BU also tend to have higher levels of TO, this would be expected that as practitioners become exhausted, depersonalized from their work, and develop a diminished sense of personal accomplishment; they would be more likely to leave their positions. This relationship has been proven extensively in the literature (Austin, et al., 2017; Leiter & Maslach, 2009; Perry, et al., 2011; Scanlan & Still, 2019; Sung, et al., 2012; Wells-English, et al., 2019; Yang, & Kim, 2016). Zhang et al., 2014). Overall, our results suggest a direct positive relationship between the debilitating concepts MD-BU-STS and BU-STS-TO, therefore organizational interventions should be aimed at reducing their side effects and enticement to leave the healthcare work force.

COVID-19 Considerations

This data was collected during the COVID-19 pandemic and open-ended responses shed some light on the specific struggles our respondents faced while working within the Network. We acknowledge that the context of the pandemic may have contributed to participants' choice of responses. Struggles our practitioners expressed include, restrictive COVID-19 protocols, lack of homecare resources, visitor restrictions, poor treatment of unvaccinated, potential COVID-19 exposure, slow speed of MAiD provision, and limited in-person assessments. Despite these obstacles, our practitioners, reported positive experiences working within the MAiD network, including comments such as “I plan to stay with oncology and the MAiD team long term”, “I find my role working on the MAiD team to be something that ‘fills my cup’” and “It’s an excellent program and I am very glad that I am part of it and even more thankful to be helping these patients”.

Recommendations

Our findings lead us to believe that currently, these members of the Network are enjoying their role in facilitating MAiD. That being said we have made some recommendations based on statements made by our MAiD practitioners as sources of MD, BU, STS, and TO for both the network and organizations with designated MAiD teams/programs. The expressed challenges included: lack of homecare resources, overworked homecare, improper staff pay, speed of MAiD provisions, workload affecting family time, having inadequate support 24/7, being frustrated with new technologies, clear objectives/direction of hospital, care coordination group is needed and access to mentors. It appears that interventions should focus on making the system as efficient as possible, highlighting ways to decrease workload where able, increase communication/support, improve the availability of resources, and provide training as needed. Decreasing the workload may include more delegation (administrative tasks), having a standardized documentation system, revisiting/restructuring workload distribution of physicians/nurses, and potentially advocating for the allocation of protected time for MAiD-related activities. Improved communication between agencies, management, and professionals is another area that needs to be reinforced. That may include more opportunities for meetings, having a clear process/policy for who needs to be contacted at what time, making sure practitioners know who is available for troubleshooting problems, ensuring again that there is a clear continuity of documentation available, promoting inter-professional relationships and if feasible advocate for access to 24/7 support, or consultation service for MAiD members. With staffing being limited, making sure that the resources are as easily accessible is imperative to the efficiency of the process. Again, communicating where materials are available is important, having a transport system in place (homecare), and having required materials (i.e., medications,

documentation) pre-packaged by units/pharmacies for easy pickup can enhance the speed of delivery. By focusing on addressing any inefficiency within the system we hope to continue maintaining/improving upon the Moral Distress, Professional Quality of Life, and ultimately reduce the chances of Turnover for these practitioners.

Future Areas of Research

We hope that this study will stimulate interest in future topics of research to minimize the dearth of MAiD literature in the future. Recommendations for future studies include; 1. Narrowing down the point of breakdown in communication amongst the network, as it is one of the highest sources of MD amongst our practitioners. 2. Evaluating differences between the nurses and physicians of a larger sample size and the experiences of each group, 3. Comparing the rates of these concepts (MD, PQL, and TO) between the network members (who volunteer) versus general palliative care, intensive care, or medical units where MAiD is generically offered. 4. Re-evaluation of this study's concepts, potentially on a larger scale outside the times of a pandemic. 5. To investigate the differences/experiences between MAiD providers in the hospital versus the community.

Strengths and Limitations

Overall, the instruments used had good reliability based on Cronbach alpha (Table 4). A strength may be related to the design, using supplemental qualitative questions to gain complementary context of quantitative results. Another strength was having access to this collection/network of MAiD-specific providers. Finally, it was advantageous to have a response rate of 61.3% (38/62 possible responses). That being said, reasons for non-participation may include lack of interest in the study topic, comfortability of study contents, sensitivity in maintaining anonymity, unwillingness to participate in research, and challenges with workload

amidst the pandemic. We acknowledge that even though we have tried to preface answering the survey questions based on the participant's experiences within the MAiD context; these survey tools are not MAiD specific and therefore there is potential to be measuring the rates of MD, PQL, and TO imposed on the practitioners through their other areas of practice (e.g., medicine, emergency, anesthesia. Furthermore, the administration of this study's surveys was provided in English due to the limitation of the primary researcher's first/only language. Additionally, our results were gathered on a smaller sample size in the time of a pandemic, generalizations outside of these extenuating circumstances should be considered.

Conclusion

Despite the continued controversy surrounding the procedure and the COVID-19 pandemic, these practitioners report enjoying their work; respondents expressed feelings of their work being "rewarding" and "deeply satisfying" with below-average rates of MD, BU, STS, TO and high rates of CS reported. Efforts should continue to support these healthcare providers and organizations should be mindful of the potentially deleterious effects and the relationships that surround this study's concepts.

Declaration of Conflicting Interests

The author(s) declare no conflicts of interest with respect to the research, authorship or publication of this article

Ethical Approval

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Supplemental Material

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Chapter 4: Integrated Discussion

In this concluding chapter, I will discuss these findings within the context of the existing literature and propose practical recommendations for clinical practice, education, research, and leadership. Finally, I will discuss the strengths and limitations of the current study.

This study found that nurses and physicians within a Canadian MAiD network reported below-average levels of MD, BU, STS, and TO with above-average levels of CS (Table 3). Quantitative results are further strengthened by participant statements expressing receiving “gratitude” from patients /families amidst the MAiD process, enjoying enabling “nice deaths”, feeling “peace” from patients/families, participating in a “journey”, experiencing MAiD work being “deeply satisfying”, and feeling like the practitioners “make a difference”.

This study contributes to the literature, measures/relationships of concepts, MD, PQL, and TO amongst MAiD providers, as well as expands our understanding of the practitioner experience. Due to the ethically complex and controversial perspectives still surrounding MAiD, healthcare providers are at risk of experiencing the damaging effects of those concepts; this potential has been the driving concern behind our study. To our knowledge the results of this single study were the first to measure levels of the MD, PQL, and TO amongst MAiD providers.

Construct Means

Moral Distress

The average (N=34) reported levels of MD were: MD (Composite) 2.9 (SD 2.03), MD (Frequency) 1.18 (SD .102), and MD (Intensity) 1.61 (SD .28). This lends to the belief that these practitioners are experiencing overall below-average levels of MD. Within the healthcare literature, practitioners in areas such as critical care, medicine/surgery, and palliative and end-of-life care, have been experiencing a lower frequency but a higher intensity of MD. For instance,

in a study looking at the MD in surgical nurses (n=119), they concluded low levels of MD frequency (1.8 (SD 0.4)) and Moderate-High levels of intensity (3.8 (SD 1.0)) (DeKeyser & Berkovitz, 2012). In another study that included intensive care unit nurses (n=39), the frequency of MD was 1.73 (SD 0.90), and MD intensity was higher at 3.66 (SD 1.73). These authors concluded their practitioners experienced a moderate level of MD (Elpern, et al, 2005). Even in palliative care settings where death is expected, nurses have reported experiencing MD “some, most, or all of the time” when using protocols for caring for patients in the palliative care setting (N=205) (Bender et al., 2019).

The top 3 rated questions for frequency and intensity in our study were: **Frequency**-- Question 3. “Follow the family's wishes to continue life support even though they believe it is not in the best interest of the patient”, Question 18. “Witness diminished patient care due to poor team communication”, Question 20. “Watch patient care suffer due to lack of provider continuity”. **Intensity**-- Question 17. “Work with nurses or other healthcare providers who are not as competent as the patient care requires” Question 18 (as stated above). Question 21 “Work with levels of care provider staffing that I consider unsafe”. It is interesting to note that one of the highest areas of MD presents in question 18 which describes a breakdown in communication that ultimately impacts patient care which has been a known cause of increased MD (Henrich et al., 2016; Maffoni,et al., 2019).. This may suggest an area of improvement needed in the network. This is different from the literature where the most common theme surrounds futile care. For instance, healthcare providers in critical care settings rated experiencing high levels of MD on items involving, actively following requests for ongoing care or passively continuing curative care at the end-of-life, carrying out acts perceived as death prolonging, and/or giving parents what they believe was false hope (Dodek et al., 2016; Johnson-Coyle et al., 2016;

Whitehead et al., 2015). Similarly, to the critical care providers, a circumstance in palliative care where MD typically occurs tends to be when practitioners perceive patients are receiving unbeneficial care at the end-of-life; when families are requesting aggressive care for a dying patient; or when there are delays in starting palliative care (Dodek et al., 2016; Hamric & Blackhall, 2007; Henrich et al., 2016). Overall, respondents in our study may be experiencing these lower-than-average levels of MD, as MAiD omits ongoing futile care and provides death in a self-determined manner grounded in patients' choice that ends prolonged suffering. Another important perspective to consider is that in the Canadian public perceptions and attitudes towards surrounding MAiD are becoming progressively acquiescent as this practice continues to be integrated into society, which may enable practitioners to feel more socially accepted and less distressed (Pesut, et al., 2021). Our respondents may also have rated lower on MD due to the voluntary nature of the network, and the tendency to have a better attitude/outlook regarding the procedure. In other areas where negative feelings exist towards clinical responsibilities- MD increases. For instance, in a recent study that examined the attitudes of ICU nurses towards euthanasia (n= 100), the authors concluded that the nurses had an overall negative attitude towards the procedure. The consensus of nurses who participated in the study considered euthanasia to be unacceptable under any circumstance. The authors correlated the moderate levels of MD they experienced to these negative feelings (Alborzi, et al., 2018). However, our participants have expressed experiencing MAiD work, as being "deeply satisfying", with an ability to "make a difference". Based on their values and beliefs our practitioners are voluntarily choosing to carry out this procedure, this could potentially alleviate some of the distress they may have otherwise experienced.

Our results may also speak to how the Network functions as a supportive organization and ethical work environment. A recent study conducted with nurses in New Zealand shows that a lack of organizational support leads nurses to experience high MD. They believed it is integral for institutions to include structures, policies, and practices that uphold the integrity of professional practice for their employees (Woods, 2020). Another study by Corely et al., (2005) looked at the effects of ethical climate on the MD of nurses (n=106). The authors believed that an organization that supports professional nursing practice provides an ethical work environment. They described a suitable ethical environment as being one that allows practitioners' ethical values to guide behavior, prioritizing resources that allow for the provision of ethical treatment of patients. Their results revealed that the perceived ethical work environment predicted the Moral Distress intensity of healthcare providers. In the case of our study where MD was below-average, this may be due to the network/team operating in a way conducive to effectively supporting providers facilitating MAiD. When our participants were asked about their experiences working within the Network, they came back with positive feedback such as "I appreciate the support of the regional program without it my job would be much more challenging" and "such an excellent program -- I feel fortunate to be part of this amazing team". This network may act as a safe ethical space, for practitioners sharing a common responsibility of carrying out a controversial procedure. This network allows these people to connect, ask questions, and receive support from other like-minded individuals, to whom they may not have otherwise had access. The results of our study's MD may be a reflection of the network acting as an operative resource for these professionals, as well providing as an ethically safe space.

Professional Quality of Life

Our results showed the averages of our practitioner's PQL (n=38) as being; BU 2.08 (SD .5) and STS 2.22 (SD .48) and CS 4.18 (SD .43). Both BU and STS were below the midpoint, suggesting the respondents displayed below-average scores. CS, which represents the positive aspect of PQL, was rated above average conveying that they are receiving fulfillment from their work. Our study shows that these practitioners' PQL is on par if not better than general palliative care providers, where PQL has been typically reported as low to moderate levels of BU and STS and high levels of CS (Kaur et al, 2018; Samson & Shvartzman, 2018).

Compassion Fatigue. This concept represents the negative aspect of PQL, the presence of BU and STS can increase the likelihood of developing CF (Stamm 2010).

Burnout. As previously mentioned, BU tends to develop from the perceived demands from work, outweighing the perceived resources available in the work environment (Potter et al., 2010; Wu et al., 2016; Yu et al., 2016). This concept has received renewed attention as a major challenge confronting healthcare today. Our reported BU may be lower due to a combination of personal and organizational factors that ultimately alleviate the effects of BU in end-of-life care. Cherny et al., (2015) suggest that within palliative care mitigating factors of BU include:

Attitudes and Values - clinicians who strongly identify with the values of end-of-life care and derive meaning from their contributions to the well-being of the patients and families they care for. Resilience – a personality trait expressed by a sense of commitment and readiness to cope with challenges. Personal Wellness – includes getting enough sleep, developing enjoyable relationships, using self-awareness techniques including mindful communication, and attending to one's personal needs. Good teamwork – having a well-functioning interdisciplinary team, with a shared philosophy of care, mutual trust, respect, and strong communication. Perceived Control

and Training –control is produced by having a sense of competence and pleasure in one’s work, this is often related to the amount of training and comfortability one has within end-of-life care. Overall, the lower rates of BU in this current study speak to the Network offering a supportive environment that fosters those mitigating factors mentioned above.

Secondary Traumatic Stress, STS results from professionals helping or wanting to help a suffering person- ultimately being “infected” by another person’s trauma (Stamm, 2010, p. 21). In previous studies within palliative care, STS tends to be higher due to the witnessing of ongoing suffering before death (Kaur et al., 2018; Samson & Shvartzman, 2018). However, our practitioners, rates of STS may be related to the finality of the procedure and the ability to stop the distress of patients. Practitioners have even described the procedure as witnessing a “good death”, which may minimize the potential for vicarious trauma. It is important to recognize that BU and STS experienced by this study’s participants may be partially related to the pandemic. Some practitioners have explicitly stated that sources of decreased PQL were related to perceived barriers to care (e.g., Mandatory PPE) and social distancing. These pandemic-related practices ultimately produced feelings of disconnect between both patients and the MAiD team.

Compassion Satisfaction. Compassion satisfaction is the derived pleasure from being able to do one's work well. (Stamm, 2010). Our practitioners appear to have higher-than-average levels of CS that may be related to the nature of the work. In two qualitative studies conducted by Joolae et al., (2022) and Stewart et al., (2021), they outlined protective factors/themes that were expressed by MAiD providers. These included feelings of having another end-of-life option to relieve suffering, granting patients the last chance to express control over their lives, contributing to patients/family comfort and relief, work being emotionally rewarding, work being intellectually/professionally satisfying, having a unique learning experience, developing

supportive collegial relationships, and having institutional/logistical/college support. These sentiments were evident in the open-ended responses provided by respondents in our study. Additionally, our practitioner's participation is completely voluntary (as previously mentioned). Practitioners choose to take on this role and therefore must receive some satisfaction/appreciation for what they do and the patients they work with. All these positive factors may have contributed to the overall high levels of our provider's CS.

Turnover Intent

In the midst of a staffing crisis (RNAO, 2022), holding on to the current working force is imperative for Canada's healthcare system. Our findings show a below-average intent to leave the MAiD work ($x = 2.22$). This conclusion is further supported by participant statements including, "I plan to stay with oncology and the MAiD team long term", "It's an excellent program and I am very glad that I am part of it and even more thankful to be helping these patients", "I appreciate the support of the regional program without it my job would be much more challenging", and it is "such an excellent program -- I feel fortunate to be part of this amazing team". These participant comments speak of both the satisfaction they feel in the role as a MAiD provider as well as the functionality/efficiency of the network. This is not surprising as the literature has shown job satisfaction, organizational leadership, team dynamics, and working conditions are directly related to TO. For example, a systematic review conducted by Woofward and Willgerodt (2022) who reviewed $N=34$ nursing studies, showed relationships between TO and individual factors such as BU, job satisfaction, organizational commitment, and job embeddedness. This review also spoke of unit-level factors including leadership, peer/ group relationships, and general work environment impacted individual TO. Particularly organizational leadership had a moderately significant correlation with TO and was identified as an important

factor in retention. In addition to having a supportive or competent leader, positive ratings on workplace relationships or teamwork were significantly associated with retention or intent to stay. As mentioned above there are plenty of individual and organizational factors that may have influenced our practitioners' rates of TO, another factor may be the culture shift surrounding the perception of MAiD. With MAiD being a part of Canada's culture for over half a decade now, people's perceptions, attitudes, and opinions surrounding the procedure are changing. In a recent qualitative study by Pesut et al. (2021), that explored practitioners' experiences while navigating MAiD, participants described how MAiD has transitioned from "a new, secretive, and anxiety-producing procedure to one that was increasingly visible and normalized" and that "MAiD was becoming more accessible, and participants were learning to trust the process" (p.5). This more accepting view from practitioners and the public may lead to decreasing levels of TO as the stigma is depreciating.

While our rates of TO are below average, they are not zero, suggesting that some areas are still contributing to TO. Some concerns were outlined in the open-ended response in our survey including workload affecting family time, having inadequate support 24/7 and being frustrated with new technologies taking time from the patient care experience. The literature has also outlined some potential stressors faced by MAiD providers that may impact TO rates. For instance, a study by Stewart, et al., (2021) examined potential stressors of MAiD on providers. Examples included, future decisions about mental disorders and MAiD, decisions regarding minors, extra clinical workload, patient and family conflict over MAiD, determinants of capacity, denial of eligibility, time pressures/urgent requests, difficulty with IV access, difficulty finding expert consult for certain conditions, determination of a reasonably foreseeable death, conflicts with colleagues, emotional burden, possible legal complaints, difficulty finding staffing

support, difficulty obtaining medication, and a sense of failure in end-of-life care. Stewart et al. (2021) went so far as to outline reasons for considering stopping MAiD work including the paperwork/administrative burden, work is too stressful, no community/peer support, proposed legislation over inclusiveness, poor remuneration, difficulty finding time and stress workplace opposition (religious, palliative or hospice institutions). Winters et al. (2021) also evaluated physicians' experiences providing MAiD, and determined some undermining factors included ambiguously phrased legislation, systems issues and individual inexperience, technical difficulties around provision, provider anxiety, logistical snags and inability to adequately counsel and guide families. Their participants expressed a desire for improved guidance, mentoring, training, and team communication. It is important to note that MAiD within Canada is still considered new and evolving (one of the latest contributions/challenges Bill C-7), and these stressors may continue to be relevant and impact providers TO. Ongoing reevaluation of practitioner experiences may be a necessary area of future research to maintain the workforce.

Correlations

Our significant correlational findings ($p = 0.005$) are seen in Table 5 (see Chapter 3). Most of the findings corroborate existing literature based on our study's concepts; however, MAiD-specific research was not found presently for direct comparison.

Moral Distress and Burnout

Our measurement of MD in its entirety (MD composite, MD_F, and MD_I) demonstrated a positive correlation with BU. Our results indicate that as MD increases, so does BU; a finding that is consistent with available literature amongst a variety of different healthcare professionals and specialties (Austin et al., 2017; Johnson-Coyle et al., 2016; Karakachian & Colbert, 2019). For instance, an article by Austin et al., 2017 evaluated MD and PQL amongst nurses and

physicians in a tertiary hospital; they concluded that MD had a significant positive correlation with BU ($r = .327, p < .001$). The authors attributed the majority of their MD to patient loads and were compelled to provide care that seemed ineffective. Their findings suggest risk for MD is highest between 6 and 10 years of working in health care and BU is between 11 and 20 years. Another study by Johnson-Coyle et al., (2016) described and compared the prevalence and contributing factors of MD and BU amongst ICU professionals. Results showed that MD and BU scores were significantly positively correlated ($0.31, p < 0.001$); with the highest contributors belonging to end-of-life care, bed capacity strain, complex patients, team communication, and non-beneficial therapy. A study conducted by Karakachian and Colbert (2019) conducted an integrative review looking at the nurses' MD and BU. Seven quantitative articles in this review reported a positive correlation between MD and BU; collectively these professionals expressed experiencing emotional issues such as sadness, anger, and frustration causing them to withdraw from patients and their families, ultimately leading to a perceived lower standard of care. Overall, this relationship was expected in our study, given the potential for morally distressing events to contribute to professional exhaustion, the development of Compassion Fatigue, and ultimately a person's progression to Burnout. More end-of-life-specific research is merited on these two concepts and within larger contexts of MAiD.

Moral Distress and Secondary Traumatic Stress

We found a strong positive correlation between MD (composite), MD_I, and STS. Our results show that as MD increases, so does their STS; these results corroborate other study findings including that of Austin et al. (2017) and Malliarou et al. (2021). Austin et al. (2017) examined MD and PQL amongst hospital physicians and nurses where findings showed a positive correlation between MD and STS ($r = .313, p < .001$). They attributed these findings to

the task of providing perceived futile care. COVID-19 added an insidious layer of complexity to end-of-life care that led to more human suffering and death faced by our providers. Malliarou et al., (2021), investigated nurses' MD and PQL at the time of the pandemic (COVID-19).

Multivariate logistic regression analysis showed a positive impact of MD on STS ($r = .398$, $p < .000$). They believed that the new challenges brought on by the pandemic played a huge role in increased MD, BU, and STS. They highlighted the potential for MD, BU, and STS to be caused by unique ethical circumstances such as being torn to provide substandard care if their safety was threatened (eg, not available adequate PPE) and ultimately witnessing patient suffering. Overall, this relationship between MD and STS was expected. It is reasonable to believe that as frequency/intensity of distressing events occurs, it may pose a risk for providers to experience vicarious trauma; especially in end-of-life care where human suffering is anticipated. It is important to note that COVID-19 contributed to increases in public mortality rates and introduced challenges that may have played a role in the correlation between MD and STS. More research is needed in this area as minimal investigation has been done looking at the relationship between MD and STS.

Burnout and Turnover Intent

As these participants care for patients with grievous and irremediable medical conditions, they are consistently exposed to a variety of stressors and execute decisions in ethically complex situations. This environment places MAiD providers at an increased risk of developing BU and subsequently leaving their job. It is not surprising that this study found a significant positive correlation between BU and TO, this relationship has been proven extensively in the literature and is a popular topic in staffing and retention (Austin, et al., 2017; Kelly et al., 2021; Leiter & Maslach, 2009; Perry, et al., 2011; Scanlan & Still, 2019; Sung, et al., 2012; Wells-English, et

al., 2019; Yang, & Kim, 2016; Zhang et al., 2014). Known BU-inducing circumstances include; harsh working conditions, unmanageable patient workloads, and organizational conflict, amongst many other factors, have been notorious to cause practitioners to leave the profession. (Kelly et al., 2021; Leiter & Maslach, 2009; Perry, et al., 2011; Scanlan & Still, 2019; Sung, et al., 2012; Wells-English, et al., 2019; Yang, & Kim, 2016). As mentioned, this relationship (BU and TO) has been proven considerably within the literature, including research by Wells-English et al. (2019) who measured PQL and TO in 93 oncology nurses; they found a significant positive correlation between BU and TO ($r= 23.72, p<0.01$). Sung et al. (2012) also established a significant positive correlation between CF/BU and TO ($r=.55, p<.001$) and additionally found that CF/BU accounted for 29.6% of the variance for TO among hospital nurses. Other studies looked at the causative agents contributing to the BU and TO relationship. In a quantitative study, Leiter & Maslach (2009) tested whether a BU model could predict TO. The variables included known causes of BU including exhaustion, cynicism, efficacy, workload, control, reward, community, fairness, and values against TO. Cynicism (their psychological withdrawal from work) was the key Burnout dimension for turnover, and the most critical areas of work life were value conflicts and inadequate rewards (Leiter & Maslach, 2009). In another quantitative longitudinal study by Kelly et al. (2021), they surveyed floor nurses in three hospitals 1 year apart between 2018 and 2019; 1,688 nurses completed 3,135 surveys. Fifty-four percent of nurses in the sample reported suffering from moderate BU, with emotional exhaustion scores increasing by 10% and cynicism scores increasing by 19% after 1 year. The impact of BU on organizational turnover was significant, with a 12% increase in a nurse leaving. Perry et al. (2011) conducted a qualitative study that further looked at contributing themes that contributed to BU which included lack of support, high expectations, lack of time/ability to give quality care,

lack of knowledge surrounding CF/ BU, being unable to ease suffering, and co-existing physical and emotional stresses outside of work. They found that the outcomes of CF included profound fatigue of the mind and body, negative effects on personal relationships, and consideration for leaving the profession. Though our participants appear to be satisfied in their current MAiD role, they still may be experiencing BU and TO in their primary areas of work. These frustrations may carry over into all areas of their lives, and therefore consideration should always be made to mitigate the effects of BU. The network/any organization should continue to work towards making sure the MAiD process is as pleasant/efficient as possible, being mindful of the causative agents discussed above.

Secondary Traumatic Stress and Turnover Intent

There has been some controversy about the existence of a relationship between STS and TO. Authors (Austin et al., 2017; Leiter & Maslach, 2009; Scanlan & Still, 2019; Sung et al., 2012;) have findings suggesting a positive correlation. However, the results of this current study did not indicate that STS is significantly predictive of TO. Wells-English (2019) (n=93), experienced similar results in their study of oncology nurses where no correlation was found between STS and TO. Our result may be due to our smaller sample size. Another explanation may be that our practitioners are emotionally prepared for MAiD. Seeing as patient outcomes are foreseeable and controlled this may influence their experiences of vicarious trauma and therefore the relationship between STS and TO. The idea of STS relates to practitioners experiencing trauma/pain second-hand to witnessing their patient's trauma, more research is needed to conclusively state if these experiences are enough to cause practitioners to leave the profession.

Compassion Satisfaction and Turnover Intent

Our results showed that CS was significantly negatively correlated with TO, this inverse relationship is logical, being that providers who receive great satisfaction in their role will tend to experience less desire to leave. This idea is further supported in the literature; Austin et al. (2017) found a significant negative relationship between CS and TO in physicians and nurses ($r = -.212, p < .001$). Wells-Eglish (2019) also found a significant negative relationship between CS and TO ($r = -0.602, p < 0.01$). Those nurses who had higher satisfaction scores reported lower TO, indicating that nurses who experience greater satisfaction in their caregiving role will likely experience fewer feelings of Burnout and stress and have less intent to leave their place of employment. We believe that these healthcare providers receive a great sense of satisfaction in being able to carry out these patients' wishes, reducing prolonged suffering, and developing relationships with patients/families; ultimately the satisfaction in this role reduces their desire to leave. As previously mentioned, our participants expressed experiencing gratitude from patients and families, being able to enable “nice deaths” feeling “peace”, participating in a “journey”, describing MAiD work as being “deeply satisfying”, and feeling like they “make a difference”. These statements further support that our CS levels are higher further reflected in lower levels of TO.

Moral Distress and Turnover Intent

We did not find a relationship between the MD and TO, and the existing literature also has mixed results. It's an acceptable assumption that if practitioners experience highly distressing events often that they would consider leaving their current role. This idea is supported by Austin et. al. (2017) who studied the past and present TO of nurses and physicians. Approximately 22% of physicians and 35% of nurses have left a position in the past or are currently considering leaving their position due to MD. Scores of MD were significantly higher among physicians than

nurses considering leaving their positions now compared to those who were not considering leaving. However, in an integrated review conducted by Karakachian and Colbert (2019) the results were mixed when it came to the relationship between MD and TO. Ten studies explored the relationship between nurses' MD and their intentions to leave their jobs/professions. Six of these studies found that high levels of MD increased nurses' intentions to leave their jobs. Three studies did not find any correlation between Moral Distress and intentions to leave jobs (Harrowing & Mill, 2010; Shoorideh et al., 2015). Specifically, Shoorideh et al. (2015), studied intensive care unit nurses' (n=159) MD and TO. They were also puzzled in finding a lack of relationships; stating that a challenging workplace should logically result in decreased tolerance for morally upsetting situations. Overall, some variables may have influenced our findings such as a desire to work in this specialized area, leadership, organizational support, and ethical climate; however further research is required to truly understand the relationship between MD and TO.

Overall, our results show that there is a direct positive relationship between the debilitating concepts MD-BU-STS and BU-STS-TO, therefore organizational interventions should be aimed at reducing the affliction of their side effects and enticement to leave the healthcare workforce.

COVID-19 Considerations

It is important to consider that this data was collected during the COVID-19 pandemic and our open-ended responses shed some light on the pandemic-specific struggles our practitioners have faced while working within the Network. Struggles our practitioners expressed included restrictive COVID-19 protocols, lack of homecare resources, visitor restrictions, poor treatment of unvaccinated, potential COVID-19 exposures, slow speed of MAiD provisions, and

limited in-person assessments. Similar experiences have been expressed in the literature. In a systematic review by Tolksdorf et al. (2022), 19 articles were evaluated during the COVID-19 pandemic related to TO intent. Several psychological characteristics of the participating nurses were found to be associated with turnover intention, anxiety or fear of COVID-19 or perceived threat by COVID-19, for example, CF, BU, MD, and PTSD symptoms. Further job-related challenges during the pandemic were low job control, increased working hours, increased workload, job stress/strain, as well as job insecurity. When pandemic care providers felt poorly prepared, not connected to their work environment, lacked communication about coronavirus planning, or felt unsafe, they reported a desire to leave the profession. Lower levels of TO during the pandemic were found in well-educated healthcare providers, specialty-trained nurses, nurses satisfied with their work/pay, and nurses' who experienced supporting leadership. Despite the obstacles, our practitioners appear to be enjoying their roles amid the pandemic, as evidenced by the positive feedback related to their experience working within the MAiD Network. Positive comments included, "I plan to stay with oncology and the MAiD team long term", "I find my role working on the MAiD team to be something that 'fills my cup'" and "It's an excellent program and I am very glad that I am part of it and even more thankful to be helping these patients".

Recommendations

With healthcare provider vacancies being at a record high across Canada (100,300 vacancies), staff retention is imperative and provider well-being should be a priority (Statistics Canada, 2021). Findings from this study can provide direction for healthcare providers and organizational leaders navigating this new clinical/legal reality. For the purpose of this study

recommendations have been provided for practice, education and leadership; intended for both the Network and institutions with designated MAiD teams/programs.

Recommendations for Practice

Our findings suggest that currently, these members of the Network are enjoying their role in facilitating MAiD. That being said we have made some recommendations based on statements made by our MAiD practitioners as sources of MD, BU, STS, and TO. The expressed challenges included: lack of generic/MAiD-specific homecare resources, generic overworked home care employees, improper staff pay, speed of MAiD provisions, workload affecting family time, having inadequate support 24/7, being frustrated with new technologies, clear objectives/direction of hospital, care coordination group is needed and access to mentors. It appears that interventions should focus on making the system as efficient as possible, highlighting ways to decrease workload where able, increase communication/support, and improve the availability of resources. Decreasing the workload may include more delegation (administrative tasks), having a standardized documentation system, revisiting/restructuring workload distribution of physicians/nurses, and potentially advocating for the allocation of protected time for MAiD-related activities. Improved communication between agencies, management, and professionals is another area that needs to be reinforced. That may include more opportunities for meetings, having a clear process/policy for who needs to be contacted at what time, making sure practitioners know who is available for troubleshooting problems, ensuring again that there is a clear continuity of documentation available, promoting inter-professional relationships and if feasible advocate for access to 24/7 support for practitioners, or consultation service for MAiD members. With staffing being limited particularly in the

homecare/community setting, making sure that the resources are as easily accessible is imperative to the efficiency of the process. Again, communicating where materials are available is important, having a transport system in place (homecare), and having required materials (i.e., medications, documentation) pre-packaged by units/pharmacies for easy pickup can enhance the speed of delivery.

Recommendations for Education

Communication and efficiency of the program may be improved by having a clear orientation program, outlining expectations, resources, and communication channels available; consider potentially having a mentorship program for both nurses/physicians entering the area. Another educational opportunity may be easy access to specific/end-of-life training for those interested. Lack of access to practitioners with IV skills was mentioned- it is in the scope of any RPN, RN, NP, or MD to insert—maybe additional training or refresher courses for this skill may make involved practitioners more comfortable (particularly those working in community settings).

Recommendations for Leadership

Awareness of the potential risks, causes, and relationships associated with this study's concepts should incentivize organizations to prioritize active ongoing dialogue and support for these healthcare providers. As some of our participants expressed difficulty in keeping up with new regulations related to MAiD, leadership should be prepared to stay up to date on current legislation, providing transparent interpretation and open dialogue to support the continuing competence of the MAiD providers. In addition to addressing challenges faced by our MAiD providers, leadership should be aware of generic suggestions made within the literature to alleviate some of the effects of MD, BU, STS, and TO. Personal strategies include educational

seminars, communication workshops, mindfulness training, and personal coping training (Johnson-Coyle et al., 2016). By focusing on addressing any inefficiency within the system we hope to continue maintaining/improving upon the Moral Distress, Professional Quality of Life, and ultimately reduce the chances of Turnover for these practitioners.

Future areas of Research

We hope that this study will stimulate interest in future topics of research to minimize the dearth of MAiD literature in the future. Recommendations for future studies include; 1. Narrowing down the point of breakdown in communication amongst the network, as it is one of the highest sources of MD amongst our practitioners. 2. Evaluating differences between the nurses and physicians of a larger sample size and the experiences of each group, 3. Comparing the rates of these concepts (MD, PQL, and TO) between the network members (who volunteer) versus general palliative care, intensive care, or medical units where MAiD is generically offered. 4. Re-evaluation of this study's concepts, potentially on a larger scale outside the times of a pandemic. 5. To investigate the differences/experiences between MAiD providers in the hospital versus the community.

Strengths and Limitations

Overall, the instruments used had good reliability based on Cronbach alpha (Table 4). A strength may be related to the design, using supplemental qualitative questions to gain complementary context of quantitative results. Another strength was having access to this collection/network of MAiD-specific providers. Finally, it was advantageous to have a response rate of 61.3% (38/62 possible responses). That being said, reasons for nonparticipation may include lack of interest in the study topic, comfortability of study contents, sensitivity in maintaining anonymity, unwillingness to participate in research, and challenges with workload

amidst the pandemic. We acknowledge that even though we have tried to preface answering the survey questions based on the participant's experiences within the MAiD context; these survey tools are not MAiD specific and therefore there is potential to be measuring the rates of MD, PQL, and TO imposed on the practitioners through their other areas of practice (e.g., medicine, emergency, anesthesia. Furthermore, the administration of this study's surveys was provided in English due to the limitation of the primary researcher's first/only language. Additionally, our results were gathered on a smaller sample size in the time of a pandemic, generalizations outside of these extenuating circumstances should be considered.

Conclusion

Despite the continued controversy surrounding the procedure and the COVID-19 pandemic, these practitioners report enjoying their work; respondents expressed feelings of their work being "rewarding" and "deeply satisfying" with below-average rates of MD, BU, STS, TO and above-average rates of CS reported. Efforts should continue to support these healthcare providers and organizations should be mindful of the potentially deleterious effects and the relationships that surround this study's concepts. Moral Distress

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Appendix A: Key Nursing Responsibilities in the Provision of MAiD

Table 1

Key Nursing Responsibilities in the Provision of MAiD (Adapted from Canadian Nurses Association, 2017)

Key Nursing Responsibilities in the Provision of MAiD

Providing the proper resources for a person inquiring about or requesting.

Recognizing, respecting, and promoting a capable person's right to be informed and make decisions.

Working towards preventing or eliminating discrimination for all those involved, fostering comfort and support of a dignified death.

Respecting the privacy of persons who inquire about or request MAiD.

Contributing to the development and evaluation of processes, practices, and guidelines.

Supporting a capable person's right to withdraw their request for MAiD.

Providing support to the patient's family within the circle of care.

Being prepared with the appropriate setup for the procedure (e.g. inserting IVs).

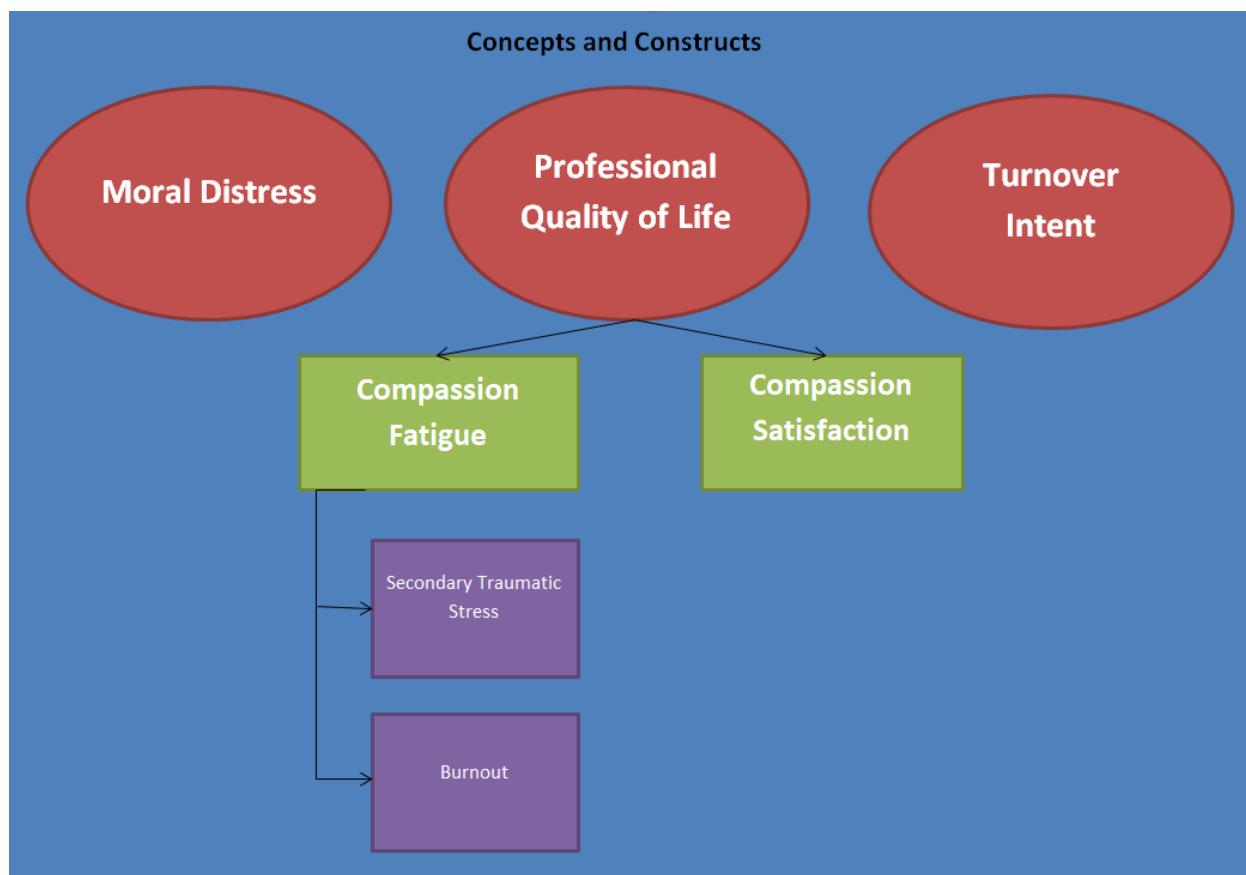
Preparing the body and documentation for proper submission to the coroner's office.

Allowing for any follow-up care and reflection for those involved.

Appendix B: Concept Mapping

Figure 1

Relevant Concepts and Constructs



Appendix C: Recruitment Email

Physicians and Nurses of the Champlain LHIN Regional MAiD Network Invitation to Participate

Title: Moral Distress, Professional Quality of Life, and Turnover Intent of Healthcare Providers Working within the Context of MAiD

Site: The Champlain LHIN (Center of operations- The Ottawa Hospital)

Alysha Hemsworth RN,
MScN (Student), School of Nursing
University of Ottawa
(Corresponding email inserted)

Co-Investigator / Thesis Supervisor

Brandi Vanderspank-Wright PhD RN CNCC(C)

Dear Regional MAiD Network member,

You are being invited to participate in a survey. This survey focuses on the nurses and physicians of the **Champlain Local Health Integration Network Regional MAiD Team**. The purpose is to better understand the experiences of healthcare providers regarding the following concepts/constructs: Professional Quality of Life, Intent to Turnover and Moral Distress within the context of MAiD. Additionally, this study also aims to describe the ways in which the COVID-19 pandemic has been experienced by yourself within the context of the The Regional MAiD Network.

The survey format includes both multiple choice and open ended questions. The survey can be accessed at <https://www.surveymonkey.ca/r/XVN69SX> or use **QR Code at the bottom of this invitation**; and will take approximately 20 minutes to complete.

Your participation in this study is voluntary and anonymous – there is no compensation for participating.

Your participation is important to better understand the impact and experiences of MAiD on our healthcare providers. If you would like more information please feel free to reach out to me by email (see above).

Kindly,

Alysha Hemsworth RN, MScN (Student)



Appendix E: Professional Quality of Life Scale (V-5)

Professional Quality of Life Scale (ProQOL)

*Compassion Satisfaction and Compassion Fatigue
(ProQOL) Version 5 (2009)*

When you [help] people you have direct contact with their lives. As you may have found, your compassion for those you [help] can affect you in positive and negative ways. Below are some-questions about your experiences, both positive and negative, as a [helper]. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the last 30 days.

1=Never 2=Rarely 3=Sometimes 4=Often 5=Very Often

- _____ 1. I am happy.
- _____ 2. I am preoccupied with more than one person I [help].
- _____ 3. I get satisfaction from being able to [help] people.
- _____ 4. I feel connected to others.
- _____ 5. I jump or am startled by unexpected sounds.
- _____ 6. I feel invigorated after working with those I [help].
- _____ 7. I find it difficult to separate my personal life from my life as a [helper].
- _____ 8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help].
- _____ 9. I think that I might have been affected by the traumatic stress of those I [help].
- _____ 10. I feel trapped by my job as a [helper].
- _____ 11. Because of my [helping], I have felt "on edge" about various things.
- _____ 12. I like my work as a [helper].
- _____ 13. I feel depressed because of the traumatic experiences of the people I [help].
- _____ 14. I feel as though I am experiencing the trauma of someone I have [helped].
- _____ 15. I have beliefs that sustain me.
- _____ 16. I am pleased with how I am able to keep up with [helping] techniques and protocols.
- _____ 17. I am the person I always wanted to be.
- _____ 18. My work makes me feel satisfied.
- _____ 19. I feel worn out because of my work as a [helper].
- _____ 20. I have happy thoughts and feelings about those I [help] and how I could help them.
- _____ 21. I feel overwhelmed because my case [work] load seems endless.
- _____ 22. I believe I can make a difference through my work.
- _____ 23. I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].
- _____ 24. I am proud of what I can do to [help].
- _____ 25. As a result of my [helping], I have intrusive, frightening thoughts.
- _____ 26. I feel "bogged down" by the system.
- _____ 27. I have thoughts that I am a "success" as a [helper].
- _____ 28. I can't recall important parts of my work with trauma victims.
- _____ 29. I am a very caring person.
- _____ 30. I am happy that I chose to do this work.

Appendix F: Intent to Turnover Scale

Intent to Turnover: Three domains: thinking of quitting, intending to leave, and searching for new employment Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital turnover. *Journal of Applied Psychology*, 63(4), 408-414.

English Version:

Please indicate how much you agree or disagree with the following statements by circling the number that best represents your answer.

(1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree)

(1) All things considered, I would like to find a comparable job in a different organization.

(2) I am thinking about quitting.

(3) It is likely that I will actively look for a different organization to work for in the next year.

(4) The results of my search for a new job are encouraging.

(5) I will probably look for a new job in the near future.

(6) At the present time, I am actively searching for a job in another organization.

(7) I intend to quit.

Appendix G: Open Ended Questions

In order of how they appear in the survey:

Question 1: “Professional Quality of life “refers to the quality one feels in relation to their work as a care provider” (Stamm, 2009, p. 8). It encompasses the feelings and perceptions that our healthcare professionals have in relation to their workplace. In your experiences of caring for patients and families pursuing/receiving MAiD during the COVID-19 pandemic, is there anything you have found that increases or decreases your perceived professional quality of life? Please explain.”

Question 2: “Moral distress is often defined as “arising when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action”(Jameton, 1984, p.6). It is experienced by healthcare professionals when their moral beliefs fall out of alignment with those of their practice and policy environments. In your experiences of caring for patients and families pursuing/receiving MAiD during the COVID-19 pandemic, is there anything you have found to be distressing? Please explain.”

Question 3: “Turnover intent relates to a healthcare professional's desire to leave their current role. In your experiences of caring for patients and families pursuing/receiving MAiD during the COVID-19 pandemic, is there anything you have found to cause you to consider leaving your current role? Please explain.”

Question 4: “Is there anything else you would like to share about your experiences working within the Regional MAiD Network? Please describe below.”