# Practicing the Public Good

## Exploring Ethical Issues in Public Health Practice

by

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I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.
I understand that my thesis may be made electronically available to the public.

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## Dedication

For Mummu: who raised three generations of readers. She awaits my first novel, but this bit of non-fiction will have to suffice for now…

For my Mom and Dad: who taught me the importance of hard work and life-long learning. They also indirectly nurtured my critical thinking skills-—even if they didn't always approve of a youth's critique of his parents …

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**Abstract**

*Everyday ethics* refers to the issues and decision-making practitioners are routinely faced with in their daily work. A quantitative, descriptive study examined everyday ethical issues in public health practice. The theoretical framework was based on Jameton's (1984) concepts of moral uncertainty, moral dilemma and moral distress in nursing. Moral distress may have negative consequences that ultimately lead to job dissatisfaction and leaving the profession. This phenomenon has been studied extensively in clinical practice, but comparatively little in public health practice.

A questionnaire was administered to employees at the Thunder Bay District Health Unit (TBDHU) in Thunder Bay, Ontario, Canada. This instrument included an extensively-modified moral distress scale (MDS) (Corley, Elswick, Gorman & Clor, 2001) supplemented by questions about demographics, ethics capacity and personal reflection.

Altogether, moral problems were reported at low mean frequencies and intensities. Generally, *front line providers* and *managers and supervisors* experienced moral problems at higher levels than the sample average. Furthermore, education, membership in a professional association and job experience had a statistically-significant impact on moral problems. Finally, themes of recent moral or ethical dilemmas included: relationships; different interests/perspectives; fairness; knowledge sharing; and personal issues.

Only a small proportion of participants were satisfied with the present ethics-related support at TBDHU. However, a large majority reported the ability to recognize and resolve ethical problems at work. Participants suggested support was needed in the areas of specific guidance, education, policies, awareness and communications.

In summary, additional research is needed, including instrument validation and standardization. Nevertheless, it is preliminarily recommended that TBDHU continue to promote an ethical organizational culture, offer guidance for ethical issues, provide relevant ethics education, and more-broadly share knowledge of public health and ethical issues.

## Table of Contents

List of Tables……..…….. ix

List of Figures ……..…… xi

Introduction ……..……... 1

The Context for Public Health Practice in Canada ……..…..…..... 3
Canada……...……..…… 4
Ontario……...……..……. 5
Local Boards of Health……..……... 6
Professional Support……..……... 6
Public Health Ethics……...……..…… 7
Scope of Public Health Ethics……..…… 7
Toward a Public Health Ethic……..…… 8
Everyday Ethics……...……..……... 12
Everyday Ethics in Clinical Nursing……..…….. 13
Everyday Ethics in Public Health……...…….. 14
Jameton's Ethical Concerns in Nursing……...…….. 15
The Evolution of Moral Distress……..…… 16
Measuring Moral Distress……...…….. 18
Consequences of Moral Distress……...…… 20
Addressing Moral Distress……..…… 21
Related Concepts……...…… 22
Moral Reckoning……..…… 23
Moral Ambiguity and Moral Agency……..……. 23
Moral Integrity and Moral Residue……...…… 24
Moral Obligation……..…… 25
Moral Identity.…….. 25
Research Study……..……... 26
Research Questions……..…… 26

Methods…..……... 28

Sample…..……. 28
Recruitment…..……. 28
Instrument……..……... 29

Results……..……. 36

Sample Characteristics...…… 36
Section A: Anonymous Demographic Information……..……... 36
Descriptive Statistics……..……... 38
Section B: Ethical Issues at Work……...……... 38
General Moral Problems at TBDHU……..…….. 39

Results (continued)
Detailed Analysis of Moral Distress..... 46
Supplementary Analyses..... 63
Factor Analysis..... 63
Section C: Ethics Capacity..... 68
Section D: Reflection..... 73
Results Summary..... 87

Discussion..... 89

Moral Problems Experienced by Staff at TBDHU..... 89
General Experiences..... 90
Potential Factors in Moral Problems..... 92
Relationships and Interaction with Others..... 94
Relationships and Role Conflict..... 95
Quality and Systemic Factors in Moral Problems..... 97
Working within the System: Rules, Choices and Control..... 99
The Management Connection..... 100
Key Demographic Factors..... 103
Additional Ethical Issues Identified at TBDHU..... 103
Sharing Public Health Knowledge..... 104
Different Perspectives, Conflicting Values and Competing Objectives..... 105
Social Justice..... 108
Ethics Capacity at TBDHU..... 110
Recognition and Resolution of Moral Problems..... 110
Education is Needed..... 110
Support and Guidance in the Workplace..... 111
Limitations..... 114
Recommendations..... 115
Further Research..... 116
TBDHU Actions..... 117

Conclusion..... 120

References..... 124

Appendix I – Instrument..... 133

## List of Tables

Table 1. Professional categories as defined in the Public Health Agency of Canada, Core Competencies for Public Health in Canada ..... 5

Table 2. The consequences of moral distress for nurses..... 21

Table 3. Situational items compared between original MDS and present study's MDS..... 33

Table 4. Response organized according to modified Public Health Agency of Canada core competencies, total sample..... 37

Table 5. Demographic characteristics of total sample..... 38

Table 6. General experiences of moral problems at TBDHU, total sample..... 40

Table 7. Paired Samples Test for general levels of moral problems, significant differences in means, total sample..... 40

Table 8. Mean frequencies, intensities and scores of moral uncertainty, moral dilemma, and moral distress compared by position and PHAC category..... 43

Table 9. Mean moral uncertainty, moral dilemma, and moral distress compared, by various demographic characteristics..... 45

Table 10. Situations ranked by decreasing mean moral distress score, total sample..... 48

Table 11. Situations with top five mean moral distress scores, front line providers..... 50

Table 12. Situations with top five mean moral distress scores, managers and supervisor..... 50

Table 13. Situations with top five mean moral distress scores, public health nurses..... 50

Table 14. Situations ranked by decreasing mean moral distress frequency, total sample compared to select sub-groups..... 56

Table 15. Situations ranked by decreasing mean moral distress intensity, total sample compared to select sub-groups..... 59

Table 16. Number and percentage of participants with high frequency of moral distress (4-6), by situation, total sample..... 62

Table 17. Number and percentage of participants with high intensity of moral distress (4-6), by situation, total sample..... 62

Table 18. Rotated Component Matrix(a) for factor analysis of moral distress score involving specific situations, total sample…….. 65

Table 19. Participants' agreement to statements regarding guidance and support for moral and ethical problems in the workplace……... 72

Table 20. Thematic analysis of recent moral or ethical dilemmas, total sample…….. 79

Table 21. Thematic analysis of additional ethical issues important in professional experience…….. 84

Table 22. Differences in mean moral distress intensity, public health (present study) and clinical practice (literature)……. 91

## List of Figures

Figure 1. Mean frequencies, intensities and scores of moral uncertainty, moral dilemma and moral distress compared by position and PHAC category……. 44

Figure 2. Proportion of high and low levels of moral problems, public health nurses compared to rest of sample……. 47

Figure 3. Mean moral distress score by situation, total sample……. 49

Figure 4. Mean moral distress score by situation, front line providers……. 52

Figure 5. Mean moral distress score by situation, managers and supervisors……... 53

Figure 6. Mean moral distress score by situation, public health nurses…… 54

Figure 7. Relative importance of moral distress factors between public health nurses and rest of sample……... 66

Figure 8. Relative importance of individual moral distress factors between positions based on PHAC categories……. 67

Figure 9. Relative importance of moral distress factors between highest levels of education attained…….. 68

Figure 10. Moral distress scores for situations involving quality, by experience in a health care field……. 69

Figure 11. Satisfaction with ethics support or resources in workplace, total sample…….. 70

Figure 12. Formal training on ethical issues specific to work received in past 3 years, total sample……. 70

Figure 13. Participants' agreement to statements regarding guidance and support for moral and ethical problems in the workplace……..…….. 72

Figure 14. Major themes for the single most important thing that the workplace can do to provide suitable ethical and moral support……. 87

*"Ethical behavior is not the display of one's moral rectitude in times of crises. It is the day-by-day expression of one's commitment to other persons and the ways in which human beings relate to one another in their daily interactions" (Levine, 1977, p. 846).*

How does one choose to do the *right thing*? What happens if one is prevented from acting on that choice? What if there is more than one right thing to do? Decisions about right and wrong in the workplace may be complicated by differing values, choices and perspectives. Making these moral and ethical decisions may take on added importance when one's work involves the health, safety and well-being of other people.

Moral and ethical decision-making is imperative in two inter-related fields concerned for human health: clinical practice and public health practice. In this context, *clinical practice* refers to the traditional notion of personal health care; that is, medical care provided to individuals by doctors, nurses and other health professionals, often taking place in hospitals, clinics and other acute and chronic care settings. *Public health practice*, on the other hand, applies a population-based approach to health and well-being. Key activities include "describing the health characteristics of communities, analyzing causal factors in populations' health, and devising and implementing programmes to maintain or improve the health of the public" (Holland, 2007, p. vii). It is recognized that while clinical activities occur in public health practice and vice versa, the intent of public health, with its focus on populations rather than individuals, is quite different from traditional clinical activities.

The moral and ethical considerations in public health practice also differ in many ways from those in clinical practice. Indeed, the "overarching concern for the individual patient found in clinical ethics is not neatly analogous to a concern for the health of a population" (Upshur,

2002, p. 101). *Public health ethics* is a field that has evolved from the more-established subjects of medical ethics and bioethics. While there is no consensus on the methods and content of public health ethics, it includes a terrain of general moral considerations, including:

> "producing benefits; avoiding, preventing and removing harms; producing the maximal balance of benefits over harms and other costs (often called utility); distributing benefits and burdens fairly (distributive justice) and ensuring public participation, including the participation of affected parties (procedural justice); respecting autonomous choices and actions, including liberty of action; protecting privacy and confidentiality; keeping promises and commitments; disclosing information as well as speaking honestly and truthfully …; and building and maintaining trust" (Childress, Faden, Gaare, Gostin, Kahn, Bonnie, Kass, Mastroianni, Moreno & Nieburg, 2002, p. 171-172).

*Medical ethics* broadly analyzes the ethical obligations of medicine and clinical practice. And as a branch of medical ethics, *bioethics* has emerged to chiefly consider the implications of the use of biotechnology to improve human health. The individual focus of medical ethics and bioethics includes principles such as respect for individual autonomy, and rights such as informed personal consent (Holland, 2007).

The main difference for public health ethics is one of perspective. As public health targets "diverse communities of heterogeneous beliefs and practices", public health ethics must include additional considerations, such as the rights of the individual and the rights of a community, or even conflicts among or in between communities (Upshur, 2002, p. 101). In other words, public health practice may work to achieve societal benefits that come at a cost to some

individuals (i.e. public good versus private good). In fact, Hester (2004) has emphasized that public health practice is unique among the health care professions because "there is a *constant* concern for *communal* health goals that inevitably (though not universally) demands the sacrifice of individual interests" (p. 1).

How do these subjects translate into day-to-day work? The subjects above can be described as *macroethics*, finding and defining consensus on broader principles, rules and values. Alternately, *microethics* and *everyday ethics* refer to the decision-making that practitioners are routinely faced with in their daily work. Macroethics provides a foundation, but the practitioner's environment – personal beliefs, interactions with other people, organizational rules and events – may force a tension between what seems right in theory (in the book) and what seems right in practice (on the ground). Everyday ethics, then, describes a reconciliation of multiple influences toward making the right decisions and acting upon them.

Overall, the goal of this research study is to examine the everyday ethics of public health practice. In the remainder of this section, research needs are identified and background theory is provided. First, a detailed literature search is presented to outline public health practice in Canada, to introduce the scope of public health ethics, and to describe the concepts, problems and preliminary work achieved in everyday ethics. Second, objectives of the research study are outlined and specific research questions are posed.

**The Context for Public Health Practice in Canada**

It is instructive to present the organizational environment for public health practice in order to better understand potential ethical issues. Generally, this outline details the government and other organizations most directly influencing the target population for this research study.

Altogether, the formal public health system is responsible for helping to protect Canadians from injury and disease and for helping them to stay healthy (Public Health Agency of Canada, 2004). The system is "an extensive collection of governmental, non-governmental, and community organizations operating at the local, provincial and federal levels with varying roles, perspectives, and linkages" (Minister of Health and Long-Term Care, 2008, p.2). These three levels of government influence practice in different ways.

**Canada.** At the federal level, the Public Health Agency of Canada (PHAC) primarily builds and strengthens public health practice capacity in Canada through health promotion, disease and injury prevention, and the preparation and response to public health emergencies (Public Health Agency of Canada, 2010, online). In addition, PHAC establishes professional standards through the release of the Core Competencies for Public Health in Canada. Based on extensive consultation, the core competencies provide a foundation for enhanced education and professional development. The competencies are categorized by professional position and include front line providers, consultant / specialists and manager / supervisors. These positions are defined in Table 1.

Table 1. Professional categories as defined in the Public Health Agency of Canada, Core Competencies for Public Health in Canada

| PHAC Category | Definition |
|---|---|
| Front line provider | Public health staff who have post-secondary education and experience in the field of public health. Front line providers have sufficient relevant experience to work independently, with minimal supervision. Front line providers carry out the bulk of day-to-day tasks in the public health sector. They work directly with clients, including individuals, families, groups and communities. Responsibilities may include information collection and analysis, fieldwork, program planning, outreach activities, program and service delivery, and other organizational tasks. Examples of front line providers are public health nurses, public health/environmental health inspectors, public health dietitians, dental hygienists and health promoters. |
| Consultant/specialist | Consultants/specialists are public health staff who are likely to have advanced preparation in a special content area or a specific set of skills. They provide expert advice and support to front line providers and managers although they may also work directly with clients. Examples of consultants/specialists include epidemiologists, community medicine specialists, environmental health scientists, evaluators, nurse practitioners and advanced practice nurses. |
| Manager/supervisor | Public health staff who are responsible for major programs or functions. Typically, they have staff who report to them. Sometimes senior managers come from sectors other than public health and therefore rely heavily on consultants/specialists and other public health professionals for content expertise and advice. In other situations, managers with public health experience and qualifications are expected to bring more content knowledge. |

Note: Definitions adapted from Last & Edwards, 2008, online.

It is important to note that the core competencies do not include ethics knowledge standards or review guidelines, but do provide a definition of ethics that acknowledges that balancing community rights and individual rights may lead to tension (Last & Edwards, 2008).

**Ontario.** In Canada's largest province, responsibility for public health is distributed between various ministries and government agencies. One agency with a central role is the Ontario Agency for Health Protection and Promotion. This arm's length agency of the government is a "hub organization" that links public health practitioners, front-line health workers and researchers to information, scientific and technical support (The Ontario Agency for Health Protection and Promotion, 2010, online). Furthermore, the Ministry of Health and Long-Term Care, the Ministry of Children and Youth Services and the Ministry of Health Promotion and Sport have an oversight role for public health practice in Ontario. This includes legislated authority to publish standards for the provision of mandatory health programs and services. As

the prime example, the Ontario Public Health Standards establish requirements for public health programs and expectations for Ontario's 36 local boards of health (Minister of Health and Long-Term Care, 2008).

**Local Boards of Health.** Historically, public health has been primarily delivered at the local or community level in Ontario. This research study focuses on practitioners in one local board of health. The Thunder Bay District Health Unit (TBDHU) – a non-profit agency funded jointly by the Ontario Government and the serviced municipalities – is governed by a Board of Health comprised of 12 municipal representatives and 3 provincial appointees (Thunder Bay District Health Unit, 2009, online). Programs include clinical health services, education and health promotion, inspections and enforcement, infectious disease monitoring, prevention and control, and advocacy. These diverse tasks could be performed by clinical nurses, dental hygienists, dentists, medical doctors, nurse practitioners, researchers, planners, educators, support staff, epidemiologists, public health inspectors, public health nurses, dieticians, audiologists, speech language pathologists and others.

**Professional Support.** In addition to legislative and government direction, another layer of oversight for public health practice may come from professional associations or other standards bodies. Several examples follow, but the list is not exhaustive.

Associations may provide ethical codes that govern the actions of their members. For example, the Canadian Institute of Public Health Inspectors represents environmental public health inspectors and outlines professional competencies, including a baseline code of ethics which members are expected to follow (CIPHI, 2010, online). As an alternative example, epidemiologists and public health researchers may look to the Tri-Council Policy Statement for ethical guidance and standards when performing research involving human subjects

(Government of Canada, 2010). This key document is published by a panel of experts established by three research agencies of the Canadian government.

Some professional associations that guide clinical practice also guide public health practice. One larger example is the Canadian Nurses Association (CNA), a federation of 11 provincial and territorial nursing associations. This association provides a national, professional voice for registered nurses and has published a code of ethics that serves as a foundation for practice (Canadian Nurses Association, 2010, online). As nurses play a fundamental role in public health program delivery, CNA acknowledges the unique challenges facing public health nursing practice. Nevertheless, the CNA code of ethics does not extend nurses' responsibilities beyond individuals and toward families and other groups as "it is less clear how to apply the code's values" to public health practice (Canadian Nurses Association, 2006, p. 5).

Finally, the Ontario Public Health Association (OPHA) has also assumed a leadership role in the professional development of public health practitioners. OPHA promotes the adoption of public health core competencies and works together with stakeholders mentioned above to develop discipline-specific and program-specific core competencies for Ontario public health practitioners (Ontario Public Health Association, 2010).

## Public Health Ethics

**Scope of Public Health Ethics**. Accordingly, the Canadian context for public health practice is characterized by the involvement of multiple organizations and professions, contributing a diversity of perspective to a potential breadth of ethical issues.

This breadth is outlined by Callahan and Jennings (2002). They categorized the issues of public health ethics into the following four general areas: health promotion and disease prevention; risk reduction; epidemiological and other public health research; and structural and

social disparities. First, the health promotion and disease prevention category encompasses issues arising from balancing individual and government responsibilities for public health, such as determining whether methods used to influence individual behaviour should involve education, incentive or intervention (or all of these methods). Second, the risk reduction category includes attempts to define what the acceptable levels of risk to health and wellbeing are and who should be empowered to make those decisions on behalf of society. Third, the public health research category includes issues of protecting privacy, obtaining informed consent and avoiding exploitation of vulnerable populations. Lastly, the structural and social disparities category refers to broader determinants of health and the development of an appropriate advocacy role for the public health community to seek greater justice for health care (Callahan and Jennings, 2002).

**Toward a Public Health Ethic.** In response to these and other issues, preliminary efforts have been made to develop rational tools to guide and support ethical public health practice. In the United States, the Public Health Leadership Society has published the Principles of the Ethical Practice of Public Health. These twelve principles are informed by statements of core values and beliefs, including:

- humans have a right to the resources necessary for health;
- humans are inherently social and interdependent;
- the effectiveness of institutions depends heavily on the public's trust;
- collaboration is a key element to public health;
- people and their physical environment are interdependent;
- each person in a community should have an opportunity to contribute to public discourse;

- identifying and promoting the fundamental requirements of health in a community are of primary concern to public health;
- knowledge is important and powerful; science is the basis for much of our public health knowledge;
- people are responsible to act on the basis of what they know; and
- action is not based on information alone (Public Health Leadership Society, 2002, p. 2-3).

In addition, Kass (2001) has proposed a six-step framework which could be used as an analytical tool for public health practitioners to consider the ethical implications of their activities. The main points are intended to guide reflection on possible program alternatives and question: the public health goals of a proposed program; the effectiveness of the program; the burdens of the program; the minimization of the burdens and alternate approaches; fair implementation of the program; and fairly balancing benefits and burdens (Kass, 2001).

Gostin (2001, in Upshur, 2002) has indicated that it is difficult to take a principle-based approach to public health ethics due to the broad range of public health activities. He examined this approach from various vantage points (the professional, the enterprise and the community) and came up with three subject areas: the ethics *of* public health; the ethics *for* public health; and the ethics *in* public health. However, Upshur (2002) noted that the strengths of a principle-based approach are its "heuristic nature and applicability to practice" (p. 93). He then proposed a set of principles for use *in* public health practice.

Upshur's principles were intended to question the justification of a public health intervention, as opposed to evaluating health prevention, promotion and research activities. First, the *harm principle* sets out the justification for a government to restrict the liberty of an

individual citizen for public health purposes. According to John Stuart Mill, the "only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant" (Upshur, 2002, p. 102). Second, the *principle of least restrictive or coercive means* basically states that exceptional measures should be used only in exceptional circumstances (and only after the less-coercive methods have failed). For example, education and communication should come before legal interventions. Third, the *reciprocity principle* states that governments must help mitigate the burdens that individuals and communities may face in order to comply with public health requests. Fourth, the *transparency principle* holds that all relevant stakeholders should be involved in making public health decisions. As well, the decision-making process should be transparent and free of political interference or domination by special interests (Upshur, 2002).

More recently, in the wake of the 2003 SARS outbreak, response and consequent refocus on pandemic planning, Baylis, Kenny and Sherwin (2008) have identified a need (and an opportunity) to develop public health ethics principles. This group challenged a past planning focus on individualistic values and priorities, as well as alleged the inappropriate use of bioethical principles. Instead, they proposed that public health ethics become more relational and centered on issues of trust, neighbourliness, reciprocity and solidarity. Overall, a public health ethic should be based on what "society does collectively to assure the conditions for people to be healthy" (Baylis, Kenny & Sherwin, 2008, p. 199).

Developing this point, some argue that public health ethics should further draw on theories of social justice, relational personhood and relational solidarity. Relational personhood acknowledges the social nature of people, as well as looking at how membership in particular

social groups shape the identity of individuals. Humans rarely exist in isolation. Therefore, social justice is fundamental because people are in part socially-constructed and are diversely-constructed (Baylis et al., 2008). How might this apply in practical terms? Relational autonomy, as opposed to strict individual autonomy, is also central to public health ethics. Autonomy is also a product of social relations, so it is important to look at the social context of an individual "when evaluating the degree of autonomy that is present in a given case to determine whether it [e.g. a public health activity] promotes or undermines opportunities for autonomy" (Baylis et al., 2008, p. 202). In other words, individual freedoms that may be limited by a public health activity should not be considered in isolation and in absolute terms, but rather considered in context. While pandemic planning efforts have provided a window of opportunity for this re-evaluation of public health ethics, Baylis et al. suggested application to broader public health activities.

Finally, Hester (2004) has also noted that public health has traditionally involved relationships between individuals and groups and the "struggle over whose interests take precedence" (p. 3). Citing an inherent adjudication role for practitioners, he concluded that ethics are fundamental to public health practice. Public health practitioners are tasked with understanding and addressing these varying interests while working toward the public good. Similar to the work described above, Hester further argued that ethical deliberation should not be framed upon the traditional dichotomy of individual interests in opposition to community interests (although these conflicts do indeed occur). Instead, in an attempt to move beyond the historical conflict between classical liberalism and communitarian approaches, individuals should be considered as socially-situated products affected by their communities. Hester pointed out that the past hundred years of social psychology and sociology have challenged

Enlightenment period notions of the "human self as an insular, isolated being formed prior to communal relations" (p. 10). Again, humans are social creatures and the modernist view is that communities play a role in the development of individuals and their concept of "self". Therefore, Hester concluded that public health decision-making must actively consider this concept of communal individuality:

> "respect for individuality demands the development of a healthy environment that enables respectful activities since to be an individual is to be a particular socially located self, and to respect such an individual is to facilitate and enhance those social (and reflectively acceptable) interactions that constitute that self" (p. 13).

With this in mind, and to conclude this section, time should be spent developing an ethic of public health practices and policy that meets the needs of those practices, as well as the needs of the environment in which they operate (Hester, 2004).

**Everyday Ethics**

As mentioned above, a public health ethic, codes and tools may be useful to guide ethical decision-making, particularly in extreme situations or involving controversial issues. However, rational tools developed at the macroethics level may not easily apply to the numerous contextual and routine decisions that a public health practitioner must make on a daily basis.

Nikku and Eriksson (2006) have pointed out that comparatively less scholarly attention has been paid to everyday ethics – or what they call the microethical dimension – than the macroethical issues discussed above. They have proposed a microethical approach that differs from a traditional applied ethics focus on general principles as a starting point. Rather, a

microethical analysis would be based on routine, ordinary, everyday human activities as a starting point. Microethics focus on specific situations, emphasizes context, analyzes attitudes, and expresses subtlety in standards (Nikku & Eriksson, 2006). It works to provide guidance in particular situations that practitioners may face routinely in their work. This approach may be appropriate for practitioners whose profession is based on caring for others, which involves inherently ethical everyday activities.

**Everyday Ethics in Clinical Nursing.** As nurses are the majority constituent group in the research study population**,** clinical nursing provides a starting point to illustrate a potential disconnect between ethics theory and practice. In nursing practice, ethical decision-making is a daily exercise, with thousands of daily acts providing regular tests of ethical practice (Woods, 1999). Hence, the moral language of nurses is not necessarily the language of formal ethics, as there is a strong practical component that is learned through experience. Nursing practice requires "a rich and deep seam of reflective interpretation and practical wisdom that is 'embedded' within the experiences of every experienced nurse" (Woods, 1999, p. 423). Woods described a nursing ethic developed from and used in everyday practice, rather than from formal education. This nursing ethic is underpinned by the following theoretical codes:

- Exhibiting appropriate nursing values and moral character;
- Establishing a purposeful relationship;
- Being personally involved;
- A commitment to expert caring;
- Maintaining trust; and
- Advocating for others (Woods, 1999, p. 426-427).

Consequently, context and personal values are important for ethical decision-making in nursing. For example, it has been shown that the ethical practice of perinatal nurses is influenced by internal and external factors. Three key factors have been identified as improving the likelihood of nurses actively participating in the resolution of ethical dilemmas: nurses perceiving an influence over their practice environment; nurses experiencing concern about the ethical dilemmas; and nurses reasoning about ethical dilemmas "in terms of a broad array of morally relevant situational factors that affect patient good or harm" (Penticuff & Walden, 2000, online).

**Everyday Ethics in Public Health.** One can immediately see a difference in focus in Woods's nursing ethic and Baylis's et al. suggested re-evaluation of public health ethics. The subject of everyday ethics has been studied extensively in clinical nursing over the last two decades, but there is a relative dearth of research available on the public health counterpart, let alone the issues that affect public health inspectors, epidemiologists and others (Oberle & Tenove, 2000).

However, early progress has been made. A survey of public health nurses in Southern Louisiana identified a variety of ethical conflicts, many relating to the dual obligation of practitioners to the patient and the community (Folmar, 1997). In addition, Bernheim (2003) has outlined four groups of issues identified by city, state and federal public health professionals in the United States: public-private partnerships and collaboration; resource allocation and priority-setting; collection and use of data; and relationships with political and legislative bodies.

Moreover, in recent work, Baum, Gollust, Goold and Jacobson (2009) interviewed a variety of public health professionals across Michigan. In this case, recurring themes involved determining the appropriate use of public health authority, making decisions related to resource

allocation, negotiating political interference in public health practice, ensuring standards of quality of care, and questioning the role or scope of public health (Baum, Gollust, Goold & Jacobson, 2009).

Finally, Oberle and Tenove (2000) attempted to differentiate the types of moral problems experienced in public health nursing by applying theories from clinical nursing. In a qualitative study, the group identified Andrew Jameton's (1984) concepts of moral distress, moral uncertainty and moral dilemma. These concepts will be discussed further in the following section. Also, they reported similar themes of ethical issues, which included relationships with health care professionals, the character of relationships, respect for persons and putting self at risk (Oberle & Tenove, 2000). Decision-making in public health nursing was found to be highly contextual and involved doing what was "best in the circumstances" because there was "seldom a clear 'right' or 'wrong' in any situation" (p. 435).

**Jameton's Ethical Concerns in Nursing**. The fact that Jameton's concepts have been identified in public health practice is important because it provides potential mechanisms to measure and better understand everyday ethics in the public health workplace.

These concepts have grown to become a fundamental part of nursing ethics research. In 1984, Andrew Jameton's defined three general types of ethical problems for hospital nurses. First, he described *moral uncertainty* as a state where one does not know what the moral problem is or what principles are applicable. Second, he identified *moral dilemmas* as situations where more than one moral principle applies, but each leads to a different action. Third, he outlined the concept of moral distress. *Moral distress* occurs when one knows the right course of action, but faces institutional barriers preventing the implementation of that action (p. 6). This last

definition has provided the basis for considerable research into everyday ethics in the ensuing decades.

**The Evolution of Moral Distress.** Later, Jameton (1993, in Corley, 2002) divided moral distress into initial and reactive moral distress. *Initial* moral distress involves feelings of frustration, anger and anxiety that occur when prevented from doing the right thing by institutional barriers or interpersonal value conflicts. *Reactive* moral distress results when a person does not act upon the initial distress.

Additionally, Mary C. Corley (2002) has proposed a more complete theory of moral distress that emphasized nursing as a moral endeavour. That is, nursing is a field that is based on caring for other people—an inherently ethical enterprise. First, she described moral distress in nurses as the opposite of moral comfort:

> "The choices of what is best for that patient may conflict… with what is best for the organization, the physician, the family, or even other patients, or, at least arguably, for society as a whole. When a nurse learns what is best for a patient, yet cannot provide it, the nurse suffers moral distress" (Corley, 2002, p. 637).

Next, addressing psychological responses and work environment, Corley based her theory of moral distress on the consequences of a nurse being unable (or feeling like he or she is unable) to advocate for a patient. The model for this theory was based on the idea that nursing is a moral profession and nurses are moral agents. Furthermore, the model detailed both individual and organizational perspectives, as well as positive and negative paths of moral actions; these paths culminate into either moral distress or moral comfort. The individual perspective brought

together inter-related moral concepts named in the literature, such as moral commitment, moral sensitivity, moral autonomy, moral sense-making, moral judgment, moral conflict, moral competency and moral certainty (p. 644). The organizational perspective was summarized by the following propositions for nurses:

- High levels of work satisfaction and constructive work culture leads to less moral distress;
- Good relationships at work lead to less moral distress;
- Influence in work environment leads to a greater likelihood to take action to resolve ethical dilemmas and consequently, less moral distress;
- Health care organizations that do not provide policies that guide practice, a supportive environment, complex ethical guidance and a mechanism to address conflicts with physicians will experience more moral distress;
- Health care organizations that foster collaboration and trust experience less moral distress in complex ethical situations; and
- Less "responsible subversion" will be observed in nurses who participate in decision-making and are given autonomy to act (Corley, 2002, p. 648).

Others have contributed to the understanding of moral distress, leading to a more comprehensive definition, which has emphasized the resultant negative feelings (Wilkinson, 1987/88; Nathaniel, 2006), expanded outside of the nursing profession (Kälvemark, Höglund, Hansson, Westerholm, & Arnetz , 2004; Hamric & Blackhall, 2007; Zuzelo, 2007; Austin, Rankel, Kagan, Bergum & Lemermeyer, 2005) and included internal as well as external causes of moral inaction (Webster & Baylis, 2000; Austin, 2005). Notably, Nathaniel (2006) has offered a synthesized definition based on the literature: "Moral distress is a pain affecting the

mind, the body, or relationships that results from a patient care situation in which the nurse is aware of a moral problem, acknowledges moral responsibility, and makes a moral judgment about the correct action, yet, as a result of real or perceived constraints, participates, either by act or omission, in a manner he or she perceives to be morally wrong" (p. 421).

It is also important to note the criticisms of moral distress as a theory. Hanna (2004) has suggested there are conceptual limitations to Jameton's framework. First, she cited difficulty with the privatization of morals, stating that they are also derived from communities. Second, she took issue with treating moral distress as mainly an occupational issue, limiting its use in clinical practice or clinical research. And lastly, she warned against the confusion of moral distress with psychological distress.

Likewise, McCarthy and Deady (2008) reported concerns with conceptual clarity and recommended further analysis of moral distress through an interdisciplinary approach. They further suggested that the moral distress discourse has an excessive, uncritical focus on common complaints associated with the nursing profession in general.

Finally, Repenshek (2009) questioned whether the body of literature quantifying moral distress was actually measuring the intended concept. He suggested that researchers may be measuring the context in which moral distress arises as opposed to the concept itself. Due to a perceived subjectivity in the analysis of moral distress, Repenshek also proposed a re-evaluation of the moral distress literature using a normative framework.

**Measuring Moral Distress**. Notwithstanding these differing perspectives on definition, moral distress has been studied in detail. In 2004, a literature review identified 35 studies of moral distress, all but one occurring in nursing and over half (18) involving qualitative methods (Hanna, 2004). Twelve studies, and many since, have employed quantitative methods.

One of the most-referenced quantitative methods employed the Moral Distress Scale (MDS)—an instrument designed to measure the frequency and intensity of moral distress in work situations (Corley, Elswick, Gorman & Clor, 2001). In addition to Jameton's concept of moral distress, the development of the MDS was based on Rizzo's role conflict theory and Rokeach's theory on values and value systems (Corley et al., 2001). *Role conflict* refers to stress that results when managers have competing or even conflicting sets of expectations for individuals in the organization. For example, nurses may experience conflicting expectations from hospital managers (who pay their salaries) and physicians (who direct the care they provide) (House & Rizzo, 1972, in Corley et al., 2001). In a different way, Rokeach's theory explains how a nurse's practice can be at conflict with his or her internal value system, leading to another possible source of job stress. A key element of both theories is professional autonomy and having the power to do the right thing (Corley et al., 2001).

Individual items on the MDS represented situations that may lead to moral distress. Items were generated from the literature and content analysis of staff nurse interviews. Participants were provided the definition of moral distress and asked to limit their consideration to their current practice. The original MDS and subsequent modifications demonstrated evidence of validity and reliability (Corley et al., 2001; Corley, Minick, Elswick & Jacobs, 2005). The research behind the development of the MDS assumed that nurses brought their values into their work, that they could identify ethical problems in their work and they could "evaluate the extent to which these problems cause[d] moral distress" (Corley et al., 2001, p. 252).

The MDS has been adapted to particular classes of nurses, such as registered nurses (Zuzelo, 2007), as well as specific groups that include other professions, such as the intensive

care unit team (Hamric & Blackhall, 2007). Moreover, the MDS is often used in tandem with other instruments, such as Olson's Hospital Ethical Climate Survey to explore the relationship between moral distress and ethical climate (Pauly, Varcoe, Storch & Newton, 2009) or McDaniel's Ethical Environment Questionnaire to assess the impact of the practice environment (Corley et al., 2005).

Other instruments have been developed and used to a lesser extent, but have provided further insight into moral distress. A similar instrument developed by Kälvemark Sporrong, Höglund and Arnetz (2006) broadened the measurement of moral distress to physicians and pharmacists. Also, Raines (2000) developed the Ethics Stress Scale to measure the stress perceived when dealing with ethical issues. Finally, Hanna developed the comprehensive Moral Distress Assessment Questionnaire, which not only measured the frequency and intensity of moral distress, but also the type and duration (Hanna, 2002, in Kälvemark Sporrong et al., 2006).

**Consequences of Moral Distress.** The plurality of instrumentation suggests that analyzing the presence and degree of moral distress is important. Indeed, moral distress has been associated with numerous negative consequences. In general, moral distress is characterized by frustration, anger and guilt, often leading to job dissatisfaction and nurses leaving the profession (Corley et al., 2005; Wilkinson, 1988). A synthesis of the negative consequences reported in the literature is provided in Table 2.

On the other hand, moral distress is not always considered negative. It may even be needed to build moral character by helping one become clearer about moral commitments, or used as a therapeutic tool or intervention (Hanna, 2004; Hardingham, 2004). Along these lines, the utility of moral problems have been identified: sharing stories of moral suffering may animate values in patient care; learning from failure may avoid painful lessons in the future; and

facilitating personal and professional growth leads toward more compassionate care (Harding, 1980, Benner, 1991, & Rushton, 1992, in Corley, 2002).

Table 2. The consequences of moral distress for nurses.

| Consequence | Symptoms | Source |
|---|---|---|
| Immediate and ultimate consequences | Nurses blaming others<br>Excusing their own actions<br>Self-criticizing; self-blaming<br>Experiencing anger, sarcasm, guilt, remorse, frustration, sadness, withdrawal, avoidance behaviour, powerlessness, burnout, betrayal of values, sense of insecurity, low self-worth<br>Internalizing anguish<br>Possibly, developing aggressive behaviour patterns | (Davies et al., 1996; Fenton, 1988; Kelly, 1998; Krishnasamy, 1999; Rushton & Scanlon, 1995; Wilkinson, 1987-88, in Nathaniel, 2006, p. 420) |
| Physical complaints | Weeping<br>Palpitations<br>Headaches<br>Diarrhea<br>Sleep problems | (Anderson, 1990; Fenton, 1988; Wilkinson, 1987-88, in Nathaniel, 2006, p. 420) |
| Quality of nursing care | Distancing self from patients<br>Becoming emotionally unavailable to patients<br>Avoiding going into patients' rooms<br>Leaving the unit or nursing altogether | (Corley, 1995; Davies et al., 1996; Fenton, 1988; Millette, 1994; Redman & Fry, 2000; Krishnasamy, 1999; Viney, 1996; Wilkinson, 1987-88, in Nathaniel, 2006, p. 421) |

**Addressing Moral Distress**. Accordingly, identifying and managing moral distress in the workplace may help with job satisfaction, performance and retention: "an organizational commitment to addressing the issue of moral distress could reap benefits with greater employee job satisfaction, decreased turnover, and ultimately improved patient care" (Pendry, 2007, p.221).

Potential moral distress management strategies have been explored in critical care nursing. The American Association of Critical Care Nurses has presented the 4 A's *Model to Rise Above Moral Distress* (Rushton, 2006). This leadership tool detailed the following cyclical components: Ask (determine whether the nurse is experiencing moral distress); Affirm (make a commitment to address moral distress); Act (prepare to take action with the goal of preserving

integrity and authenticity); and Assess (identify the sources of the moral distress). In addition to using this tool, a complementary solution involved a team workshop where nurses discussed ways to identify moral distress and strategies to cope (Beumer, 2008). This approach, coupled with follow-up education, has demonstrated a reduction of moral distress in pre- and post-test surveys.

Moreover, Raines (2000) has suggested proactive intervention strategies for reducing ethics stress in nursing could include:

- a nursing ethics library or journal club;
- a nursing ethics/research committee;
- nursing ethics rounds with interdisciplinary participation;
- an annual educational program for all staff using current issues;
- a nursing ethics article of the month with encouraged discussion;
- biannual surveys of staff regarding ethical issues; and
- researching best practices from other organizations (p. 40).

Finally, it has been acknowledged that moral distress likely cannot be completely eliminated and it could be considered a part of health care (Kälvemark Sporrong et al., 2006). However, from an organizational perspective, cost incentives have been shown for health care organizations that decrease the occurrence of ethical conflicts (Nelson, Weeks & Campfield, 2008).

**Related Concepts**

Next, several additional moral and ethical concepts connected to moral distress are presented to add further depth to the discussion. Moral reckoning, moral ambiguity, moral

agency, moral integrity, moral residue, moral obligation and moral identity are briefly introduced.

**Moral Reckoning.** Nathaniel (2006) has proposed a grounded theory of *moral reckoning* in nurses that encompasses moral distress, but reaches further to establish unique connections and to offer a new perspective and integrated scope.

Moral reckoning is characterized by three stages. First, nurses experience a *stage of ease.* This involves: a) becoming (developing core beliefs and values); b) professionalizing (repetition of professional norms); c) institutionalizing (internalizing social norms); and d) working (unique experiences of nursing) (Nathaniel, 2006, p. 425). The stage of ease can be disrupted by a situational bind—a conflict between or among these conditions. These often force difficult choices between core values and professional/institutional norms, moral disagreement among decision-makers in the face of power imbalance, or workplace deficiencies that may cause harm to patients (p. 428). Next, seeking to resolve these binds could lead to the *stage of resolution.* Essentially, in this stage there are two main choices: to make a stand or to give up. Lastly, a *stage of reflection* follows: nurses look back, remember and reflect upon – or reckon – their actions to resolve the problem. The main components of this stage include remembering (often vividly), telling the story, examining conflicts and living with the consequences (p. 432-434).

**Moral Ambiguity and Moral Agency.** Like moral distress, moral ambiguity is related to or impacted by a sustained proximity to patients (Peter & Liaschenko, 2004). *Moral ambiguity* refers to the difficulty nurses face in defining their moral role at work. It is related to moral uncertainty in that both imply indecision about the application of moral principles and values.

Conversely, *moral agency* allows one to recognize, reflect on and act on moral responsibilities and is entwined with the preceding concepts in this discussion (Peter & Liaschenko, 2004). The process of a nurse or other health care professional developing and identifying as a moral agent should recognize that ethical nursing practice is a personal, professional and social-mediated process. Increasingly, nursing literature has acknowledged that ethical reasoning also involves emotion and that nurses need more than rational tools to help them develop knowledge about and comfort with the dynamic ethical issues occurring in clinical practice (Doane, Pauly, Brown & McPherson, 2004).

Naef (2006) has argued that *bearing witness* allows a nurse to enact his or her moral agency. Necessarily, nurses experience profound changes in the health and quality of life of their patients, as well as key moments in their lives. Bearing witness to these events allows the nurse to relate and to engage in a moral way with their patients (Naef, 2006).

Ultimately, moral agency has been shown to be inhibited by the political character of a work environment and, in Canada, constrained by health care restructuring and diminished resources (Peter, Macfarlane & O'Brien-Pallas, 2004). Health care providers need the time to engage with their patients in an emotional way.

**Moral Integrity and Moral Residue.** Compromised integrity may result from not being able to act on moral choices. In turn, this may result in a lingering *moral residue*, something that nurses have been shown to carry with them after they have compromised their values and subsequently experienced moral distress (Webster & Baylis, 2000; Hardingham, 2004). While moral residue may involve negative experiences and painful consequences, the resultant reflection and maturation may also build moral integrity. May suggested that *moral integrity* has

three components: critical thinking; coherence of value orientation; and the disposition or commitment, to act in a principled way (in Hardingham, 2004).

**Moral Obligation.** Workers may choose to avoid a situation that could lead to moral distress. They could choose to do what they feel is the right thing in spite of organizational rules or other constraints. These righteous actions may result from *moral obligation,* which is a dimension of moral and ethical responsibility inherent to many caring professions (Provis & Stack, 2004). However, doing the right thing may still lead to tensions. For example, a conflict between an obligation to the institution and an obligation to an individual patient was reported: a care worker provided extra towels to elderly patients, against organizational policies. The worker felt that the extra towels were needed, but also felt guilty about not being more cost-conscious (Provis & Stack, 2004).

**Moral Identity**. Finally, studies have shown that a person's moral identity best predicts moral action (Doane, 2002). Related to the concept of a socially-situated "self" introduced above, identity is also established by what a person is, and where that person is, in social terms. It follows that *moral identity* has also been identified as a socially-mediated process in nursing. In a study of nurses, Doane found that participants highlighted the following components of moral identity when describing their everyday work experiences: the narrative (telling stories of past experiences and ethical actions); the dialogical (namely, inner dialogue to determine moral action); the relational (identities emerge through negotiation with self, with others and within a social organization); and the contextual (the moral context of their work environment). Nurses experienced ethics as a "deeply personal process that is lived in the complexity and ambiguity of everyday nursing work" (Doane, 2002, p. 633). Overall, building on much of the preceding discussion in the present study so far, Doane's work has emphasized the importance of ethical

reflection and inner dialogue in ethical nursing behaviours, as well as the importance of bringing together the various components of moral identity in order to develop a consensus on the values and actions of everyday nursing.

## Research Study

Fundamentally, the present research study is driven by two important issues introduced above: the potential severe consequences of everyday ethical problems (particularly moral distress) and the relative dearth of knowledge about the everyday ethical issues faced in public health practice in Canada. This quantitative, descriptive study takes an introductory look at everyday ethical issues in public health practice, as well as opportunities for building capacity to recognize and address these issues. The conceptual framework for this study is based on Jameton's (1984) concepts of moral uncertainty, moral dilemma, and moral distress in nursing.

**Research questions.** The research questions posed in this study are:

1. What is the frequency of moral uncertainty, moral dilemma and moral distress faced by public health professionals working at a public health unit?
2. What is the intensity of moral uncertainty, moral dilemma and moral distress faced by public health professionals working at a public health unit?
3. What situations present moral distress to public health professionals and to what degree (i.e. frequency and intensity)?
4. Are particular personal or professional characteristics associated with the intensity and frequency of ethical issues?
5. What capacity is present to mitigate ethical issues at a public health unit?
6. What are some suitable opportunities for increasing the capacity to mitigate ethical issues at a public health unit?

The target population for this study is a diverse public health practice environment, comprised of management and staff employed at the Thunder Bay District Health Unit in Thunder Bay, Ontario, Canada.

Overall, this study seeks to shed light on the relatively new subject of everyday ethics in public health practice, as well as building on theories of moral uncertainty, moral dilemma and moral distress.

## Methods

This quantitative, descriptive study measured and examined moral and ethical issues and problems in public health practice using survey methods. Information was collected by administering a questionnaire to participating employees of the Thunder Bay District Health Unit (TBDHU). The research proposal and instrument have been reviewed by the researcher's thesis committee, as well as the TBDHU education officer and Director of Health Protection. The instrument was edited for length and clarity based on input from the thesis committee and several colleagues involved in health care and allied professions. Overall, formal support was sought and received from TBDHU and this study was reviewed and approved by the Lakehead University Research Ethics Board.

### Sample

TBDHU employees comprised diverse education levels and professions. The population included 203 full and part-time management and staff working at a variety of levels and program areas, including clinical nurses, dental hygienists, dentists, medical doctors, nurse practitioners, researchers, planners, educators, support staff, epidemiologists, public health inspectors, public health nurses, dieticians, audiologists, speech language pathologists and others. The sample could also have included students as no attempt was made to restrict access to any employee.

### Recruitment

Participants were recruited between February 1, 2010 and March 8, 2010. First, the objectives of the study were introduced to potential participants at an all-staff session and through internal communications. An individual draw prize was advertised and offered as an incentive to participate.

Next, the participant package, which contained a formal invitation and information letter, consent form and a uniquely numbered copy of the questionnaire, was made available following the staff session and remained conspicuously available in multiple locations at TBDHU. Employees working at remote locations were sent packages with postage-paid, pre-addressed envelopes for ease of return.

Additional measures were taken at regular intervals during the recruitment period. Reminder notices were sent by email to all staff and a researcher-sponsored coffee break was held in the main lobby at TBDHU to further encourage participation. Participants were asked to place completed questionnaires and consent forms in a locked box. These boxes were placed on each level of TBDHU and allowed for ready access, discretion, privacy and security. Only the researcher had access to the contents of the boxes.

**Instrument**

The instrument used was a quantitative questionnaire based on work conducted in clinical nursing and informed by preliminary work in public health ethics (see Appendix I). Generally, the research questionnaire captured information on demographics, everyday ethical problems, and the capacity to identify and resolve those problems.

The instrument was separated into four parts. First, anonymous demographic information was collected for comparative analysis (Section A). This included basic personal characteristics such as age, gender and highest completed level of education. Information requested about professional characteristics included: years of work experience (in public health and related fields); employment status (full-time, part-time or casual); program area of work as it relates to the TBDHU mission (health protection, health promotion, or prevention) with an added category for administration and support services based on consultation with TBDHU; position as it related

to the Public Health Agency of Canada's (2008) categories (front line provider, consultant specialist or manager/supervisor) with an added category for administration and support services based on consultation with TBDHU; and further position detail identifying the participant as a public health nurse or public health inspector. No other specific job positions or professions were specified due to small sample sizes and the need to ensure anonymity. Examples that were given to define some of the primary areas of responsibility were adapted from Shah (2003, p. 33).

Second, everyday ethical problems in public health practice were examined by adapting and building upon Jameton's (1984) framework of nursing ethics (Section B). Moral uncertainty, moral dilemma and moral distress were measured by adapting the MDS (Corley et al., 2001, 2005) for use in diverse public health practice as well as in general situations of moral problems.

The concepts of moral dilemma, moral uncertainty and moral distress were defined as a lead in to the questions. The first two terms remained relatively unchanged from Jameton's original definition (1984). However, in the present instrument, moral distress was defined as follows:

> **Moral distress** is a negative reaction that occurs in situations when you know the right thing to do based on your moral principles or values, but you don't do it. This lack of action may be due to personal or external constraints, failures or barriers.

Jameton chiefly referred to institutional barriers as the cause of the moral constraint. The updated definition in the present study accounted for more recent emphasis on the negative feeling state

caused by moral distress (Wilkinson, 1987/88; Nathaniel, 2006), for a broader application to all categories of staff (Kälvemark et al., 2004) and for a variety of causes, including personal failings, errors of judgment and other internal causes (Webster & Baylis, 2000). The clear wording of the final definition was based on Austin et al. (2005).

The MDS (Corley et al., 2001; Corley et al., 2005) was modified for a diverse public health setting much like instruments completed for other health care professions beyond nursing (Hamric et al., 2007; Zuzelo, 2007; Elpern, Covert, & Kleinpell, 2005). Similar to previous versions, intensity and frequency were respectively rated by participants on separate 7-point Likert scales scored from 0 to 6 in response to the following questions:

- **How often** do you experience *moral uncertainty* [*moral dilemma, moral distress*] in your current job?
- **How intense** or how disturbing do you find these experiences?

The value "0" indicated no distress or never occurring, and "6" indicated extreme distress or often occurring (Corley et al., 2001; Zuzelo, 2007). "Don't know" was also a valid response for both. For analysis, frequency and intensity were multiplied for each moral problem to produce a moral problem score (Hamric, 2007).

Participants were asked to rate the frequency and intensity of moral distress, moral uncertainty and moral dilemma as it applied in general to their present work at TBDHU. Literature references to the application of the MDS to moral uncertainty and moral dilemma have not been found. However, the scale was employed to provide an introductory and consistent comparison of the three types of everyday ethical problems.

Next, the questionnaire focused on the concept of moral distress in detail. This was more consistent with the traditional use of the MDS in clinical practice. Participants were asked to

rate both the frequency and intensity of moral distress (in a manner similar to the previous general questions) associated with 25 items as each related to their current public health work. The items described situations involving a specific issue that had the potential for moral problems as reported in the literature.

Certain transferable items were modified from an instrument similar to the MDS used in clinical practice, the Ethics Stress Scale (Items 7, 13-14, 20-24: Raines, 2000), while the majority of items were based on ethical issues identified in public health practice through focus groups, interviews and surveys (Items 10-11: Bernheim, 2003; Items 1, 3-5, 8: Baum et al., 2009; and Items 2, 6, 9, 15-19, 25: Oberle & Tenove, 2000). A summary of changes between the original MDS and the present study are displayed in Table 3.

Table 3. Situational items compared between original MDS and present study's MDS.

| Original MDS (Corley et al., 2001, p. 254)[1] | MDS in present study[2] |
|---|---|
| Work in situations where the number of staff is so low that care is inadequate | Using the legal authority given to public health professionals (Baum et al., 2009). |
| Carry out the physician's orders for unnecessary tests and treatments for terminally ill patients | Potentially conflicting choices between individual interest and the public good (Oberle & Tenove, 2000). |
| Assist the physician who in your opinion is providing incompetent care | Balancing population health benefits with economic benefits (Baum et al., 2009). |
| Work with 'unsafe' levels of nurse staffing | Working in a system of political guidance and supervision (Baum et al., 2009). |
| Initiate extensive life-saving actions when I think it only prolongs death | Questioning the role or scope of public health practice (Baum et al., 2009). |
| Follow the family's request not to discuss death with a dying patient who asks about dying | Allocating resources and setting priorities (Oberle & Tenove, 2000). |
| Follow the physician's request not to discuss death with a dying patient who asks about dying | Considering the cost of programs / activities to society (Raines, 2000, p.34). |
| Carry out the physician's order for unnecessary tests and treatment | Ensuring quality standards of practice (Baum et al., 2009). |
| Follow the physician's order not to tell the patient the truth when he/she asks for it | Maintaining quality in the face of diminished resources (Oberle & Tenove, 2000). |
| Follow the physician's request not to discuss the Code status with the family when the patient becomes incompetent | The potential risk of imprecision and inaccuracy in data assessment and reporting (Bernheim, 2003). |
| Observe without intervening when health care personnel do not respect the patient's dignity | Collecting, reporting and using research data about particular subgroups in the population (Bernheim, 2003). |
| Continue to participate in care for a hopelessly injured person who is being sustained on a respirator, when no one will make a decision, to "pull the plug". | Viewing policy and law as a support or constraint (Oberle & Tenove, 2000). |
| Follow the family's wishes to continue life support even though it is not in the best interest of the patient | Perceiving health unit policies as inconsistent with practice (Raines, 2000, p.34). |
| Let medical students perform painful procedures on patients solely to increase their skill | Perceiving provincial standards and guidelines as inconsistent with practice (Raines, 2000, p.34). |
| Assist physicians who are practicing procedures on a patient after CPR has been unsuccessful | Putting your health or safety at risk (Oberle & Tenove, 2000). |
| Prepare a terminally ill elderly patient on a respirator for surgery to have a mass removed | Putting your self at risk of legal action (Oberle & Tenove, 2000). |
| Carry out a work assignment in which I do not feel professionally competent | Maintaining relationships with other health professionals within the same profession (Oberle & Tenove, 2000). |
| Provide better care for those who can afford to pay than those who can't | Maintaining relationships with other health professionals outside of your profession (Oberle & Tenove, 2000). |
| Ignore situations of suspected abuse by care givers | Witnessing questionable practices of a coworker. |
| Ignore situations in which I suspect that patients have not been given adequate information to insure informed consent | Protecting a client/patient's information (Raines, 2000, p.34). |
| Discharge a patient when he has reached the maximum length of stay based on diagnostic related grouping (DRG) although he has many teaching needs | Caring for the infectious client / patient (Raines, 2000, p.34). |
| Perform a procedure when the patient is not adequately informed about procedures which he/she is about to undergo | Caring for or providing service to a non-compliant client / patient (Raines, 2000, p.34). |
| Carry out orders institutional policies to discontinue treatment because the patient can no longer pay | Obtaining informed consent (Raines, 2000, p.34). |

Table 3. Situational items compared between original MDS and present study's MDS (continued).

| Original MDS (Corley et al., 2001, p. 254)[1] | MDS in present study[2] |
|---|---|
| Avoid taking any action when I learn that a nurse colleague has made a medication error and does not report it | Respecting the autonomy / rights of groups, including families, businesses, corporations, community groups etc (Raines, 2000, p.34). |
| Assist the physician who performs a test or treatment without informed consent | Respecting the individual autonomy / rights of clients / patients (Oberle & Tenove, 2000). |
| Give only haemodynamic stabilizing medication intravenously during a Code with no compression or intubation | |
| Follow the physician's request not to discuss Code status with patient | |
| Prepare an elderly man who is severely demented and a "No Code" for surgery to have a gastrostomy tube put in | |
| Follow the family's wishes for the patient care when I do not agree with them | |
| Give medication intravenously to a patient who has refused to take the medication orally. | |

1. Items not in order of presentation on instrument.
2. Items in order of presentation on instrument.

The MDS was used as a basis for the present study as it has shown evidence of reliability and validity (Corley et al., 2001). However, while the present study transferred the concept of measuring moral distress frequency and intensity on a Likert scale, many aspects of the modified MDS were different enough that past estimates of reliability and validity were not applicable. In summary, the differences included a revised definition of moral distress based on a synthesis of the literature, different items drawn from ethical issues reported in clinical and public health practice, and generalization of the items for applicability to multiple professions. Also, as mentioned, there was no precedent for the use of the MDS to quantify general situations of moral distress, let alone moral uncertainty or moral dilemma. Further research is needed to better establish the reliability and validity of the MDS in this instrument.

In the next section of the instrument (Section C), the perceived ethical capacity of the participant and the participant's workplace was examined. In this context, "ethical capacity" referred to education, resources and support mechanisms available to use to recognize, resolve or

mitigate ethical issues. First, participants were asked to rate their general satisfaction with the ethical capacity of their workplace using a 5-point scale. Second, participants were asked to indicate the number of hours of formal ethics training they have received in the past three years. Next, four additional questions (3. a – d) about the necessity of building ethical capacity were posed for agreement. These questions were based on previous work in public health ethics by Folmar et al. (1997). Similarly, questions 3. e – g rated agreement to the utility of specific measures that may build ethical capacity.

Finally, opportunity was given for participants to expand on the previous responses through open-ended questions (Section D). Descriptive questions were asked for the purpose of elaborating on experiences, identifying unmentioned issues, comparing to previous work in clinical practice and elucidating additional solutions for improving ethical capacity in the workplace. Questions 1 and 2 were based on previous work (1.: Zuzelo, 2007; 2.: Robillard, 1989). A phenomenological analysis was undertaken in the method of Colaizzi (1978) to assess the response to these three open-ended questions. This descriptive procedure involved extracting significant statements from participant protocols, formulating meanings, and aggregating these meanings into clusters of themes (p. 59).

## Results

Quantitative data analysis was completed primarily using PASW Statistics (SPSS) versions 17 and 18 and Microsoft Office Excel 2003 and 2010. Sample characteristics, descriptive statistics and supplementary analyses are summarized below. Section lettering corresponds to the survey instrument (see Appendix I).

### Sample Characteristics

**Section A: Anonymous Demographic Information.** Over approximately five weeks in early 2010, 69 completed questionnaires were received. Four questionnaires were discarded due to lack of suitable personal consent, leaving a sample size of 65 participants and a response rate of 32.0% out of a potential 203 full-time and part-time employees (personal communication, Aimee Linkewich, June 21, 2010). Effectively, over-represented in the sample were public health nurses (sample = 50.8%, N=33; population = 29.6%, N=60), comprising just over half of the sample, as well as managers and supervisors (sample = 13.8 %, N=9; population = 5.9%, N=12). Hence, despite a relatively low participation rate overall, better than half (55%) of TBDHU's public health nurses responded. Also, at nearly the rate of the population at large, about a third (33%) of public health inspectors responded (N=5). These groups accounted for the only constituent groups for which reference data was available from TBDHU, limiting demographic comparison of the sample to the population. Table 4 outlines participation organized by Public Health Agency of Canada (PHAC) categories (with the researcher's addition of an administration or support role). Overall, the largest group of participants (69.2%) were front line providers, which includes public health nurses and public health inspectors (N=45). Much of the proceeding analysis is broken down by these sub-groups.

While participants were asked to identify their "primary area of responsibility" based on the mission statement of TBDHU, this question invariably posed problems as many participants could not limit their answer to one point as asked, limiting the analytical value of the responses. This variable was excluded from the following analysis.

Table 4. Response organized according to modified Public Health Agency of Canada categories, total sample.

| Position | Frequency | Percentage |
|---|---|---|
| **Administration and Support Services** (position added by researcher) Roles not directly related to public health practice, involving the maintenance of the building, administrative duties, communications, finance, etc. | 5 | 7.7 |
| **Consultant / Specialist** Consultants/Specialists provide expert advice and support to front line providers and managers although they may also work directly with clients. Examples: epidemiologists, community medicine specialists, environmental health scientists, evaluators, nurse practitioners and advanced practice nurses. | 5 | 7.7 |
| **Front Line Provider** Front line providers work directly with clients (individuals, families, groups and communities). Responsibilities may include information collection and analysis, fieldwork, program planning, outreach activities, program and service delivery, and other organizational tasks. Examples: public health nurses, public health/environmental health inspectors, public health dietitians, dental hygienists and health promoters. | 45 | 69.2 |
| **Manager / Supervisor** Public health staff who are responsible for major programs or functions. Typically, they have staff who report to them. | 9 | 13.8 |
| **Sample** | 65 | 100.0 |

(PHAC Categories adapted from Last & Edwards, 2008, online).

Demographically, the sample was mostly female (81.5 %), employed full-time (84.6%), well-educated (i.e. almost all had post-secondary education and 83.1% of the total sample reported either a bachelor's degree or master's degree as their highest level of attained education), and over the age of 40 (61.6%). Nearly seventy percent (69.2%) of participants were members of a professional association. Table 5 provides a detailed breakdown of demographic characteristics.

Table 5. Demographic characteristics of the total sample.

| Metric | Category | Frequency | Percentage |
|---|---|---|---|
| Age Group | 20 to 29 years | 7 | 10.8 |
| | 30 to 39 years | 17 | 26.2 |
| | 40 to 49 years | 17 | 26.2 |
| | 50 to 59 years | 16 | 24.6 |
| | 60 years and older | 7 | 10.8 |
| Highest Level of Education Attained | Diploma | 9 | 13.8 |
| | Bachelor's Degree | 41 | 63.1 |
| | Master's Degree | 13 | 20.0 |
| | Other | 1 | 1.5 |
| Employment Status | Full-time | 55 | 84.6 |
| | Other | 2 | 3.1 |
| | Part-time | 7 | 10.8 |
| Experience in Current Role | 1 to 5 years | 27 | 41.5 |
| | 6 to 10 years | 22 | 33.8 |
| | 11 to 15 years | 6 | 9.2 |
| | 16 to 20 years | 5 | 7.7 |
| | 21 to 25 years | 3 | 4.6 |
| | 26 plus years | 2 | 3.1 |
| Experience in Public Health Field | 1 to 5 years | 17 | 26.2 |
| | 6 to 10 years | 18 | 27.7 |
| | 11 to 15 years | 10 | 15.4 |
| | 16 to 20 years | 6 | 9.2 |
| | 21 to 25 years | 5 | 7.7 |
| | 26 plus years | 6 | 9.2 |
| Experience in Health Care Field | 1 to 5 years | 13 | 20.0 |
| | 6 to 10 years | 12 | 18.5 |
| | 11 to 15 years | 5 | 7.7 |
| | 16 to 20 years | 3 | 4.6 |
| | 21 to 25 years | 7 | 10.8 |
| | 26 plus years | 10 | 15.4 |

Note: Percentage is out of total sample (N=65).

## Descriptive Statistics

**Section B: Ethical Issues at Work.** The following section outlines the results of applying the extensively-modified MDS to public health practice. First, frequencies ("how often") and intensities ("how disturbing") of general experiences of moral uncertainty, moral dilemma and moral distress are examined. Participants rated frequencies of moral problem occurrence between 0 ("never") and 6 ("often"). Likewise, participants rated intensities of moral problems (how disturbing they were) between 0 ("not disturbing") and 6 ("greatly disturbing"). "Don't know" was also a valid response for both. For each problem, frequency

and intensity **responses** were also multiplied to produce a **score** (e.g. the moral distress score). For greater clarity, moral problem responses (i.e. frequencies or intensities) may range from 0 to 6, while moral problem scores (a product) may range from 0 to 36.

In addition, simple counts of responses above and below the scale midpoint (3) are presented in a similar fashion as Zuzelo (2007). In the present study, frequency and intensity responses from 4 to 6 are grouped as "high" levels, while 3 or less are grouped as "low". Intuitively, while ordinal variables have arbitrary values, high level responses may indicate a stronger moral problem, implying a deliberate effort to choose a ranking greater than the middle point to identify that item as particularly noteworthy.

Second, moral distress experienced in specific situations is detailed using similar techniques and nomenclature. Moral distress frequency and intensity were ranked for each of 25 situational items. A composite moral distress frequency, intensity and score are each also calculated by taking the mean of all item responses together.

**General Moral Problems at TBDHU**. Overall, the respondents reported mean frequencies and intensities of all three moral problems at low levels (i.e. below the midpoint). Mean moral uncertainty and moral dilemma frequencies, intensities and scores were comparable for the sample (see Table 6). However, mean moral distress frequency was notably lower (nearly 30%) than the frequencies of the other two moral problems. As the moral distress intensity was higher than the other moral problems, the product was a more comparable, albeit slightly lower, moral distress score. In other words, experiences of moral distress were the most intense on average, but did not occur as often. Significant differences in means between pairs of general moral problems are reported in Table 7.

Table 6. General experiences of moral problems at TBDHU, total sample.

| | Moral Uncertainty | | | Moral Dilemma | | | Moral Distress | | |
|---|---|---|---|---|---|---|---|---|---|
| | F | I | Score | F | I | Score | F | I | Score |
| Mean (M) | 2.18 | 2.44 | 6.49 | 2.10 | 2.46 | 6.22 | 1.51 | 2.70 | 5.63 |
| Count (N) | 62 | 61 | 61 | 63 | 63 | 63 | 63 | 60 | 62 |
| Standard Deviation (S.D). | 1.22 | 1.54 | 5.68 | 1.28 | 1.53 | 5.56 | 1.33 | 1.99 | 6.17 |

Note: Scores represent the average product of multiplying frequency by intensity for each participant. Significant differences in pairs reported in Table 7.

Table 7. Paired Samples Test for general levels of moral problems, significant differences in means, total sample.

| Pair of variables | t | df | p (2) |
|---|---|---|---|
| moral uncertainty frequency - moral distress frequency | 3.675 | 62 | .000 |
| moral dilemma frequency - moral distress frequency | 2.979 | 63 | .004 |
| moral dilemma frequency - moral dilemma intensity | -2.390 | 63 | .020 |
| moral distress frequency - moral distress intensity | -5.699 | 60 | .000 |
| moral uncertainty frequency - moral distress intensity | -2.478 | 59 | .016 |
| moral distress frequency - moral dilemma intensity | -4.499 | 63 | .000 |
| moral distress frequency - moral uncertainty intensity | -4.259 | 61 | .000 |
| moral dilemma frequency - moral uncertainty intensity | -2.200 | 61 | .032 |
| moral uncertainty score - moral uncertainty frequency | 7.226 | 61 | .000 |
| moral uncertainty score - moral uncertainty intensity | 7.099 | 61 | .000 |
| moral uncertainty score - moral dilemma frequency | 6.829 | 61 | .000 |
| moral uncertainty score - moral dilemma intensity | 6.453 | 61 | .000 |
| moral dilemma score - moral dilemma frequency | 7.296 | 63 | .000 |
| moral dilemma score - moral dilemma intensity | 6.739 | 63 | .000 |
| moral dilemma score - moral distress frequency | 7.310 | 63 | .000 |
| moral dilemma score - moral distress intensity | 5.281 | 60 | .000 |
| moral distress score - moral distress frequency | 6.703 | 62 | .000 |
| moral distress score - moral distress intensity | 5.082 | 60 | .000 |

Note: t = paired sample t-test statistics
df = degrees of freedom
p(2) = significance (2-tailed)

Next, moral problems are analyzed by various demographic characteristics. Mean frequencies, intensities and scores are compared for public health nurses and other positions based on PHAC categories: front line providers; administrative and support; consultant / specialists; and managers and supervisors.

Front line providers (including public health nurses separately) and managers and supervisors experienced moral problems of all types at a slightly higher frequency and intensity than the sample average, but still at low levels (see Table 8). Similar to the sample at large, mean moral distress was the least frequent problem for all sub-groups mentioned above, and it was the most disturbing for all sub-groups except administrative and support staff. In addition, mean moral distress scores were lower than the other moral problem scores in all sub-groups except for administrative and support staff. For all except managers and supervisors, situations of moral uncertainty occurred most often, slightly higher than moral dilemmas, as well as had the highest scores.

Although the sample size was relatively small (N=9), it is also noteworthy that managers and supervisors had higher average moral uncertainty, moral dilemma and moral distress scores than front line providers (see Table 8).

Few statistically significant differences in moral problem means were revealed for the various demographic variables. First, the differences in mean moral uncertainty frequency, $t(57)=2.42$, $p<.05$, and moral uncertainty intensity, $t(56)=2.09$, $p<.01$, experienced by public health nurses compared to participants who did not identify themselves as public health nurses were significant. Second, the differences in moral uncertainty frequency between different positions based on PHAC category were significant, $F(4,58)=2.85$, $p<.05$. Third, moral dilemma frequency, $F(4,59)=5.05$, $p=.001$, intensity, $F(4,59)=4.34$, $p<.05$, and score, $F(4,59)=2.58$, $p<.05$, were significantly different among the PHAC categories. Finally, as a supplementary analysis, PHAC categories were isolated by front line providers and managers and supervisors and their mean moral problems were each compared to the rest of the sample. From this analysis, only the

mean moral dilemma frequency experienced by managers and supervisors was found to be significantly different than the rest of the sample, $t(62),=2.11$, $p<.05$.

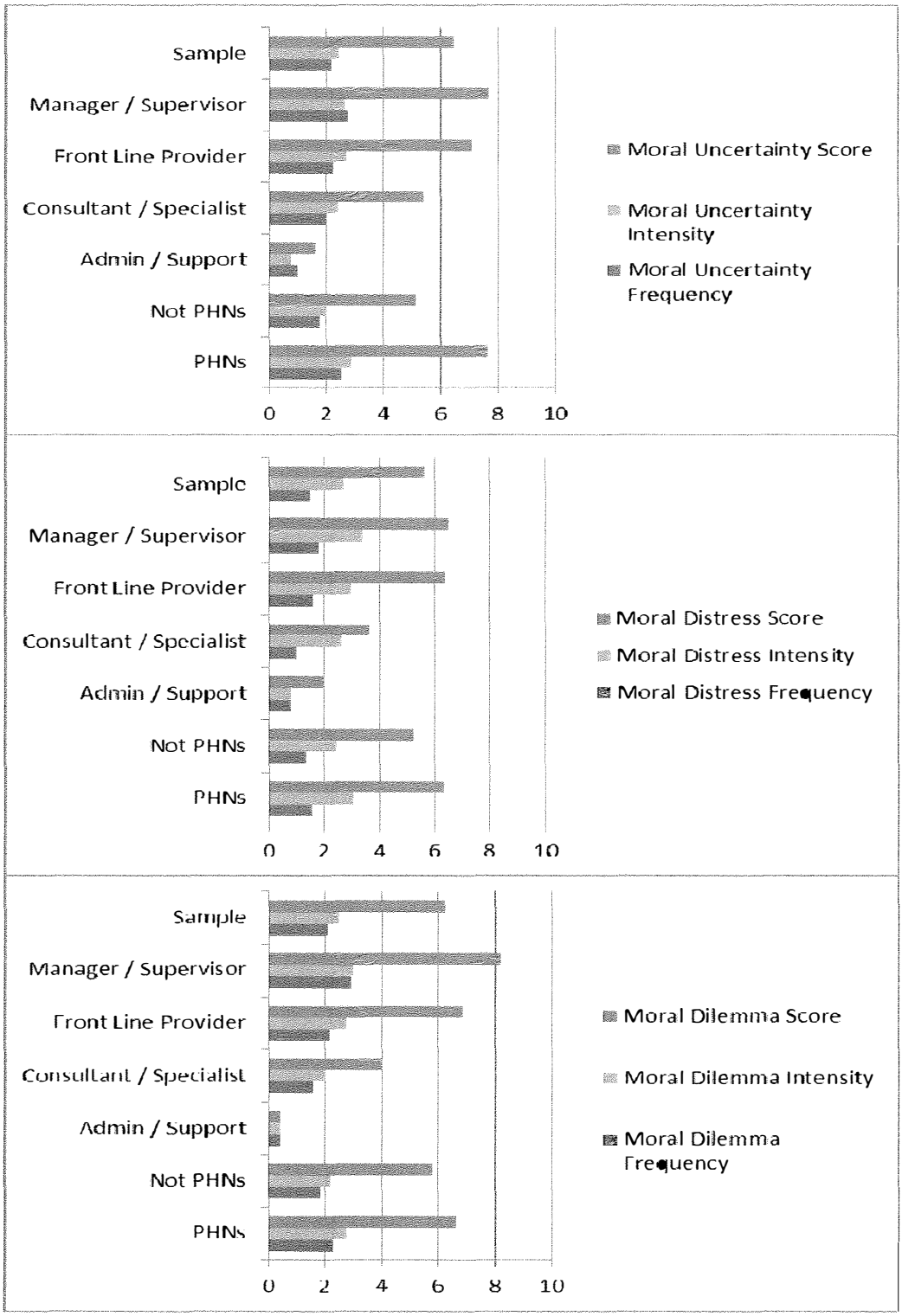
Table 8 outlines mean moral problem frequencies, intensities and scores by PHAC category, as well as by public health nurses and the rest of the sample. Figure 1 provides a comparative view of the same information.

Table 8. Mean frequencies, intensities and scores of moral uncertainty, moral dilemma, and moral distress compared by position and PHAC category.

| | | Moral Uncertainty | | | Moral Dilemma | | | Moral Distress | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | F | I | Score | F | I | Score | F | I | Score |
| PHNs | M | 2.53 | 2.88 | 7.63 | 2.28 | 2.78 | 6.63 | 1.59 | 3.03 | 6.32 |
| | N | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 31 | 31 |
| | S.D. | 1.22 | 1.50 | 5.45 | 1.20 | 1.39 | 4.92 | 1.37 | 2.02 | 6.35 |
| Not PHNs | M | 1.78 | 2.04 | 5.15 | 1.86 | 2.21 | 5.82 | 1.36 | 2.46 | 5.25 |
| | N | 27 | 26 | 26 | 28 | 28 | 28 | 28 | 26 | 28 |
| | S.D. | 1.56 | 1.54 | 5.41 | 1.41 | 1.67 | 6.18 | 1.28 | 2.08 | 6.39 |
| Test | t | 2.42 | 2.09 | 1.72 | 1.26 | 1.43 | .560 | .689 | 1.05 | .646 |
| | df | 57 | 56 | 56 | 58 | 58 | 58 | 58 | 55 | 57 |
| | p(2) | .019* | .041* | .090 | .212 | .158 | .577 | .494 | .300 | .521 |
| Admin / Support | M | 1.00 | 0.80 | 1.60 | 0.40 | 0.40 | 0.40 | 0.80 | 0.80 | 2.00 |
| | N | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | S.D. | 1.23 | 0.84 | 2.51 | 0.55 | 0.55 | 0.55 | 1.30 | 1.30 | 3.94 |
| Consultant / Specialist | M | 2.00 | 2.40 | 5.40 | 1.60 | 2.00 | 4.00 | 1.00 | 2.60 | 3.60 |
| | N | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | S.D. | 1.00 | 1.34 | 4.83 | 0.89 | 1.41 | 4.12 | 0.71 | 2.70 | 4.28 |
| Front Line Provider | M | 2.23 | 2.74 | 7.10 | 2.20 | 2.75 | 6.84 | 1.64 | 2.95 | 6.39 |
| | N | 43 | 42 | 42 | 44 | 44 | 44 | 44 | 42 | 44 |
| | S.D. | 1.13 | 1.62 | 5.83 | 1.19 | 1.51 | 5.75 | 1.45 | 1.98 | 6.79 |
| Manager / Supervisor | M | 2.78 | 2.67 | 7.67 | 2.89 | 3.00 | 8.22 | 1.78 | 3.38 | 6.50 |
| | N | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 8 | 8 |
| | S.D. | 1.30 | 1.32 | 5.36 | 1.17 | 1.12 | 4.21 | 0.67 | 1.60 | 3.63 |
| Test | F | 2.85 | 2.52 | 1.60 | 5.05 | 4.34 | 2.58 | 1.07 | 2.07 | 0.98 |
| | df | 4,58 | 4,57 | 4,57 | 4,59 | 4,59 | 4,59 | 4,59 | 4,56 | 4,58 |
| | p | .032* | .051* | .187 | .001** | .004** | .046* | .379 | .098 | .428 |
| Sample | M | 2.18 | 2.44 | 6.49 | 2.10 | 2.46 | 6.22 | 1.51 | 2.70 | 5.63 |
| | N | 62 | 61 | 61 | 63 | 63 | 63 | 63 | 60 | 62 |
| | S.D. | 1.22 | 1.54 | 5.68 | 1.28 | 1.53 | 5.56 | 1.33 | 1.99 | 6.17 |

Note: Scores refer to individually-calculated total scores (frequency multiplied by intensity for each).
PHN = Public Health Nurse
F = Frequency, I = Intensity
M = mean, N = number, S.D. = Standard deviation
t = independent t-test statistics, equal variances assumed
df = degrees of freedom
p(2) = significance (2-tailed)
F = test statistic, one-way ANOVA
*- statistically significant difference at p<.05 level.
**-statistically significant difference at p<.01 level.

Figure 1. Mean frequencies, intensities and scores of moral uncertainty, moral dilemma and moral distress compared by position and PHAC category.




Note: Scores refer to individually-calculated total scores (frequency multiplied by intensity for each).
PHN = Public Health Nurse

Table 9 compares mean moral problems for various demographic variables, including membership in professional associations, highest level of education attained, gender and age. Variables with smaller samples sizes are not shown. None of these differences were statistically significant.

Table 9. Mean moral uncertainty, moral dilemma, and moral distress compared, by various demographic characteristics.

| | | Moral Uncertainty | | | Moral Dilemma | | | Moral Distress | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Characteristic | | F | I | Score | F | I | Score | F | I | Score |
| Not a member of professional association | M | 1.75 | 2.00 | 5.11 | 1.75 | 2.20 | 5.45 | 1.25 | 2.50 | 4.95 |
| | N | 20 | 19 | 19 | 20 | 20 | 20 | 20 | 18 | 20 |
| | S.D. | 1.16 | 1.60 | 5.57 | 1.41 | 1.74 | 5.74 | 1.21 | 2.23 | 6.24 |
| Member of professional association | M | 2.35 | 2.72 | 7.09 | 2.23 | 2.64 | 6.55 | 1.64 | 2.86 | 6.09 |
| | N | 43 | 43 | 43 | 44 | 44 | 44 | 44 | 43 | 43 |
| | S.D. | 1.21 | 1.56 | 5.62 | 1.20 | 1.46 | 5.45 | 1.37 | 1.95 | 6.18 |
| Female | M | 2.22 | 2.46 | 6.50 | 2.08 | 2.46 | 6.04 | 1.54 | 2.82 | 6.00 |
| | N | 51 | 50 | 50 | 52 | 52 | 52 | 52 | 49 | 51 |
| | S.D. | 1.21 | 1.47 | 5.58 | 1.28 | 1.50 | 5.54 | 1.39 | 2.05 | 6.52 |
| Male | M | 2.00 | 2.36 | 6.45 | 2.18 | 2.45 | 7.09 | 1.36 | 2.18 | 3.91 |
| | N | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | S.D. | 1.34 | 1.91 | 6.41 | 1.33 | 1.75 | 5.82 | 1.03 | 1.72 | 3.91 |
| 20 to 39 years | M | 2.26 | 2.30 | 6.13 | 1.96 | 2.25 | 5.63 | 1.79 | 2.78 | 6.50 |
| | N | 23 | 23 | 23 | 24 | 24 | 24 | 24 | 23 | 24 |
| | S.D. | 1.01 | 1.49 | 5.19 | 1.12 | 1.57 | 5.58 | 1.44 | 1.93 | 7.05 |
| 40 years and older | M | 2.13 | 2.53 | 6.71 | 2.18 | 2.59 | 6.59 | 1.33 | 2.65 | 5.08 |
| | N | 39 | 38 | 38 | 39 | 39 | 39 | 39 | 37 | 38 |
| | S.D. | 1.34 | 1.59 | 6.02 | 1.37 | 1.52 | 5.59 | 1.24 | 2.06 | 5.57 |
| Diploma | M | 2.67 | 2.33 | 8.33 | 2.11 | 1.89 | 6.22 | 2.22 | 2.67 | 9.00 |
| | N | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | S.D. | 1.58 | 1.73 | 8.23 | 1.69 | 1.69 | 7.98 | 1.72 | 2.12 | 9.34 |
| Bachelor's Degree | M | 2.21 | 2.53 | 6.61 | 2.05 | 2.53 | 5.90 | 1.30 | 2.59 | 4.69 |
| | N | 39 | 38 | 38 | 40 | 40 | 40 | 40 | 37 | 39 |
| | S.D. | 1.22 | 1.56 | 5.33 | 1.24 | 1.52 | 4.88 | 1.27 | 2.07 | 5.33 |
| Master's Degree | M | 1.92 | 2.46 | 5.38 | 2.38 | 2.85 | 7.69 | 1.77 | 3.23 | 6.54 |
| | N | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| | S.D. | 0.76 | 1.39 | 4.61 | 1.04 | 1.35 | 5.84 | 1.09 | 1.64 | 5.49 |

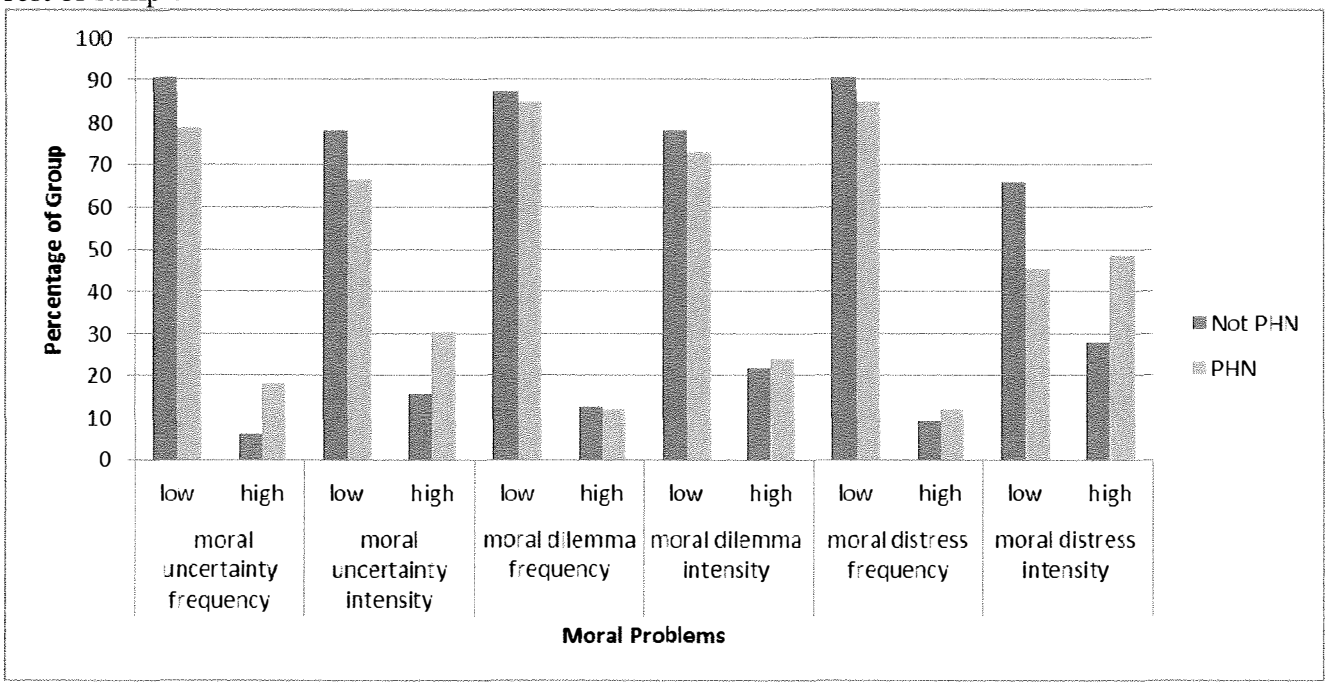
Note: F = Frequency, I = Intensity
M = mean, N = number, S.D. = Standard deviation
Means compared using independent samples t-test and ANOVA, none are statistically significant.

Finally, examining simple counts of high (4 to 6) and low (0 to 3) responses, appreciable differences were revealed between public health nurses and the sample at large. First, public health nurses experienced situations of moral uncertainty at higher levels. A higher proportion of public health nurses (18.2 %) reported a high frequency of these problems compared to the sample (12.3 %). Moreover, almost one third of public health nurses (30.4%) reported high intensities of moral uncertainty, compared to almost quarter-sample (23.1%) that reported the same.

Similarly, more public health nurses (12.1%) experienced high levels of moral distress than the total sample (10.7%). Even more noticeably, while more than a third (38.5%) of the sample reported high intensity moral distress, nearly half (48.5%) of public health nurses reported the same. Alternately, high levels of moral dilemma were comparable between public health nurses and the total sample.

Figure 2 highlights the frequency and intensity of general moral uncertainty, moral dilemma and moral distress between public health nurses and the rest of the sample.

Figure 2. Proportion of high and low levels of moral problems, public health nurses compared to rest of sample




Note: Frequency scale: 0 = never to 6 = often.
Intensity scale: 0 = not disturbing to 6 = greatly disturbing.
Low = 0 to 3
High = 4 to 6

**Detailed Analysis of Moral Distress**. Mean moral distress frequencies, intensities and scores for each situation (item) were compared and ranked for public health nurses, managers and supervisors, front line providers and the total sample. As in the previous section, high levels (ranked greater than 3) of moral distress were also compared for the sample. Moral distress scores are ranked in Table 10 for the total sample.

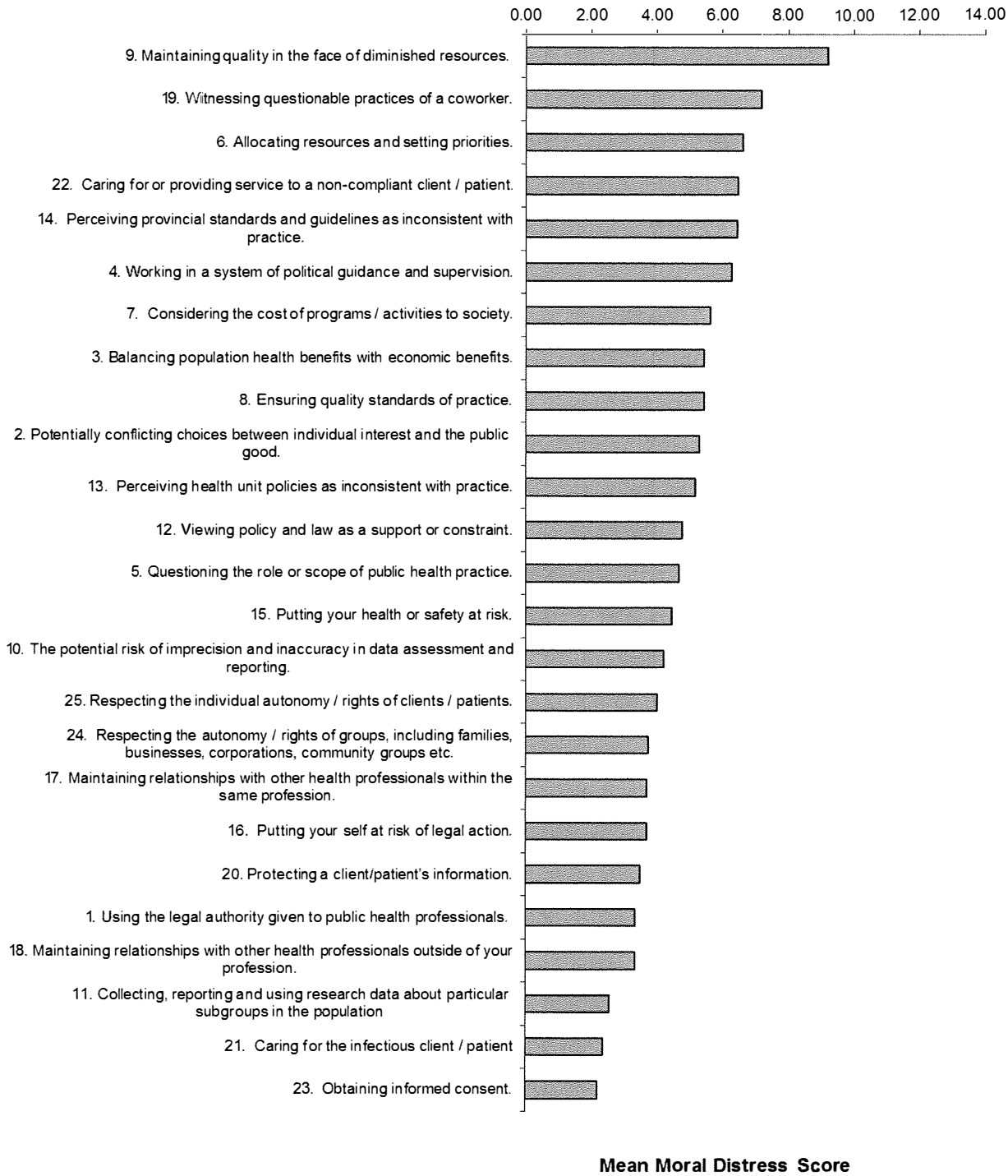
Table 10. Situations ranked by decreasing mean moral distress score, total sample.

| Situation | M | N | S.D. |
|---|---|---|---|
| 9. Maintaining quality in the face of diminished resources. | 9.21 | 61 | 8.91 |
| 19. Witnessing questionable practices of a coworker. | 7.20 | 61 | 8.71 |
| 6. Allocating resources and setting priorities. | 6.61 | 59 | 7.20 |
| 22. Caring for or providing service to a non-compliant client / patient. | 6.47 | 51 | 7.85 |
| 14. Perceiving provincial standards and guidelines as inconsistent with practice. | 6.44 | 59 | 7.55 |
| 4. Working in a system of political guidance and supervision. | 6.27 | 56 | 7.67 |
| 7. Considering the cost of programs / activities to society. | 5.64 | 58 | 6.86 |
| 3. Balancing population health benefits with economic benefits. | 5.45 | 56 | 7.05 |
| 8. Ensuring quality standards of practice. | 5.43 | 61 | 7.19 |
| 2. Potentially conflicting choices between individual interest and the public good. | 5.28 | 58 | 5.87 |
| 13. Perceiving health unit policies as inconsistent with practice. | 5.17 | 59 | 6.04 |
| 12. Viewing policy and law as a support or constraint. | 4.78 | 50 | 6.02 |
| 5. Questioning the role or scope of public health practice. | 4.66 | 62 | 5.51 |
| 15. Putting your health or safety at risk. | 4.46 | 59 | 7.15 |
| 10. The potential risk of imprecision and inaccuracy in data assessment and reporting. | 4.21 | 58 | 6.15 |
| 25. Respecting the individual autonomy / rights of clients / patients. | 4.00 | 61 | 5.53 |
| 24. Respecting the autonomy / rights of groups, including families, businesses, corporations, community groups etc. | 3.74 | 57 | 5.59 |
| 17. Maintaining relationships with other health professionals within the same profession. | 3.69 | 61 | 6.84 |
| 16. Putting your self at risk of legal action. | 3.68 | 59 | 5.64 |
| 20. Protecting a client/patient's information. | 3.48 | 60 | 5.34 |
| 1. Using the legal authority given to public health professionals. | 3.35 | 52 | 3.96 |
| 18. Maintaining relationships with other health professionals outside of your profession. | 3.34 | 62 | 6.49 |
| 11. Collecting, reporting and using research data about particular subgroups in the population | 2.55 | 51 | 4.28 |
| 21. Caring for the infectious client / patient | 2.35 | 43 | 4.59 |
| 23. Obtaining informed consent. | 2.18 | 57 | 4.30 |

Note: M = mean, N = number, S.D. = standard deviation
The number of the left-hand side of the situation description refers to its order on the MDS.

First, observing the total sample, situations involving "maintaining quality in the face of diminished resources" resulted in the highest mean moral distress score (M=9.21, N=61, S.D.=8.91). Also, this situation occurred the most frequently and was the most disturbing (see Table 14 and Table 15). The remainder of the highest five ranked situations were different for each of moral distress frequency and intensity. Situations involving "allocating resources and setting priorities" were the second-most frequent on average, while situations involving "witnessing questionable practices of a coworker" were the second-most intense. The lowest mean moral distress score was reported for situations involving "obtaining informed consent". All items are also ranked in Figure 3.

Figure 3. Mean moral distress score by situation, total sample.



Next, specific moral distress situations are analyzed by the largest sub-groups: public health nurses; front line providers; and managers and supervisors. Not surprisingly, front line providers and their largest constituents – public health nurses – had similar results. Both front line providers and public health nurses have the greatest average moral distress score in situations that involve "maintaining quality in the face of diminished resources" (front line providers: M=9.88, N=43, S.D. =9.85; public health nurses: M=11.28, N=32, S.D.=9.07). The situations with the top five highest mean moral distress scores for the major sub-groups are provided in Tables 11 to 13.

Table 11. Situations with top five mean moral distress scores, front line providers.

| | M | N | S.D. |
|---|---|---|---|
| 9. Maintaining quality in the face of diminished resources. | 9.88 | 43 | 9.85 |
| 19. Witnessing questionable practices of a coworker. | 7.65 | 43 | 8.75 |
| 22. Caring for or providing service to a non-compliant client / patient. | 7.38 | 37 | 8.05 |
| 14. Perceiving provincial standards and guidelines as inconsistent with practice. | 6.56 | 41 | 7.35 |
| 6. Allocating resources and setting priorities. | 6.21 | 42 | 7.20 |

Table 12. Situations with top five mean moral distress scores, managers and supervisors

| | M | N | S.D. |
|---|---|---|---|
| 4. Working in a system of political guidance and supervision. | 12.63 | 8 | 13.43 |
| 6. Allocating resources and setting priorities. | 12.00 | 9 | 7.66 |
| 7. Considering the cost of programs / activities to society. | 11.89 | 9 | 9.05 |
| 3. Balancing population health benefits with economic benefits. | 10.44 | 9 | 11.30 |
| 13. Perceiving health unit policies as inconsistent with practice. | 10.38 | 8 | 10.46 |

Note: M = mean, N = number, S.D. = standard deviation.

Table 13. Situations with top five mean moral distress scores, public health nurses.

| | M | N | S.D. |
|---|---|---|---|
| 9. Maintaining quality in the face of diminished resources. | 11.28 | 32 | 9.07 |
| 19. Witnessing questionable practices of a coworker. | 9.13 | 32 | 9.13 |
| 6. Allocating resources and setting priorities. | 8.81 | 31 | 8.24 |
| 22. Caring for or providing service to a non-compliant client / patient. | 8.64 | 28 | 8.37 |
| 7. Considering the cost of programs / activities to society. | 6.87 | 30 | 7.52 |

Note: M = mean, N = number, S.D. = standard deviation.

Managers and supervisors reported situations involving "working in a system of political guidance and supervision" with the highest mean moral distress score (M=12.63, N=8, S.D.=13.43). While these types of situations only ranked as seventh most frequent, they ranked as the second most intense. Meanwhile, moral distress in situations involving "allocating resources and setting priorities" occurred the most frequently (M=3.56, N=9, S.D=2.01) and moral distress in situations involving "balancing population health benefits with economic benefits" were the most intense (M=3.22, N=9, S.D.=2.05).

Figure 4. Mean moral distress score by situation, front line providers.

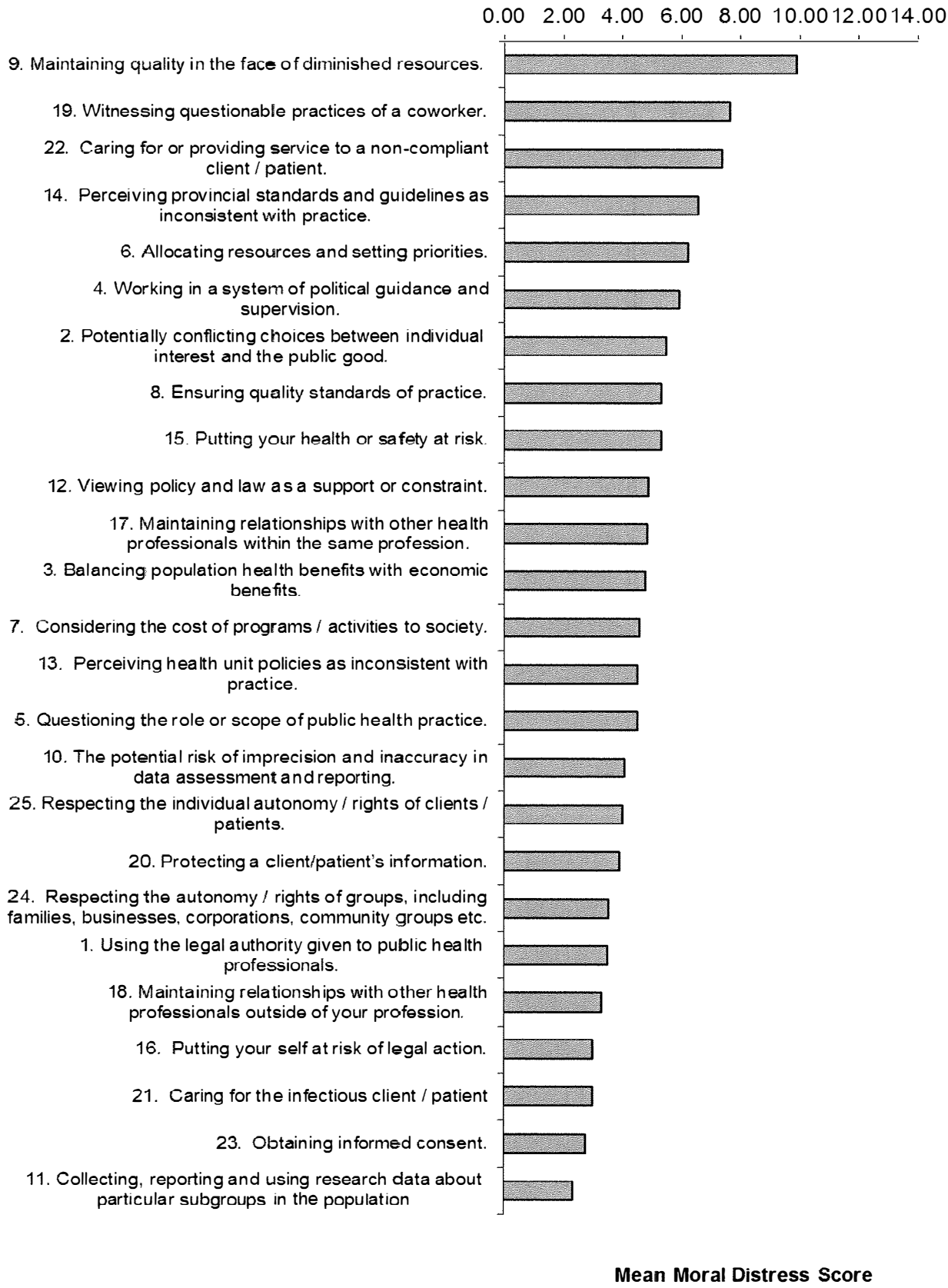


Figure 5. Mean moral distress score by situation, managers and supervisors.

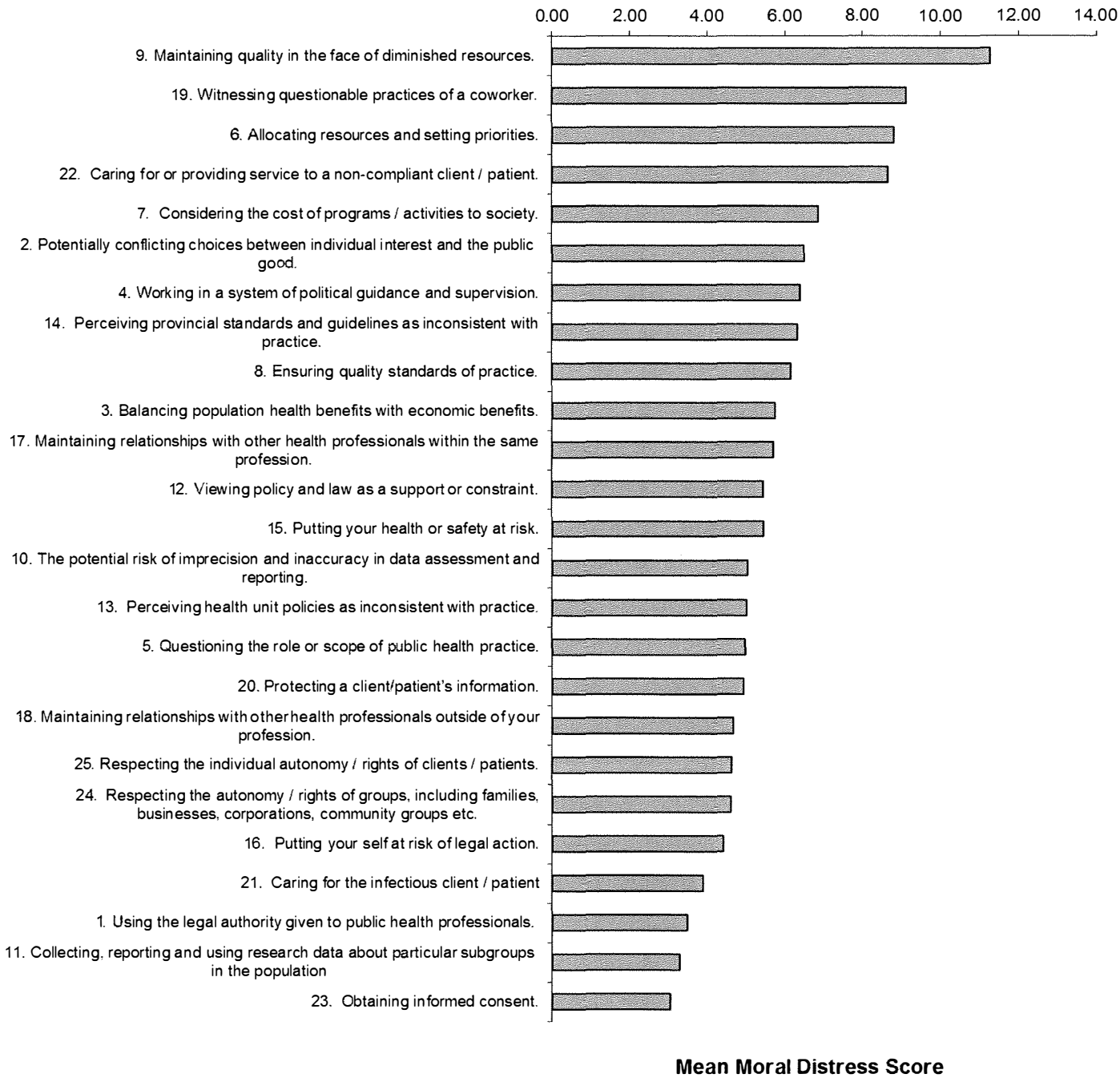
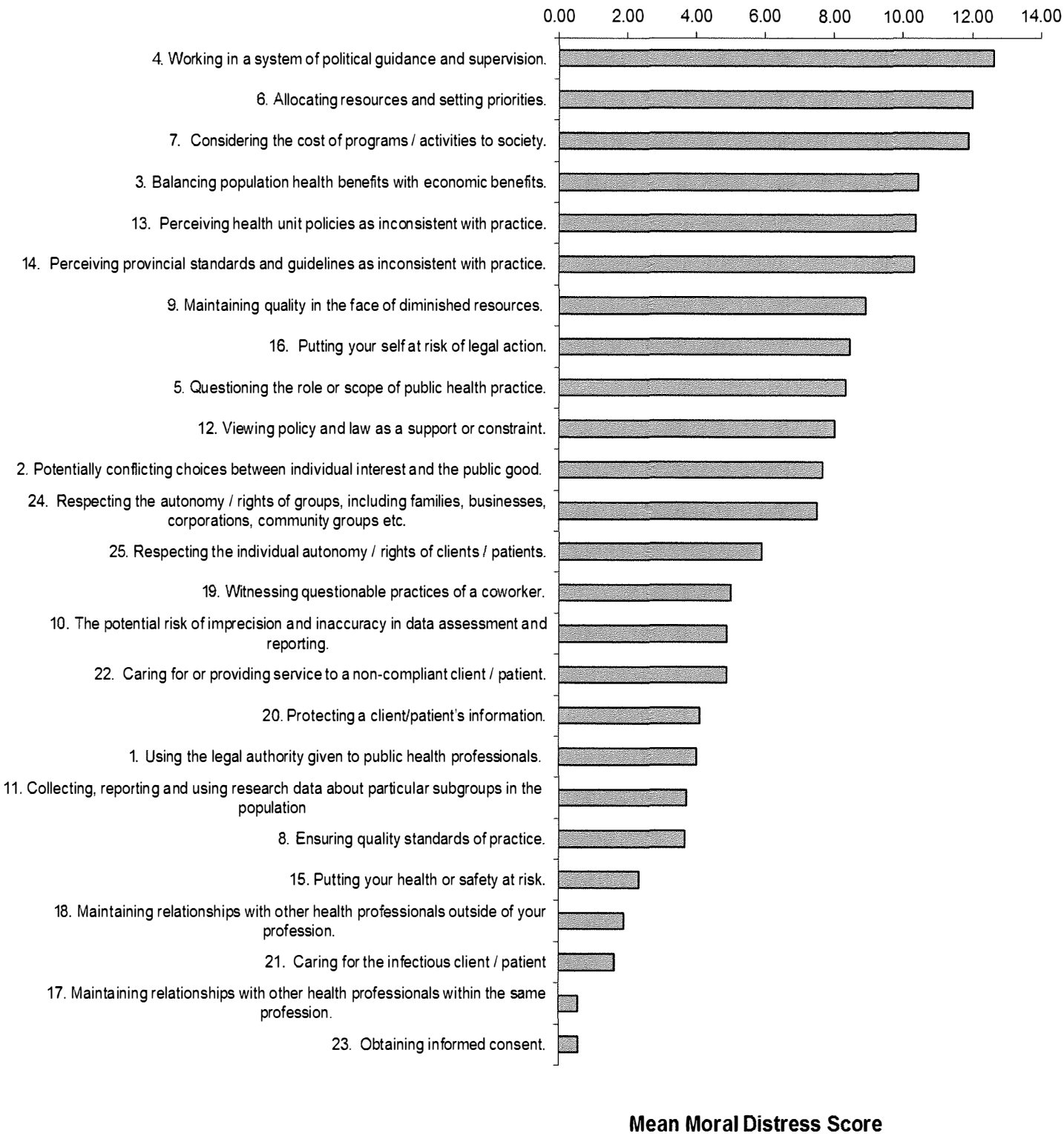


Figure 6. Mean moral distress score by situation, public health nurses.



Overall, no mean response for any situation in the total sample was at or above the mid-point (greater than or equal to 3.00) for moral distress frequency or intensity (see Table 14). However, analyzing the results by the same three major sub-groups (front line providers, public health nurses, and managers and supervisors) revealed several situations rated above the mid-point.

Managers and supervisors were the only one of these sub-groups with mean moral distress frequencies above the mid-point. This occurred in situations involving:

- Allocating resources and setting priorities;
- Perceiving provincial standards and guidelines as inconsistent with practice; and
- Considering the cost of programs / activities to society.

The ranges of mean moral distress frequency responses for these sub-groups were as follows: public health nurses, 1.33 to 2.82; front line providers, 1.05 to 2.50; managers and supervisors, 0.44 to 3.56; and the total sample, 1.00 to 2.50.

Table 14. Situations ranked by decreasing mean moral distress frequency, total sample compared to select sub-groups.

| Rank | Situation | M | N | S.D. | Comparative Rank Group, Rank (M, N, S.D.) |
|---|---|---|---|---|---|
| 1 | 9. Maintaining quality in the face of diminished resources. | 2.50 | 62 | 1.62 | FLP, 1st (2.50, 44, 1.72)<br>PHN, 1st (2.82, 33, 1.63)<br>MS, 4th (2.89, 9, 1.54) |
| 2 | 6. Allocating resources and setting priorities. | 2.15 | 60 | 1.55 | FLP, 3rd (2.02, 43, 1.39)<br>PHN, 2nd (2.47, 32, 1.50)<br>MS, 1st (**3.56**, 9, 2.01) |
| 3 | 14. Perceiving provincial standards and guidelines as inconsistent with practice. | 2.02 | 59 | 1.57 | FLP, 5th (1.98, 41, 1.56)<br>PHN, 7th (1.97, 32, 1.51)<br>MS, 3rd (**3.11**, 9, 1.69) |
| 4 | 19. Witnessing questionable practices of a coworker. | 1.95 | 61 | 1.59 | FLP, 2nd (2.07, 43, 1.61)<br>PHN, 3rd (2.41, 32, 1.58)<br>MS, 19th (1.44, 9, 1.13) |
| 5 | 4. Working in a system of political guidance and supervision. | 1.91 | 57 | 1.42 | FLP, 6th (1.90, 39, 1.33)<br>PHN, 6th (2.00, 29, 1.28)<br>MS, 7th (2.56, 9, 2.01) |
| 6 | 8. Ensuring quality standards of practice. | 1.87 | 61 | 1.53 | FLP, 8th (1.74, 43, 1.43)<br>PHN, 9th (1.91, 33, 1.42)<br>MS, 13th (2.11, 9, 1.69) |
| 7 | 7. Considering the cost of programs / activities to society. | 1.79 | 58 | 1.56 | FLP, 15th (1.46, 41, 1.36)<br>PHN, 8th (1.93, 30, 1.55)<br>MS, 2nd (**3.56**, 9, 1.81) |
| 8 | 22. Caring for or providing service to a non-compliant client / patient. | 1.78 | 51 | 1.60 | FLP, 4th (2.00, 37, 1.51)<br>PHN, 4th (2.25, 28, 1.48)<br>MS, 20th (1.38, 8, 2.13) |
| 9 | 2. Potentially conflicting choices between individual interest and the public good. | 1.78 | 58 | 1.44 | FLP, 7th (1.83, 40, 1.47)<br>PHN, 5th (2.07, 30, 1.39)<br>MS, 12th (2.11, 9, 1.83) |
| 10 | 13. Perceiving health unit policies as inconsistent with practice. | 1.75 | 59 | 1.33 | FLP, 11th (1.62, 42, 1.15)<br>PHN, 14th (1.68, 31, 1.19)<br>MS, 5th (2.88, 8, 1.96) |
| 11 | 5. Questioning the role or scope of public health practice. | 1.71 | 62 | 1.31 | FLP, 9th (1.70, 44, 1.25)<br>PHN, 10th (1.85, 33, 1.33)<br>MS, 8th (2.56, 9, 1.42) |
| 12 | 3. Balancing population health benefits with economic benefits. | 1.66 | 56 | 1.38 | FLP, 12th (1.58, 40, 1.32)<br>PHN, 12th (1.77, 30, 1.30)<br>MS, 10th (2.44, 9, 1.81) |
| 13 | 12. Viewing policy and law as a support or constraint. | 1.66 | 50 | 1.45 | FLP, 10th (1.64, 36, 1.46)<br>PHN, 11th (1.80, 25, 1.47)<br>MS, 6th (2.71, 7, 1.38) |
| 14 | 25. Respecting the individual autonomy / rights of clients / patients. | 1.49 | 61 | 1.51 | FLP, 14th (1.47, 43, 1.55)<br>PHN, 16th (1.64, 33, 1.56)<br>MS, 15th (2.00, 9, 1.66) |
| 15 | 10. The potential risk of imprecision and inaccuracy in data assessment and reporting. | 1.49 | 59 | 1.33 | FLP, 20th (1.37, 41, 1.39)<br>PHN, 19th (1.59, 32, 1.39)<br>MS, 14th (2.00, 9, 1.00) |
| 16 | 24. Respecting the autonomy / rights of groups, including families, businesses, corporations, community groups etc. | 1.40 | 57 | 1.55 | FLP, 18th (1.41, 41, 1.53)<br>PHN, 15th (1.67, 30, 1.65)<br>MS, 11th (2.13, 8, 2.03) |

Table 14. Situations ranked by decreasing mean moral distress frequency, total sample compared to select sub-groups (continued).

| Rank | Situation | M | N | S.D. | Comparative Rank Group, Rank (M, N, S.D.) |
|---|---|---|---|---|---|
| 17 | 18. Maintaining relationships with other health professionals outside of your profession. | 1.34 | 62 | 1.51 | FLP, 22nd (1.25, 44, 1.45)<br>PHN, 17th (1.61, 33, 1.60)<br>MS, 16th (1.56, 9, 1.88) |
| 18 | 17. Maintaining relationships with other health professionals within the same profession. | 1.33 | 61 | 1.59 | FLP, 13th (1.52, 44, 1.61)<br>PHN, 13th (1.76, 33, 1.64)<br>MS, 22nd (1.11, 9, 1.96) |
| 19 | 1. Using the legal authority given to public health professionals. | 1.31 | 52 | 1.32 | FLP, 17th (1.42, 36, 1.18)<br>PHN, 23rd (1.41, 29, 1.02)<br>MS, 17th (1.50, 8, 2.14) |
| 20 | 15. Putting your health or safety at risk. | 1.31 | 59 | 1.43 | FLP,16th (1.44, 43, 1.50)<br>PHN, 20th (1.52, 33, 1.52)<br>MS, 23rd (1.00, 9, 1.41) |
| 21 | 16. Putting your self at risk of legal action. | 1.27 | 60 | 1.39 | FLP, 24th (1.07, 43, 1.18)<br>PHN, 22nd (1.45, 33, 1.39)<br>MS, 9th (2.56, 9, 1.94) |
| 22 | 20. Protecting a client/patient's information. | 1.23 | 60 | 1.47 | FLP, 19th (1.40, 43, 1.43)<br>PHN, 18th (1.61, 33, 1.52)<br>MS, 21st (1.33, 9, 1.94) |
| 23 | 11. Collecting, reporting and using research data about particular subgroups in the population | 1.15 | 53 | 1.15 | FLP, 25th (1.05, 37, 1.22)<br>PHN, 25th (1.33, 30, 1.32)<br>MS, 18th (1.50, 8, 0.93) |
| 24 | 23. Obtaining informed consent. | 1.05 | 57 | 1.38 | FLP, 21st (1.27, 41, 1.52)<br>PHN, 24th (1.37, 30, 1.67)<br>MS, 25th (0.44, 9, 0.73) |
| 25 | 21. Caring for the infectious client / patient | 1.00 | 44 | 1.28 | FLP, 23rd (1.17, 29, 1.28)<br>PHN, 21st (1.46, 24, 1.32)<br>MS, 24th (1.00, 8, 1.60) |

Note: M = mean, N = number, S.D. = standard deviation
FLP = Front Line Provider (includes PHNs)
PHN = Public Health Nurse
MS = Managers and Supervisors
Mean responses at or over the mid-point are bolded.

Alternately, mean moral distress intensities for one or more situations were reported at or above the mid-point for all three sub-groups (see Table 15). Front line providers and public health nurses both reported high levels of moral distress for situations involving:

- Maintaining quality in the face of diminished resources; and
- Witnessing questionable practices of a coworker.

Notably, managers and supervisors reported high mean moral distress intensity in six situations, including:

- Witnessing questionable practices of a coworker;
- Allocating resources and setting priorities;
- Balancing population health benefits with economic benefits;
- Potentially conflicting choices between individual interest and the public good;
- Working in a system of political guidance and supervision; and
- Considering the cost of programs / activities to society.

The ranges of mean moral distress intensities for the sub-groups were as follows: public health nurses, 1.52 to 3.35; front line providers, 1.35 to 3.10; managers and supervisors, 0.33 to 3.22; and the total sample, 1.16 to 2.93.

Table 15. Situations ranked by decreasing mean moral distress intensity, total sample compared to select sub-groups.

| Rank | Situation | M | N | S.D. | Comparative Rank Group, Rank (M, N, S.D.) |
|---|---|---|---|---|---|
| 1 | 9. Maintaining quality in the face of diminished resources. | 2.93 | 58 | 1.74 | FLP, 1st (**3.10**, 40, 1.85)<br>PHN, 3rd (**3.29**, 31, 1.72)<br>MS, 8th (2.78, 9, 1.48) |
| 2 | 19. Witnessing questionable practices of a coworker. | 2.88 | 58 | 1.90 | FLP, 2nd (**3.00**, 40, 1.84)<br>PHN, 1st (**3.35**, 31, 1.56)<br>MS, 6th (**3.00**, 9, 2.18) |
| 3 | 22. Caring for or providing service to a non-compliant client / patient. | 2.51 | 47 | 1.86 | FLP, 3rd (**3.00**, 33, 1.73)<br>PHN, 2nd (**3.31**, 26, 1.52)<br>MS, 20th (1.38, 8, 1.77) |
| 4 | 6. Allocating resources and setting priorities. | 2.39 | 56 | 1.49 | FLP, 4th (2.36, 39, 1.51)<br>PHN, 4th (2.93, 30, 1.53)<br>MS, 4th (**3.00**, 9, 1.50) |
| 5 | 3. Balancing population health benefits with economic benefits. | 2.24 | 54 | 1.78 | FLP, 11th (2.05, 38, 1.74)<br>PHN, 7th (2.47, 30, 1.66)<br>MS, 1st (**3.22**, 9, 2.05) |
| 6 | 2. Potentially conflicting choices between individual interest and the public good. | 2.22 | 55 | 1.70 | FLP, 8th (2.19, 37, 1.66)<br>PHN, 6th (2.55, 29, 1.68)<br>MS, 3rd (**3.00**, 9, 2.06) |
| 7 | 4. Working in a system of political guidance and supervision. | 2.19 | 54 | 1.76 | FLP, 7th (2.22, 37, 1.69)<br>PHN, 9th (2.37, 27, 1.67)<br>MS, 2nd (**3.13**, 8, 2.42) |
| 8 | 14. Perceiving provincial standards and guidelines as inconsistent with practice. | 2.16 | 58 | 1.70 | FLP, 6th (2.23, 40, 1.80)<br>PHN, 12th (2.29, 31, 1.74)<br>MS, 12th (2.67, 9, 1.58) |
| 9 | 7. Considering the cost of programs / activities to society. | 2.15 | 55 | 1.67 | FLP, 14th (1.95, 38, 1.69)<br>PHN, 5th (2.57, 28, 1.85)<br>MS, 5th (**3.00**, 9, 1.22) |
| 10 | 8. Ensuring quality standards of practice. | 2.11 | 56 | 1.61 | FLP, 9th (2.18, 38, 1.57)<br>PHN, 8th (2.39, 31, 1.58)<br>MS, 17th (1.78, 9, 1.39) |
| 11 | 13. Perceiving health unit policies as inconsistent with practice. | 2.05 | 58 | 1.64 | FLP, 13th (1.98, 41, 1.57)<br>PHN, 16th (2.10, 30, 1.67)<br>MS, 9th (2.75, 8, 1.98) |
| 12 | 15. Putting your health or safety at risk. | 1.92 | 53 | 1.84 | FLP, 5th (2.32, 37, 1.90)<br>PHN, 13th (2.21, 29, 1.92)<br>MS, 22nd (0.89, 9, 1.27) |
| 13 | 5. Questioning the role or scope of public health practice. | 1.92 | 59 | 1.36 | FLP, 16th (1.90, 42, 1.34)<br>PHN, 20th (1.97, 32, 1.33)<br>MS, 7th (2.89, 9, 1.05) |
| 14 | 1. Using the legal authority given to public health professionals. | 1.91 | 46 | 1.60 | FLP, 10th (2.13, 31, 1.57)<br>PHN, 10th (2.35, 26, 1.57)<br>MS, 19th (1.57, 7, 1.27) |
| 15 | 12. Viewing policy and law as a support or constraint. | 1.89 | 46 | 1.52 | FLP, 12th (2.00, 32, 1.61)<br>PHN, 14th (2.13, 23, 1.58)<br>MS, 13th (2.57, 7, 1.13) |
| 16 | 10. The potential risk of imprecision and inaccuracy in data assessment and reporting. | 1.85 | 53 | 1.45 | FLP, 18th (1.81, 36, 1.56)<br>PHN, 15th (2.10, 29, 1.54)<br>MS, 15th (2.13, 8, 0.99) |

Table 15. Situations ranked by decreasing mean moral distress intensity, total sample compared to select sub-groups (continued).

| Rank | Situation | M | N | S.D. | Comparative Rank Group, Rank (M, N, S.D.) |
|---|---|---|---|---|---|
| 17 | 20. Protecting a client/patient's information. | 1.75 | 52 | 1.70 | FLP, 17th (1.89, 36, 1.75)<br>PHN, 11th (2.32, 28, 1.81)<br>MS, 16th (2.11, 9, 1.62) |
| 18 | 25. Respecting the individual autonomy / rights of clients / patients. | 1.74 | 57 | 1.64 | FLP, 20th (1.67, 39, 1.66)<br>PHN, 19th (2.00, 30, 1.68)<br>MS, 11th (2.67, 9, 1.80) |
| 19 | 16. Putting your self at risk of legal action. | 1.67 | 55 | 1.61 | FLP, 21st (1.63, 38, 1.63)<br>PHN, 21st (1.93, 29, 1.58)<br>MS, 14th (2.44, 9, 1.74) |
| 20 | 24. Respecting the autonomy / rights of groups, including families, businesses, corporations, community groups etc. | 1.58 | 53 | 1.59 | FLP, 22nd (1.49, 37, 1.45)<br>PHN, 22nd (1.75, 28, 1.60)<br>MS, 10th (2.75, 8, 2.19) |
| 21 | 17. Maintaining relationships with other health professionals within the same profession. | 1.52 | 54 | 1.63 | FLP, 15th (1.92, 38, 1.73)<br>PHN, 17th (2.10, 30, 1.75)<br>MS, 24th (0.33, 9, 0.71) |
| 22 | 18. Maintaining relationships with other health professionals outside of your profession. | 1.38 | 56 | 1.52 | FLP, 24th (1.42, 38, 1.50)<br>PHN, 23rd (1.70, 30, 1.64)<br>MS, 21st (1.00, 9, 1.41) |
| 23 | 11. Collecting, reporting and using research data about particular subgroups in the population | 1.35 | 43 | 1.15 | FLP, 25th (1.29, 28, 1.18)<br>PHN, 24th (1.52, 25, 1.26)<br>MS, 18th (1.71, 7, 1.25) |
| 24 | 21. Caring for the infectious client / patient | 1.29 | 35 | 1.56 | FLP, 19th (1.71, 21, 1.62)<br>PHN, 18th (2.00, 20, 1.62)<br>MS, 23rd (0.71, 7, 1.50) |
| 25 | 23. Obtaining informed consent. | 1.16 | 51 | 1.42 | FLP, 23rd (1.49, 35, 1.54)<br>PHN, 25th (1.52, 25, 1.26)<br>MS, 25th (0.33, 9, 0.71) |

Note: M = mean, N = number, S.D. = standard deviation
FLP = Front Line Provider (includes PHNs)
PHN = Public Health Nurse
MS = Managers and Supervisors
Mean scores at or over the mid-point are bolded.

For comparative purposes, the proportion of high versus low responses was also ranked (see Tables 16 and 17). Generally, the rank order of most morally distressing situations was comparable between techniques. In the case of frequency, the top 3 remained the same for the sample. The top 2 were the same for moral distress intensity. However, differences in order were noted for the remainder.

Over a quarter (27.7%) of the total sample (N=18) reported that they experienced a high frequency of moral distress in situations involving "maintaining quality in the face of diminished

resources". Even more (30.4%) reported these situations as highly intense or disturbing. Correspondingly, a fifth of the total sample (20%) reported a high frequency of moral distress occurring in situations involving allocating resources and priorities. Also noteworthy was the high proportion of participants (30.8%) who reported that situations involving "witnessing questionable practices of a coworker" engendered highly intense or disturbing moral distress.

Table 16. Number and percentage of participants with high frequency of moral distress (4-6), by situation, total sample.

| | N | % |
|---|---|---|
| 9. Maintaining quality in the face of diminished resources. | 18 | 27.7 |
| 6. Allocating resources and setting priorities. | 13 | 20.0 |
| 14. Perceiving provincial standards and guidelines as inconsistent with practice. | 12 | 18.5 |
| 7. Considering the cost of programs / activities to society. | 10 | 15.4 |
| 8. Ensuring quality standards of practice. | 10 | 15.4 |
| 4. Working in a system of political guidance and supervision. | 9 | 13.8 |
| 5. Questioning t e role or scope of public health practice. | 9 | 13.8 |
| 19. Witnessing questionable practices of a coworker. | 9 | 13.8 |
| 3. Balancing population health benefits with economic benefits. | 8 | 12.3 |
| 24. Respecting the autonomy / rights of groups, including families, businesses, corporations, community groups etc. | 8 | 12.3 |
| 15. Putting your health or safety at risk. | 7 | 10.8 |
| 17. Maintaining relationships with other health professionals within the same profession. | 7 | 10.8 |
| 18. Maintaining relationships with other health professionals outside of your profession. | 7 | 10.8 |
| 2. Potentially conflicting choices between individual interest and the public good. | 6 | 9.2 |
| 12. Viewing policy and law as a support or constraint. | 6 | 9.2 |
| 22. Caring for or providing service to a non-compliant client / patient. | 6 | 9.2 |
| 25. Respecting the individual autonomy / rights of clients / patients. | 6 | 9.2 |
| 13. Perceiving health unit policies as inconsistent with practice. | 5 | 7.7 |
| 16. Putting yourself at risk of legal action. | 5 | 7.7 |
| 20. Protecting a client/patient's information. | 5 | 7.7 |
| 10. The potential risk of imprecision and inaccuracy in data assessment and reporting. | 4 | 6.2 |
| 23. Obtaining informed consent. | 4 | 6.2 |

Table 17. Number and percentage of participants with high intensity of moral distress (4-6), by situation, total sample.

| | N | % |
|---|---|---|
| 9. Maintaining quality in the face of diminished resources. | 20 | 30.8 |
| 19. Witnessing questionable practices of a coworker. | 20 | 30.8 |
| 2. Potentially conflicting choices between individual interest and the public good. | 15 | 23.1 |
| 4. Working in a system of political guidance and supervision. | 15 | 23.1 |
| 22. Caring for or providing service to a non-compliant client / patient. | 15 | 23.1 |
| 6. Allocating resources and setting priorities. | 14 | 21.5 |
| 8. Ensuring quality standards of practice. | 14 | 21.5 |
| 3. Balancing population health benefits with economic benefits. | 13 | 20.0 |
| 7. Considering the cost of programs / activities to society. | 13 | 20.0 |
| 14. Perceiving provincial standards and guidelines as inconsistent with practice. | 13 | 20.0 |
| 15. Putting your health or safety at risk. | 13 | 20.0 |
| 5. Questioning the role or scope of public health practice. | 10 | 15.4 |
| 13. Perceiving health unit policies as inconsistent with practice. | 10 | 15.4 |
| 16. Putting your self at risk of legal action. | 10 | 15.4 |
| 12. Viewing policy and law as a support or constraint. | 9 | 13.8 |
| 20. Protecting a client/patient's information. | 9 | 13.8 |
| 10. The potential risk of imprecision and inaccuracy in data assessment and reporting. | 8 | 12.3 |
| 25. Respecting the individual autonomy / rights of clients / patients. | 8 | 12.3 |
| 17. Maintaining relationships with other health professionals within the same profession. | 7 | 10.8 |
| 24. Respecting the autonomy / rights of groups, including families, businesses, corporations, community groups etc. | 7 | 10.8 |
| 1. Using the legal authority given to public health professionals. | 6 | 9.2 |
| 18. Maintaining relationships with other health professionals outside of your profession. | 6 | 9.2 |

Table 16. Number and percentage of participants with high frequency of moral distress (4-6), by situation, total sample (continued).

| | N | % |
|---|---|---|
| 1. Using the legal authority given to public health professionals. | 3 | 4.6 |
| 11. Collecting, reporting and using research data about particular subgroups in the population | 2 | 3.1 |
| 21. Caring for the infectious client / patient | 2 | 3.1 |

Table 17. Number and percentage of participants with high intensity of moral distress (4-6), by situation, total sample (continued).

| | N | % |
|---|---|---|
| 23. Obtaining informed consent. | 5 | 7.7 |
| 21. Caring for the infectious client / patient | 4 | 6.2 |
| 11. Collecting, reporting and using research data about particular subgroups in the population | 3 | 4.6 |

Note: N = number of high responses (4-6)
% = percentage of high responses (4-4)

Finally, looking at the mean of all item responses for each participant, the mean composite moral distress frequency (M=1.61, S.D.=0.92) and intensity (M=1.99, S.D.=0.93) for the sample were also in the low range. Composite moral distress frequency results were slightly higher for public health nurses (M=1.81, S.D.=0.88) and managers and supervisors (M=2.04, S.D.=1.30). Composite frequencies for front line providers were comparable to the total sample (M=1.60, S.D.=0.86). Similarly, mean composite moral distress intensities were higher for public health nurses (M=2.25, S.D.=0.84), front line providers (M=2.06, S.D.=0.93) and managers and supervisors (M=2.18, S.D.=0.90). Again, managers and supervisors had the highest moral distress levels of all the major sub-groups.

**Supplementary Analyses**

**Factor Analysis**. The 25 items of the modified MDS were reduced to 5 component factors through factor analysis. Principle Component Analysis was utilized with the criterion of Eigenvalues greater than 1.0. The rotation method was Varimax rotation with Kaiser Normalization. The 5 extracted factors accounted for 80.5% of the total variance (see Table 18).

The five factors were largely distinct and conceptually clear. The first factor grouped items related to interactions with others (9 items -26.6% total variance), including relationships and client care interactions. The second factor related to organizational, professional or

structural concerns (i.e. the professional practice environment) (8 items – 21.6%). A third factor included two items related to handling client information and data analysis. A fourth factor contained two items directly related to quality. A final factor included two distinct components related to the scope and authority and a third component shared with the organizational factor. The shared item – "balancing population health benefits with economic benefits" – could be related to both scope and organizational factors.

There were also two items that did not clearly fall into any factors. "Protecting a client's / patient's information" seemed to connect to three factors: interactions, organizational and data analysis. Intuitively, the relationship component, the structural component and the information component were seen in this item. Likewise, "respecting autonomy /rights of groups, including families, businesses, corporations, community groups, etc" made up both the interactions and organizational factors.

The items comprising each factor were added and recoded into new variables: interactions, organizational, handling client information (data analysis), quality and scope.

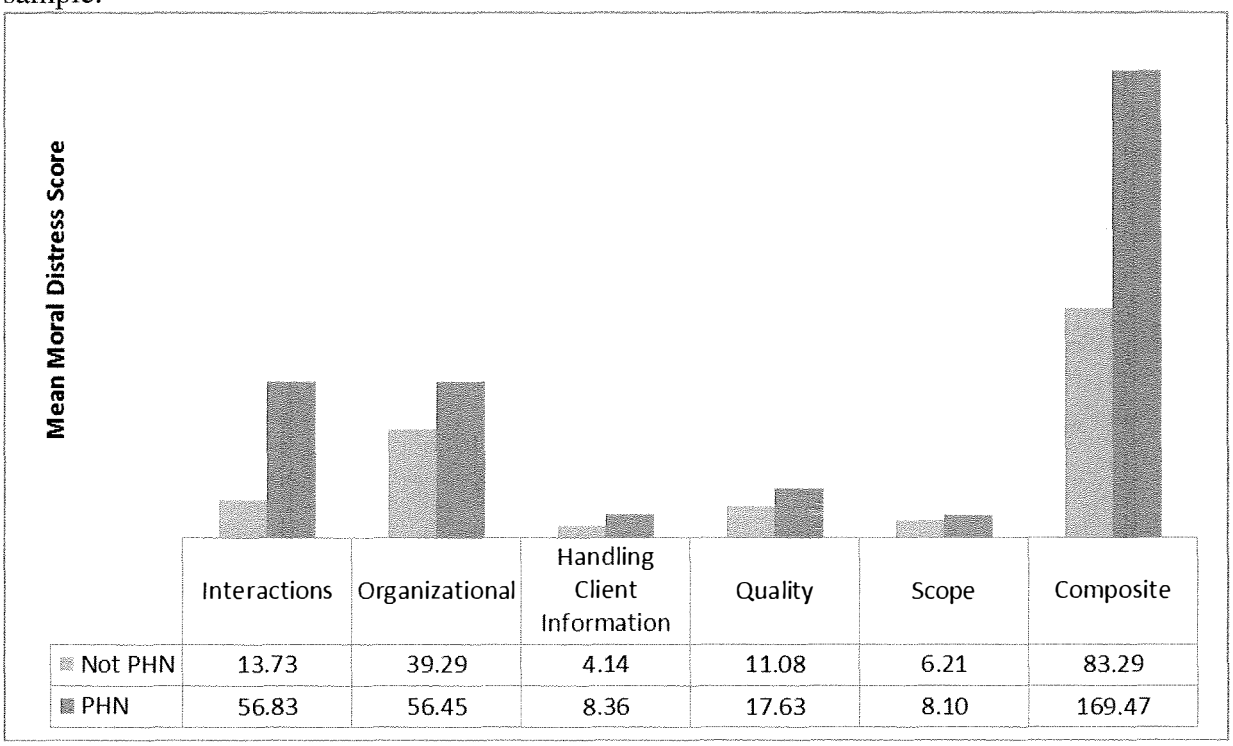
Table 18. Rotated Component Matrix(a) for factor analysis of moral distress score involving specific situations, total sample.

| | Component | | | | | |
|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | Factor Name |
| 18. Maintaining relationships with other health professionals outside of your profession | **0.930** | | | | | Interacting with others, including relationships and client care interactions ("interactions") |
| 21. Caring for the infectious client / patient | **0.841** | | | | | |
| 17. Maintaining relationships with other health professionals within the same profession | **0.807** | | | | | |
| 22. Caring for or providing service to a non-compliant client/patient | **0.805** | | | | 0.402 | |
| 25. Respecting individual autonomy / rights of clients/patients | **0.784** | | | | | |
| 23. Obtaining informed consent. | **0.773** | | | | | |
| 16. Putting yourself at risk of legal action | **0.735** | | | | | |
| 19. Witnessing questionable practices of a coworker | **0.734** | | | | | |
| 15. Putting your health or safety at risk | **0.633** | | | | 0.464 | |
| 20. Protecting a client/patient's information | 0.530 | 0.460 | 0.409 | | | |
| 13. Perceiving health unit policies as inconsistent with practice | | **0.908** | | | | Organizational, professional and structural environment ("organizational") |
| 7. Considering the cost of programs / activities to society | | **0.784** | 0.438 | | | |
| 4. Working in a system of political guidance and supervision | | **0.757** | | | | |
| 12. Viewing policy and law as a support or constraint | | **0.747** | 0.504 | | | |
| 14. Perceiving provincial standards and guidelines as inconsistent with practice | | **0.673** | | | | |
| 2. Potentially conflicting choices between individual interest and the public good | | **0.625** | 0.423 | | 0.406 | |
| 3. Balancing population health benefits with economic benefits | | **0.610** | | | **0.607** | |
| 6. Allocating resources and setting priorities | | **0.605** | 0.473 | 0.458 | | |
| 24. Respecting autonomy /rights of groups, including families, businesses, corporations, community groups, etc. | 0.517 | 0.572 | | | | |
| 11. Collecting, reporting, and using research data about particular subgroups in the population | | | **0.754** | | | Handling client information ("data_analysis") |
| 10. The potential risk of imprecision and inaccuracy in data assessment and reporting | | 0.464 | **0.670** | | | |
| 8. Ensuring quality of standards of practice | | | | **0.841** | | Quality ("quality") |
| 9. Maintaining quality in the face of diminished resources | | | | **0.805** | | |
| 1. Using the legal authority given to public health professionals | | | | | **0.781** | Authority / scope of practice ("scope") |
| 5. Questioning the role or scope of public health practice | | 0.409 | | | **0.695** | |

Note: Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 8 iterations.
Values < 0.400 omitted for clarity.

Next, the reduced factor means and the composite moral distress score (the sum of all item scores) means were compared against various demographic variables. First, moral distress scores were significantly higher for public health nurses than the rest of the sample in situations involving interacting with others ("interactions"), $t(30.37)=3.29$, $p<.01$ (see Figure 7). Also, the composite moral distress scores were significantly higher for public health nurses than the rest of the sample, $t(27)=2.18$, $p<.05$. Public health nurses reported higher moral distress scores for all factors, as well as the composite score.

Figure 7. Relative importance of moral distress factors between public health nurses and rest of sample.

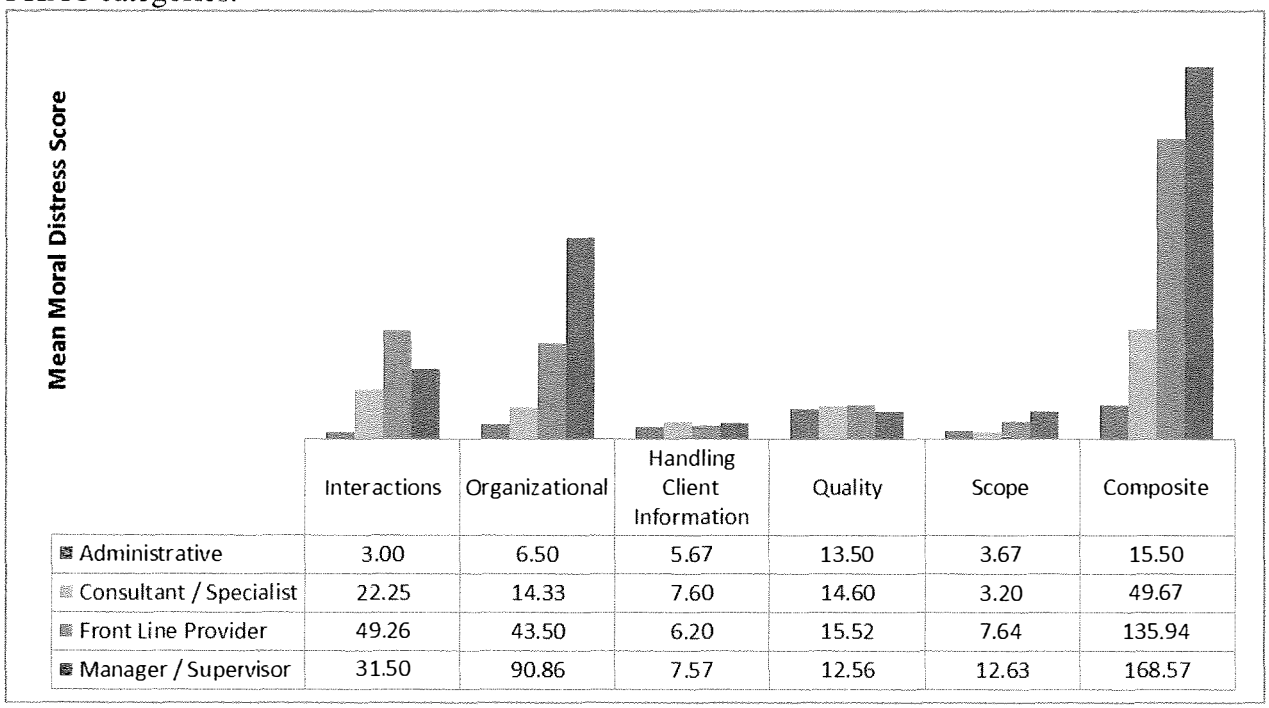



| | Interactions | Organizational | Handling Client Information | Quality | Scope | Composite |
|---|---|---|---|---|---|---|
| Not PHN | 13.73 | 39.29 | 4.14 | 11.08 | 6.21 | 83.29 |
| PHN | 56.83 | 56.45 | 8.36 | 17.63 | 8.10 | 169.47 |

Note: PHN = Public Health Nurses
Composite = the sum of all moral distress scale item scores (composite moral distress score).
The differences in the "Interactions" column were significant, $t(30.37)=3.29$, $p<.01$.
The differences in the "composite" column were significant, $t(27)=2.18$, $p<.05$.

Second, the differences in moral distress scores in situations involving organizational or structural components ("organizational") were significant between the various positions based on PHAC categories, $F(3,36)=4.20$, $p<.05$ (see Figure 8). For this factor, managers and supervisors experienced the highest levels of moral distress ($M=90.86$, $N=9$, $S.D.=59.68$).

Figure 8. Relative importance of individual moral distress factors between positions based on PHAC categories.



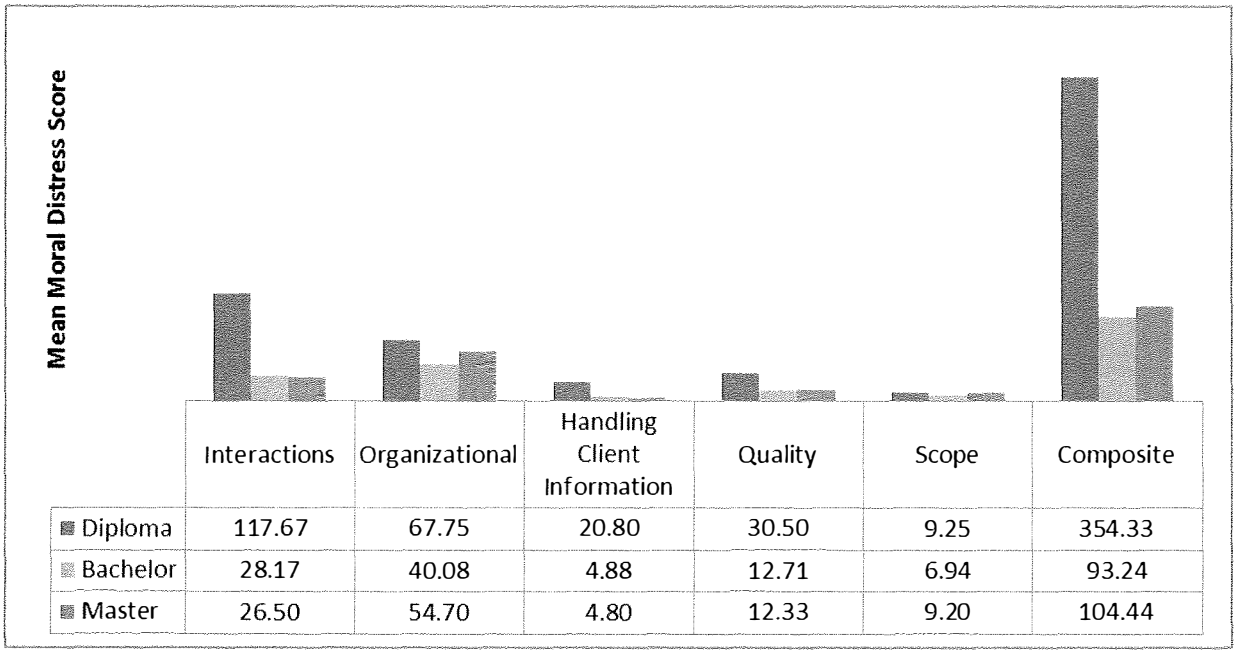

| | Interactions | Organizational | Handling Client Information | Quality | Scope | Composite |
|---|---|---|---|---|---|---|
| Administrative | 3.00 | 6.50 | 5.67 | 13.50 | 3.67 | 15.50 |
| Consultant / Specialist | 22.25 | 14.33 | 7.60 | 14.60 | 3.20 | 49.67 |
| Front Line Provider | 49.26 | 43.50 | 6.20 | 15.52 | 7.64 | 135.94 |
| Manager / Supervisor | 31.50 | 90.86 | 7.57 | 12.56 | 12.63 | 168.57 |

Note: Composite = the sum of all moral distress scale item scores (composite moral distress score). The differences in the "organizational" column are significant, $F(3,36)=4.20$, $p<.05$.

Third, there were significant differences in mean moral distress scores between participants with a membership in a professional association ($M=49.88$, $N=32$, $S.D.=52.18$) and those without ($M=9.00$, $N=9$, $S.D.=7.47$) in situations involving interacting with others, $t(34.96)=4.28$, $p<.001$, as well as in situations involving the authority or scope of practice ("scope"), $t(49.02)=2.80$, $p<.01$. For the latter factor, those with memberships in a professional association reported higher moral distress scores ($M=8.97$, $N=39$, $S.D.=9.12$) than those without memberships ($M=4.08$, $N=13$, $S.D.=3.45$).

Fourth, significant differences in mean moral distress scores for a variety of factors were seen when comparing participants level of education (see Figure 9), including situations involving interactions with others, $F(2,37)=13.87$, $p<.001$, handling client information, $F(3,45)=5.83$, $p<.01$ and quality, $F(3,55)=4.67$, $p<.01$, as well as the composite moral distress score, $F(2,26)=13.42$, $p<.001$. Overall, in all these categories, participants who reported a diploma as their highest level of education attained also reported the highest moral distress scores.

Figure 9. Relative importance of moral distress factors between highest levels of education attained.



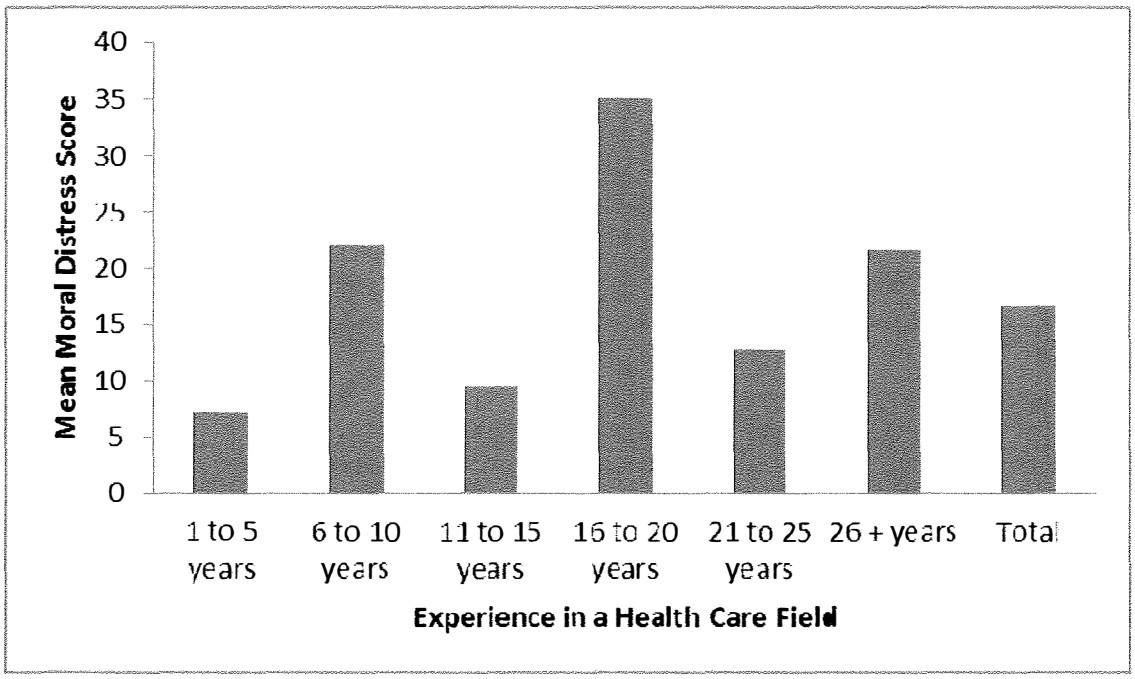

| | Interactions | Organizational | Handling Client Information | Quality | Scope | Composite |
|---|---|---|---|---|---|---|
| Diploma | 117.67 | 67.75 | 20.80 | 30.50 | 9.25 | 354.33 |
| Bachelor | 28.17 | 40.08 | 4.88 | 12.71 | 6.94 | 93.24 |
| Master | 26.50 | 54.70 | 4.80 | 12.33 | 9.20 | 104.44 |

Note: "Other" category excluded due to small count (N<5).
Composite = the sum of all moral distress scale item scores (composite moral distress score).
The differences in the "Interactions" column were significant, $F(2,37)=13.87$, $p<.001$.
The differences in the "handling client information" were significant, $F(3,45)=5.83$, $p<.01$.
The differences in the "quality" column were significant, $F(3,55)=4.67$, $p<.01$.
The differences in the "composite" column were significant, $F(2,26)=13.42$, $p<.001$.

Finally, when comparing years of experience in a health care or medical field, mean moral distress scores were significantly different in situations involving quality, $F(5,29)=2.71$,

p<.05 (see Figure 10). In this case, moral distress scores fluctuated up and down between experience sub-groups.

Figure 10. Moral distress scores for situations involving quality, by experience in a health care field.




Note: The difference in mean moral distress scores was significant, $F(5,29)=2.71$, $p<.05$.

**Section C: Ethics Capacity**. Overall, one-fifth (20%) of the total sample was satisfied or very satisfied with the present ethics support or resources at TBDHU, while just under a quarter (24.6 %) reported dissatisfaction. The majority of the sample was neutral (52.3%) (see Figure 11). Nonetheless, the majority of the sample reported a relatively low number of training hours received on ethical issues specific to their work in the past three years (see Figure 12). Over a third of the sample (36.9%) reported that they have received no formal training and more (41.5%) reported that they have received less than five hours.

Figure 11. Satisfaction with ethics support or resources in workplace, total sample.

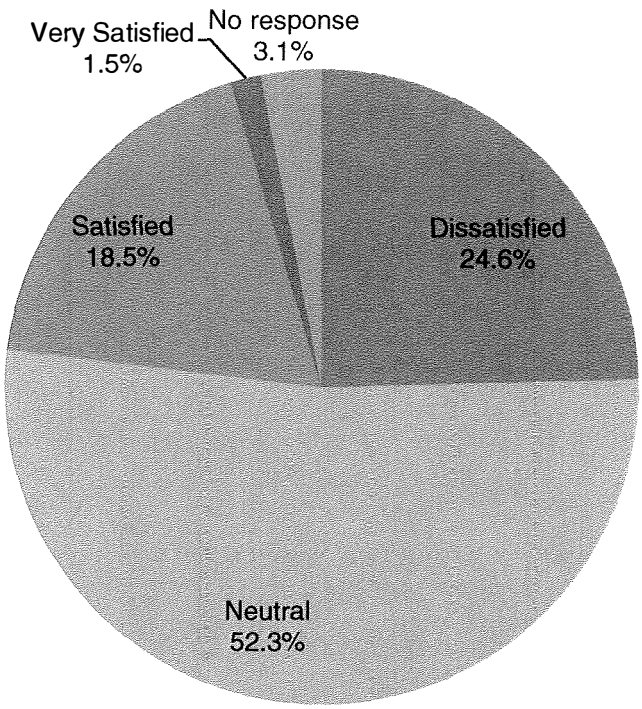
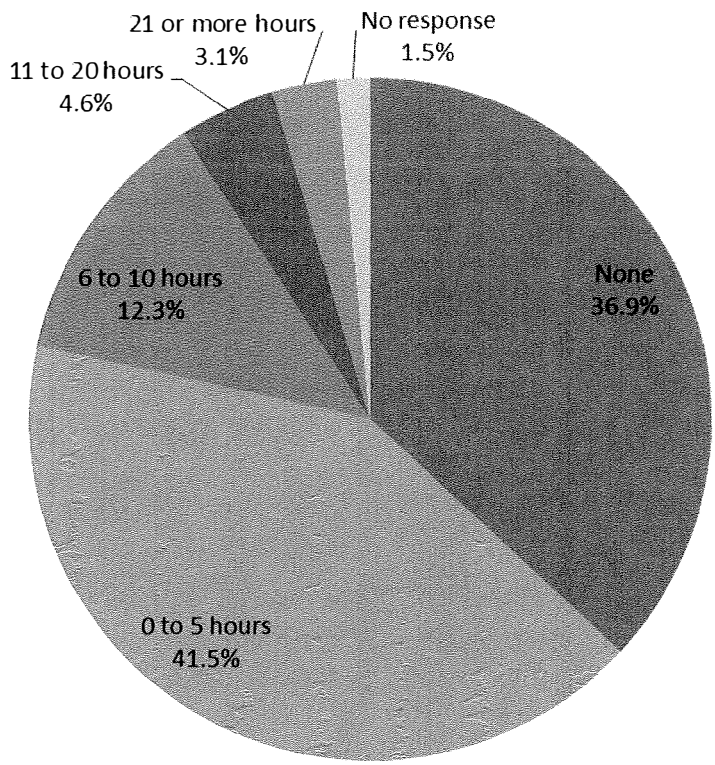



Figure 12. Formal training on ethical issues specific to work received in past 3 years, total



sample.

Next, participants' level of agreement to a series of seven statements related to ethical guidance and support in the workplace is reported. In this section, "agreed" and "strongly agreed" are both synonymous with "agreed" (or "agreement"). A substantial majority of the sample (81.6%) agreed that they were able to recognize moral and ethical problems in their work. Yet less (61.5%) agreed that they were able to resolve these problems. A large majority of the sample (72.3%) also agreed that there was a need for continuing courses on public health ethics in the workplace. Even more (78.5%) agreed that they would be interested in taking these courses.

Furthermore, a large majority of participants (72.3%) reported agreement with the statement that their profession has a code of ethics that provides useful guidance. When considering the need for more detailed or clear protocols to provide additional ethical guidance, just under half agreed (49.2%). A further 35.4% were neutral on this issue.

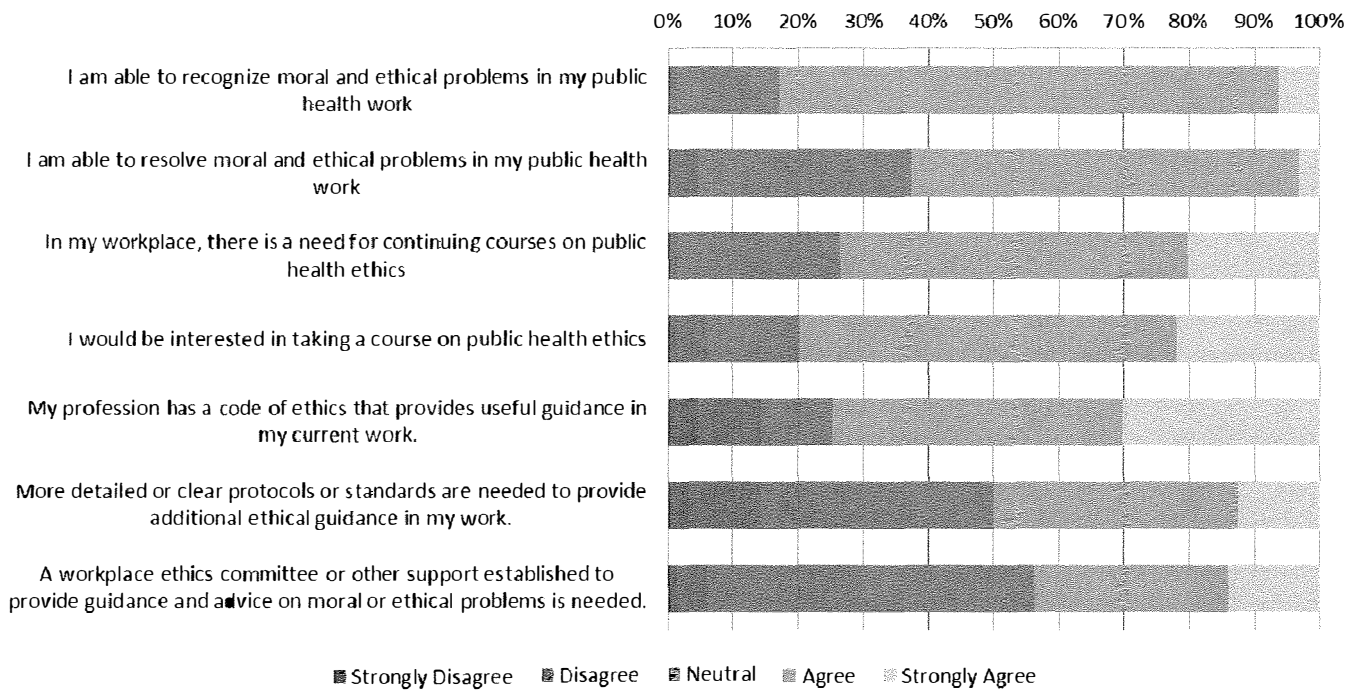
Finally, less than half of the sample (43.1%) agreed that a workplace ethics committee (or other support) was needed. While only 6.2% disagreed with this statement, the remaining participants (49.2% of the total sample) were neutral. Table 19 and Figure 13 outline these frequencies in detail.

Table 19. Participants' agreement to statements regarding guidance and support for moral and ethical problems in the workplace.

| | Strongly Disagree | | Disagree | | Neutral | | Agree | | Strongly Agree | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % |
| I am able to recognize moral and ethical problems in my public health work | 0 | .0% | 1 | 1.5% | 10 | 15.4% | 49 | 75.4% | 4 | 6.2% |
| I am able to resolve moral and ethical problems in my public health work | 0 | .0% | 3 | 4.6% | 21 | 32.3% | 38 | 58.5% | 2 | 3.1% |
| In my workplace, there is a need for continuing courses on public health ethics | 0 | .0% | 1 | 1.5% | 16 | 24.6% | 34 | 52.3% | 13 | 20.0% |
| I would be interested in taking a course on public health ethics | 1 | 1.5% | 3 | 4.6% | 9 | 13.8% | 37 | 56.9% | 14 | 21.5% |
| My profession has a code of ethics that provides useful guidance in my current work. | 3 | 4.6% | 6 | 9.2% | 7 | 10.8% | 28 | 43.1% | 19 | 29.2% |
| More detailed or clear protocols or standards are needed to provide additional ethical guidance in my work. | 2 | 3.1% | 7 | 10.8% | 23 | 35.4% | 24 | 36.9% | 8 | 12.3% |
| A workplace ethics committee or other support established to provide guidance and advice on moral or ethical problems is needed. | 1 | 1.5% | 3 | 4.6% | 32 | 49.2% | 19 | 29.2% | 9 | 13.8% |

Note: N = count
% = percentage of total sample

Figure 13. Participants' agreement to statements regarding guidance and support for moral and ethical problems in the workplace.




Note: Percentages based on total sample (N=65).

**Section D: Reflection.** The last section of the questionnaire provided participants with the opportunity to answer short questions and elaborate on previous responses, as necessary. A phenomenological analysis was undertaken in the method of Colaizzi (1978) to assess the three open-ended questions. This descriptive procedure involved "acquiring a feeling" for the participants' descriptions or protocols, extracting significant statements, formulating meanings, aggregating these meanings into clusters of themes, and integrating the results into an exhaustive description (p. 59). Validation steps were taken at multiple points to compare the reduced data back to the original questionnaires. Careful effort was made to ensure that the resultant themes encompassed as many fundamental dimensions of the response as possible, in the context of the question.

The first question asked participants to describe the most recent moral or ethical dilemma that has occurred in their public health work. Forty-seven participants (72.3 % of sample) responded to this question with considerable variation. The nature of responses led to the grouping of sub-themes, themes and overarching issues/clusters of themes. Each participant's response could have included numerous different sub-themes, which could have then been placed within different overarching themes. Hence, there were more sub-themes than participants. Themes reflected an attempt to break the moral dilemma down to fundamental components. It should be noted that themes were developed inductively, but could be interpreted or arranged in many ways. Of course, the issues represented only one perspective of the dilemma (the participant's) and could have been either (or both) positive or negative.

The overarching issues were described by five terms: relationships, different interests, fairness, knowledge-sharing and personal issues. Table 20 provides a complete breakdown and the frequency of occurrence.

First, the overarching issues/theme of "relationships" was broken down into themes such as external and internal interpersonal relationships, as well as sub-themes such as managing expectations and respecting individual autonomy. The most frequently occurring sub-themes with select examples included:

1. **Relationships (between practitioner and client).** An example was:

   a) Counseling women on options for pregnancy; women decide to have therapeutic abortion; teaching needs to be done in caring supportive manner.

2. **Relationships (between manager and employee).** Examples included:

   a) Employee was singled out by manager for inappropriate behaviour.

   b) Manager was very cautious about appropriate disciplinary action against employees.

3. **Relationships (between coworkers).** An example was:

   a) An employee wonders if he or she should tell the manager of an incident involving a coworker.

4. **Organizational culture.** An example was:

   a) Fluoride issue: as a health unit, we had one set of ethical values that pushed us to move forward; some members of the public had different ethical values; the dilemma resulted because the Board of Health leaders appeared to change values and that was very difficult for staff; "it felt like we followed values that are not what we espouse in public health".

5. **Respecting individual autonomy.** An example was:

   a) The disclosure of information related to partner notification at the sexual health clinic.

Second, the overarching issue/theme of "different interests" comprised a cluster of themes related to contrasting ideas, competing objectives and conflicting values. In this case, the most frequently occurring themes are presented with examples:

1. **Conflicting values.** An example was:

   a) promoting active and safe routes to school programs while parents / school boards are mainly concerned with safe arrival and not the health benefits of walking to school.

2. **Competing health objectives.** An example was:

   a) Employee provided with free safety equipment for disadvantaged kids' sports, but the most popular gear advertised a popular soda company resulting in a "dilemma - know kids would wear this item and be safer from injury… knew that promotion of pop does not meet with Health Unit promotion of healthy food choices"

3. **Conflicting duties.** An example was:

   a) To the parent and to the child: "when a child who is 6 yrs or over refused to be vaccinated for booster due to fear of needles, parents wants nurses to proceed with immunizing even if we had to hold his/her arm down. I find this unethical"

4. **Conflict surrounding the best interest of a child.** An example was:

   a) "There was a recent need to have a pediatric client taken into child care, as there was non-compliance with treatment from the parent. This was disturbing as the non-compliance stemmed from ignorance of the need for treatment and was not the fault of the parent. However, the decision was made with the long term health of the child and family in mind".

Third, “fairness” described themes related to equality, equity and justice. One major theme was labeled “social determinants of health”. This broad category outlined issues related to access to care, underlying issues associated with health, such as poverty and vulnerable populations. Another involved structural issues, such as the fairness of the system, laws and policy. The most frequently occurring themes with examples were:

1. **Structural.** Examples included:

   a) Screening of developmental concerns in children: "telling patients that the earlier a concern is [identified] the better the outcome, but then when there is a concern [identified] children are placed on 2+ year wait lists for assessment and service"

   b) Determining whether or not to issue compliance fines to businesses that are struggling financially

2. **Resource distribution.** Examples included:

   a) Distribution of financial resources - very high for advertising, very little for direct practice to support clients needs.

   b) Sometimes it is hard to be sure if funding is being used in the best way possible, especially if use is dictated.

3. **Addressing social determinants of health.** Examples included:

   a) During an inspection at a daycare there was an issue that could have been addressed; however, the centre is in a poor area of town and the operator could not afford the change; replacing melamine dishes with glass; instead of this change they used the money for groceries that week.

b) Providing injection gear to drug users and not addressing other issues regarding addiction - income, safety, housing, treatment.

Fourth, "knowledge sharing" comprised another overarching issue or cluster of themes. This term broadly defines moral and ethical dilemmas associated with the sharing of health-related knowledge with the public (in general or individual clients). Major themes included:

1. **Encouraging behavioural change.** An example was:

   a) "Deciding whether to lay a provincial offence charge against a 14 year old. Would education work better and result in changed behaviour?"

2. **Knowledge sharing with public/clients.** An example was:

   b) Giving a diagnosis of Hepatitis C to a person who is currently homeless; trying to describe importance of follow-up with a medical doctor; failure to do so because client has some form of mental illness; client does not comprehend information, does not consent to treatment.

3. **Informed consent.** An example was:

   a) The family was extremely high risk; tried numerous times to get them out to services but they did not show up over two years; finally got them out for service but appropriate person to sign consent to receive services was not present and not available by phone.

Finally, the remaining cluster comprised "personal" or individual components of moral and ethical dilemmas. Two prominent themes included:

1. **Health and safety.** An example was:

a) A mother requests immunization for two autistic sons, but the practitioner felt that forcing immunization on the uncooperative children could risk the safety of those involved.

2. **Quality of work.** Examples included:

a) Inequality of workload - stretched too thin to properly meet demands of job.

b) Coworkers' behaviour, work ethic and attitudes.

Table 20. Thematic analysis of recent moral or ethical dilemmas, total sample.

| Overarching Issue | Theme | N | Subtheme | N |
|---|---|---|---|---|
| Relationships | External | 13 | Relationships (between practitioner and client) | 13 |
| | Internal | 20 | Relationships (between manager and employee) | 2 |
| | | | Relationships (between senior leadership and staff) | 3 |
| | | | Relationship (between coworkers) | 6 |
| | | | Organizational culture | 9 |
| | Managing expectations | 1 | Managing expectations (clients) | 1 |
| | Respecting individual autonomy | 10 | Respecting individual autonomy | 10 |
| Different interests | Conflicting values | 9 | Conflicting values (between practitioner and client) | 3 |
| | | | Conflicting values (between Board of Health and staff) | 1 |
| | | | Conflicting values (between organization and stakeholder groups) | 1 |
| | | | Conflicting values (between organization and client) | 1 |
| | | | Conflicting values (between organization and practitioner) | 2 |
| | | | Conflicting values (between stakeholder groups) | 1 |
| | Organizational rules conflict with health objectives/ principles | 2 | Organizational rules conflict with health objectives/principles | 2 |
| | Competing health objectives | 10 | Competing health objectives | 10 |
| | Conflicting duties | 8 | Conflicting duty (to region and to province) | 1 |
| | | | Conflicting duty (to client and to public) | 3 |
| | | | Conflicting duty ( to parent and to child) | 4 |
| | Conflict surrounding best interest of child | 5 | Conflict surrounding best interest of child | 5 |
| Fairness | Structural | 13 | Fairness (of law) | 7 |
| | | | Fairness (of system) | 3 |
| | | | Fairness (of policies) | 3 |
| | Fairness (treatment of staff) | | Fairness (treatment of staff) | 1 |
| | Resource distribution | 8 | Resources (limited) | 6 |
| | | | Resources (allocation) | 2 |
| | Addressing social determinants of health | 6 | Addressing social determinants of health | 6 |
| Knowledge sharing | Encouraging behavioural change | 2 | Encouraging behavioural change | 2 |
| | Knowledge sharing with public | 9 | Knowledge sharing | 9 |
| | Informed consent | 8 | Informed consent | 1 |
| | | | Informed consent (of youth) | 7 |
| Personal | Personal values | 1 | Personal values | 1 |
| | Religious guidance | 1 | Religious guidance | 1 |
| | Professional guidance | 1 | Professional guidance | 1 |
| | Quality of work | 6 | Quality of work | 6 |
| | Health and safety | 3 | Health and safety | 3 |

In addition, a small number of potentially contentious issues were repeated, including the mention of H1N1 (5 times) and immunization in youth (3 times). Also, participants often identified specific population sub-groups or demographics in their responses (the primary target of the issue was counted), with children and youth by far mentioned the most frequently (14 times). The next highest was mothers or women (5 times)

The second open-ended question in this section – additional ethical issues important in professional experience - was analyzed in a similar manner. Thirty-seven participants provided a response. Many sub-themes recurred from the previous question, with the addition of few new components. All fell within the same overarching issues/themes of the previous question (see Table 21). The most frequently occurring themes were:

1. **Knowledge sharing** (N=16)**.** This theme referred generally to the need to, or the inability to, communicate health information to individual clients and the public at large. Examples included:

a) Dealing with clients and trying to enforce laws on people that do not understand the law due to age and education.

b) "Profound question of limited resources and not communicating this to the public - leading to unrealistic expectations"

c) Promoting "healthy weights" messages for obesity prevention without having a negative impact on eating disorders.

2. **Fairness (structural)** (N=13). This theme collected responses that suggest a justice issue or differences in treatment related to laws, policies and the system in general. Examples included:

a) The right of provider to refuse to see individual or family for lack of therapeutic relationship (i.e. having to "fire" patients).

b) The law sees all violations at equal scale; health inspectors discretion to deal with two different kinds of operators with same kind of violations in two different ways.

c) Working with families in the free Healthy Babies, Healthy Children program — sometimes there is a fine line between helping families in need and being taken advantage of.

**3. Internal relationships** (N=12). This theme grouped significant statements related to various interpersonal relationships and organizational culture. Examples included:

a) Co-workers who could be doing more with their position than they are.

b) Not able to do anything about an unethically-behaving colleague without losing too much, leading to ethical distress.

c) Favouritism by managers and directors.

**4. Resource distribution** (N=12). This theme collected statements related to limited resources or the allocation of resources. Examples included:

a) Sometimes have to send clients away or advise to come back due to limited staff/time.

b) Ensuring that there is funding available to provide the best services in an ethical manner.

c) "Rise in Aboriginal youth pop. In schools, high suicide rates, social isolation and racism, but not sure of how and limited resources to make a difference. This is my most troublesome area of my career….effects of poverty as a health determinant and we have such little power to make an impact".

**5. Conflicting values** (N=10). In general, this theme described a variety of situations where a difference in values exists between individuals and/or groups. Examples included:

a) Getting questioned all the time about providing free needles for illicit drug injection but not for the diabetic population.

b) When personal biases or values interfere with professional responsibilities ("e.g. won't do abortion counseling but want to work sexual health or genetics").

c) Parents who refuse to have their children vaccinated due to religion or disbelief of immunization.

**6. Addressing social determinants of health** (N=10). This theme was used to broadly categorize statements related to social justice, access to care, etc., as related to addressing the underlying components of health. Examples included:

a) Observing children in sub-standard care and housing without healthy social and physical environments.

b) Judging someone's credibility based on financial, social, or educational position, and his or her ability to take care/deal with the very situation or problem that he or she is seeking help with.

c) Addressing social determinants of health (e.g. advocating for food security versus promoting healthy eating).

**7. Respecting individual autonomy** (N=9). This recurring theme categorized statements related to respecting the rights and freedoms of individuals, including privacy. Examples included:

a) Caring for non-compliant clients.

b) “Having people you know come through the sexual health clinic, test positive for a STI, finding out that their contact is a close friend of yours but can't say anything to that person.”

c) Individual autonomy versus implementing practice for public good.

**8. Quality of work** (N=9). This theme referred to statements related to work not meeting standards, competence of individuals or coworkers, or some other inadequacy of work. Examples included:

a) Funding and policy limitations on appropriate practice.

b) Certain programs not valued; so, no provisions made for proper confidentiality of client information (e.g. counseling).

c) Not enough financial resources; "sometimes it feels like we 'inflate' outcomes to justify our actions".

As one can observe, many of the statements could easily have been presented as examples for multiple themes.

Table 21. Thematic analysis of additional ethical issues important in professional experience.

| Overarching Issue | Theme | N | Subtheme | N |
|---|---|---|---|---|
| Relationships | External | 3 | Relationships (between practitioner and client) | |
| | | | Relationships (between organizations) | 2 |
| | | | Customer Service | 1 |
| | Internal | 12 | Relationships (between manager and employee) | 2 |
| | | | Relationships (between senior leadership and staff) | |
| | | | Relationships (between coworkers) | 2 |
| | | | Relationships (general) | 1 |
| | | | Organizational culture | 7 |
| | Managing expectations | 1 | Managing expectations (clients) | 1 |
| | Respecting individual autonomy | 9 | Respecting individual autonomy | 9 |
| Different interests | Conflicting values | 10 | Conflicting values (between practitioner and client) | 2 |
| | | | Conflicting values (between Board of Health and staff) | |
| | | | Conflicting values (between TBDHU and stakeholder groups) | 1 |
| | | | Conflicting values (between organization and client) | 1 |
| | | | Conflicting values (between organization and practitioner) | 2 |
| | | | Conflicting values (between stakeholder groups) | 1 |
| | | | Conflicting values (between practitioner and practice) | 1 |
| | | | Conflicting values (general) | 2 |
| | Organizational rules conflict with health objectives/ principles | 4 | Organizational rules conflict with health objectives/principles | 4 |
| | Competing health objectives | 5 | Competing health objectives | 5 |
| | Conflicting duties | 3 | Conflicting duty (to region and to province) | |
| | | | Conflicting duty (to client and to public) | 1 |
| | | | Conflicting duty ( to parent and to child) | 1 |
| | | | Conflicting duty (personal and professional) | 1 |
| | Conflict surrounding best interest of child | 2 | Conflict surrounding best interest of child | 2 |
| Fairness | Structural | 13 | Fairness (of law) | 3 |
| | | | Fairness (of system) | 4 |
| | | | Fairness (of policies) | |
| | | | Fairness (of organization) | 1 |
| | | | Organizational policy does not meet needs of practice | 3 |
| | | | Societal rules as a barrier to health objectives | 1 |
| | | | Provincial legislation does not meet needs of practice | 1 |
| | Resource distribution | 12 | Resources (limited) | 8 |
| | | | Resources (allocation) | 4 |
| | Addressing social determinants of health | 10 | Addressing social determinants of health | 10 |
| | Abuse of system | 1 | Abuse of system | 1 |
| Knowledge sharing | Encouraging behavioural change | 4 | Encouraging behavioural change | 4 |
| | Knowledge sharing | 16 | Knowledge sharing | 16 |
| | Informed consent | 1 | Informed consent | |
| | | | Informed consent (of youth) | 1 |
| | Truth-telling | 1 | Truth-telling | 1 |

Table 21. Thematic analysis of additional ethical issues important in professional experience (continued).

| Overarching Issue | Theme | N | Subtheme | N |
|---|---|---|---|---|
| Personal | Personal values | 3 | personal values | 3 |
| | Religious guidance | 2 | Religious guidance | 2 |
| | Professional guidance | 1 | Professional guidance | 1 |
| | Quality of work | 9 | Quality of work | 9 |
| | Health and safety | | Health and safety | |
| | Discretion | 1 | Use of discretion | 1 |

As in the previous question, specific issues recurred between participants and themes, although none dominated. For example, the most frequently recurring issue was related to food and eating (mentioned 4 times). Similarly, children and youth were the most frequently mentioned sub-group or demographic (9 times).

The third and final open-ended question asked participants to briefly identify what they thought was the single most important thing their workplace could do to provide suitable ethical and moral support for them in their public health work. Fifty-three participants responded to this question. Several overarching themes were identified (see Figure 14). The most commonly recurring themes for workplace moral and ethical support included: specific guidance; education; policies; awareness; and communication.

First, specific guidance referred to help, advice and/or support with ethical decision-making in specific circumstances. This included ethics committees, peer support groups, workplace mentors, debriefings, "ability to bring issues forward in a safe context" or follow up by management.

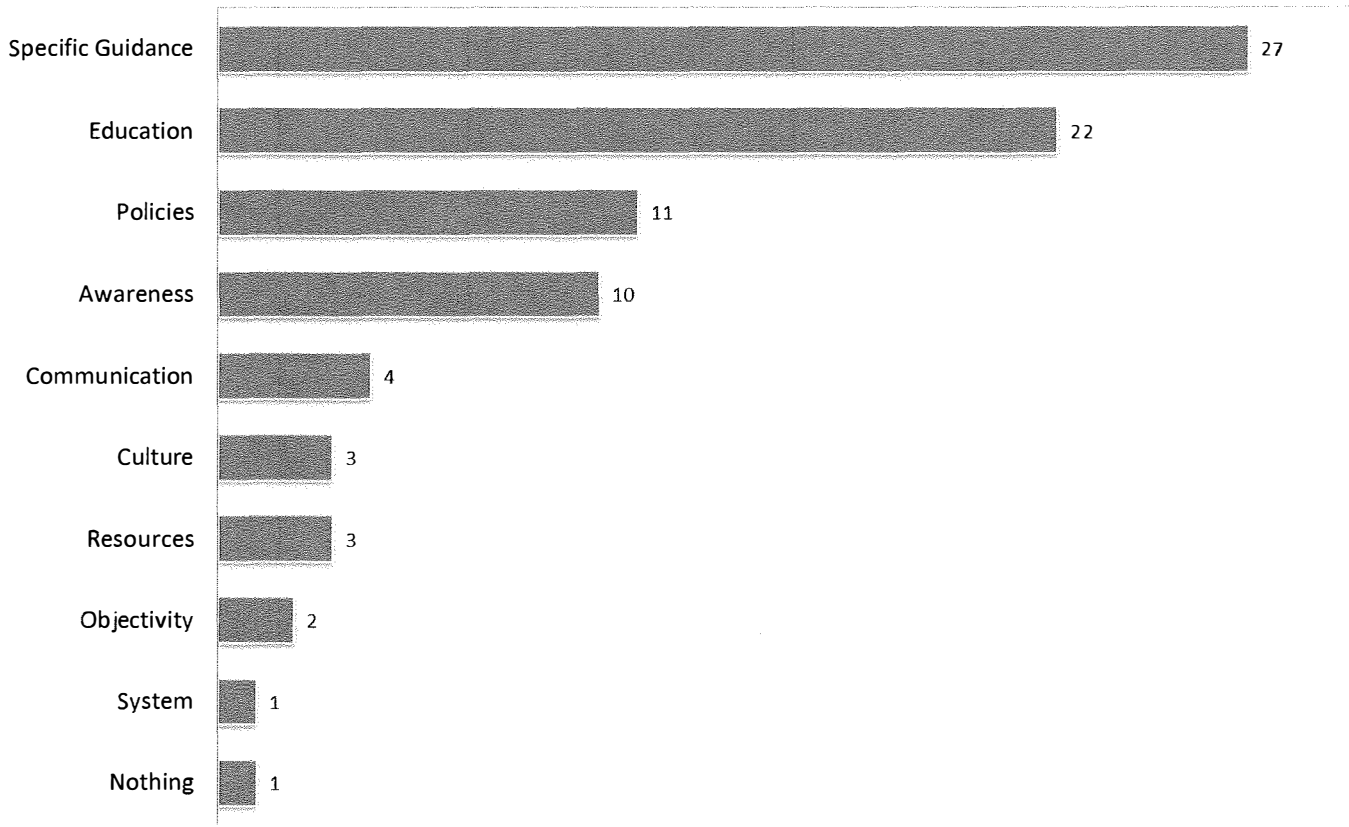
Second, education referred to training or other forms of learning about moral and ethical issues. This included forums such as in-services, workshops, a topic at regular all-staffing meetings, and guest speakers. Responses were not limited to staff, and included educating management and educating the public.

Third, "policies" included such significant statements as general ethics policies, sponsorship policies, a "policy statement about our ethical role to protect the public and the ethical responsibility(ies) of PH professionals to provide current information", guidelines, and written standards for front line workers.

Fourth, the overarching theme of "awareness" referred to activities that involve a basic introduction to ethical or moral issues and what resources are available, as a starting point toward more formal support. Examples included: increasing awareness of management supporting staff who are dealing with moral and ethical issues; "it is really important for employees to realize that they do have …[ethical frameworks that are applicable to public health]"; explaining organizational expectations in moral and ethical decision-making; raising awareness of issues and seeking to discuss or share; and defining ethics and morals. Not being aware of any present support in the workplace also fell into this theme.

Fifth, a general "communication" theme was observed, which referred to changes that could be made, or comments about, interactions between staff, between management and staff or others. This included references to "open, honest communications" and dealing with people without anger. This theme was closely related to another describing organizational "culture," which included responses about promoting ideological consistency, encouraging openness without fear of reprisal, and "walking the walk".

Figure 14. Major themes for the single most important thing that the workplace can do to provide suitable ethical and moral support.




Note: Participants may report more than one theme.

## Results Summary

In summary, responding participants provided varied and considerable information about moral problems occurring at TBDHU and their respective capacity to recognize and mitigate them. First, demographic questions revealed that the sample was somewhat over-represented by public health nurses, as well as managers and supervisors. The sample was also predominantly female, well-educated and largely represented by a professional association. Second, the modification of the MDS to public health practice revealed that moral problems occur at low mean frequencies and intensities at TBDHU overall. Significant differences in moral problems

were observed among various PHAC categories, positions and demographic characteristics. Specific situations causing moral distress were ranked and compared positions and PHAC categories. Factor analysis of these specific situations grouped the items into five named components (interactions; organizational; handling client information; quality; and scope). Third, questions about ethics capacity assessed satisfaction with present TBDHU ethical supports and resources, as well as opportunities for improvement. Finally, three open-ended questions provided participants with the opportunity to respond in narrative form. Thematic analysis of responses revealed consistent themes of recent moral or ethical dilemmas and other important ethical issues experienced in professional practice. Major themes were also revealed in response to the "single most important thing" that the workplace could do to provide suitable ethical and moral support.

## Discussion

Collectively, this study provided an introduction to everyday ethics in public health practice at a local public health unit in Ontario, Canada. It also represented the first known attempt to modify the moral distress scale (MDS) (Corley et al., 2001; Corley et al., 2005) to a diverse public health setting, as well as the first known attempt to comparatively measure general moral uncertainty, moral dilemma and moral distress using the adapted MDS. Several key results will be discussed in the context of comparable work done in clinical practice, as well as preliminary work in public health. Limitations of the study are also presented. Finally, the discussion will lead to preliminary recommendations for action at TBDHU and further research.

The data is presented and compared using descriptive methods, as opposed to analytical methods. This is done for three main reasons: the exploratory and introductory nature of studying moral problems at a public health unit; a relatively small sample size that is not randomly distributed; and the inability to compare the results directly to other studies due to the modification of the research instrument to fit the public health context.

### Moral Problems Experienced by Staff at TBDHU

The presence of moral problems should not automatically be considered negative. As mentioned above, moral distress can be considered a part of health care and may even be necessary to build moral character (Hanna, 2004; Hardingham, 2004). Likewise, the absence of moral problems should not necessarily be considered positive. For example, lack of moral problems may be interpreted as a worrisome lack of moral and ethical awareness (e.g. someone who doesn't care about behaving ethically may not experience moral distress). So, it could be argued that observing some level of moral problems was expected. These introductory results could be viewed as baseline levels for the sample. Further research would be needed to

determine what the "normal" levels of moral problems would be for a frame of reference, controlling for personal, educational and professional characteristics. Further research could also be done at TBDHU to monitor whether the levels go up or down in response to a particular intervention or stimuli. That said, informative internal comparisons can be made in the present study by analyzing the impact of the various demographic variables on moral problems.

**General Experiences.** On average, moral uncertainty, moral dilemma and moral distress were reported at low levels (below the midpoint) for the total sample. Moral distress occurred the least frequently out of the three general experiences of moral problems for the sample and for the position-based sub-groups. In contrast, Oberle and Tenove (2000) found that moral distress and moral uncertainty occurred the most frequently for public health nurses. Moral dilemmas occurred least frequently. Consistent with this group's qualitative study, public health nurses in the present study experienced moral uncertainty the most frequently. No studies were found that quantified all three moral problems in a public health or clinical setting.

Ultimately, one cannot statistically compare the present results to the more abundant clinical practice literature due to the extensive modification of the MDS (namely, the complete replacement of items to reflect the different scope and general nature of the public health environment – please see Methods section for more detail). However, general comparisons are made for moral distress intensity to point out additional avenues of research. In the present study, general levels and the average of specific responses are compared to an average of specific situational responses in the literature. While public health nurses reported generally higher levels of moral distress intensity than the total sample, the levels were notably lower than three comparative studies involving clinical nurses (see Table 22).

Table 22. Differences in mean moral distress intensity, public health (present study) and clinical practice (literature).

| Setting | Mean moral distress intensity |
|---|---|
| Public health workers (total sample) (average general response) | 2.70 (S.D.=1.99) |
| Public health nurses (average general response) | 3.03 (S.D.=2.02) |
| Public health workers (total sample) (average specific situations) | 2.25 (S.D.=0.84) |
| Public health nurses (average specific situations) | 1.99 (S.D.=0.93) |
| RNs from two large medical centres (Corley et al., 2005, p. 386) | 3.64 (S.D.=1.57) |
| RNs in acute care (Pauly, Varcoe, Storch & Newton, 2009, p. 566) | 3.88 (S.D.=1.61) |
| Staff nurses in intensive care unit (Elpern, Covert, & Kleinpell, 2005, p.525) | 3.66 (S.D.=1.73) |

Note: M = mean; S.D. = standard deviation
This table is for reference purposes only, a comparison cannot be made between studies due to the extensive modification of the MDS for the present study.

Though the evidence is scant for public health, one could further explore the possibility that the markedly lower moral distress intensities in public health practice compared to clinical practice may be partially connected to temporality of outcomes. Many of the moral problems in clinical practice involve choices where the results are more immediate. At one extreme are choices that have a direct and immediate impact on life and death. A clinical nurse says "I often equate my job with 'keeping dead people alive'. On these days, I dread coming to work" (Elpern et al., 2005, p. 525). Moral problems associated with death and dying were not identified in the present study. Urgency and the likelihood of personally witnessing the outcome of a morally-charged decision may play a role in the intensity of the moral problems, but further research is needed.

A corollary may be seen in the difference between public health nurses (and front line providers) and the rest of the sample. When providing front-line service, there may be a more immediate expectation from a client or patient for help. This may in turn explain, at least in part, a greater intensity of moral problems on the front line. At first glance, one could suggest a pattern of lowering intensity coincident with lowering immediacy of the outcomes of decision-

making: clinical nurses to public health nurses/front line providers to other public health professionals. Managers and supervisors, who experience the highest levels of moral distress, may not be faced with decision-making that has a more immediate outcome on a daily basis, but they may face these situations more intensely in public health emergencies such as a pandemic.

Finally, an additional consideration for the difference between moral problems experienced by clinical and public health practitioners could be that it is a reflection of the fact that public health practice issues have been discussed and researched comparatively less than clinical practice issues (as detailed in the introduction to this study).

**Potential Factors in Moral Problems**

Moral distress is common to health care systems where there are insufficient staffing levels, inadequate training and organizational rules that cause barriers to meeting the needs of patients and families (Corley, 2002). In the present study, moral problems in public health practice may also have been influenced by certain characteristics.

First, factor analysis of the MDS reduced 25 correlated situational items to five components. This included situations involving: interactions with others; organizational, professional or structural concerns; handling client information and data analysis; quality; and scope and authority. Contrasting with clinical nurses, the original MDS yielded three factors, including "individual responsibility", "not in patient's best interest" and "deception" (Corley et al, 2001).

Second, in terms of specific demographic variables, level of education, membership in a professional association and to some extent, level of experience, had statistically significant impacts on moral problems. In the original MDS, Corley et al. (2001) found no significant relationships between moral distress and similar demographic or work experience variables.

However, later, Corley et al. (2005) identified a statistically significant, negative correlation between moral distress intensity and age.

Third, thematic analysis of the most recent moral or ethical dilemma occurring in practice revealed several broad themes: relationships; different interests (conflicting values); fairness; knowledge sharing; and personal issues, such as quality of work. Similarly, a comparable analysis of frequently recurring ethical problem(s) for Canadian public health nurses included relationships with health care professional (intra-professional and inter-professional); systems issues (just resource distribution, policy and law as a support or constraint and systems support for nursing practice); character of relationships (context/nature of the relationship, empowerment vs. dependency, and setting boundaries); respect for persons (autonomy, confidentiality and honouring context); and putting self at risk (values conflicts and physical danger) (Oberle & Tenove, 2000, p. 428).

In fact, many of these themes informed the development of MDS items in the present study. Out of these transferable themes, the highest levels of moral distress occurred for situations involving "allocating resources and setting priorities", which has the third highest mean moral distress score for the sample. On the other hand, situations involving relationships with other health professionals both inside and outside of the participant's profession ranked relatively low (18$^{th}$ and 22$^{nd}$ respectively) among the 25 items on the MDS. This is somewhat unexpected in light of the literature, as well as in light of the recurring theme of internal relationship issues as source of recent moral dilemmas in the present study. This implies that the moral problems were more one of not knowing the right thing to do than knowing, but not being able to act on it.

The following discussion elaborates on these points and others in more detail.

**Relationships and Interaction with Others.** Relationships and interactions between people were identified as potential sources of moral problems throughout this study. This may be particularly noteworthy for front line providers and, namely, public health nurses.

Public health nurses experienced higher levels of moral distress than the total sample. Greater urgency and more immediate outcomes are implicated above, but could the relationship factor be more important? Public health nurses had significantly higher mean moral distress scores in situations involving "interactions". This factor was the only one where a significant difference was noted between public health nurses and the rest of the sample, and was comprised of situations involving contact with others, internally or externally. It included patient care and maintaining relationships. As front line providers, nurses would have greater exposure to troubling and ethically-charged interactions with patients / clients. This could have been a source of more frequent and more intense moral distress.

This fits with previous work that has associated sustained proximity to patients as a basis for nurse moral distress (Peter & Liaschenko, 2004). Nurses occupy a certain social space that necessarily involves sustained patient contact. Morality is a key component of that social space: "morality is interpersonal, inhering in the social practices of responsibility in which people account to themselves and each other for their understandings of these practices" (Walker, 1998 in Peter & Liaschenko, 2004, p. 218). Moreover, moral distress occurring with customer/patient involvement has previously been shown in health professions other than nursing (e.g. staff with regular patient/customer contact at hospitals and pharmacies) (Kälvemark Sporrong et al., 2006).

Furthermore, in the present study, two of the top three highest morally distressing situations for front line providers related to relationships with coworkers and patients. This is consistent with the most frequently reported themes of recent moral dilemmas: relationships

between practitioners and clients; relationships between manager and employee; and relationships between coworkers. Consider the moral implications of building relationships and trust in the following participant example: a public health nurse was conflicted between the duties to a mother and to the mother's 14-year old daughter while having a difficult conversation about the daughter's sexual health. While the nurse respected the mother's concerns and desire to be present, she also respected the right of the daughter to a confidential interview, especially as the daughter would likely provide more information about her sexual activities without her mother present. In the end, the nurse found it uncomfortable to ask the mother to leave, but did so in the best interest of the daughter.

**Relationships and Role Conflict.** Expanding on the moral impact of relationships, higher levels of moral distress may be connected to how the traditional role of nursing translates to a public health environment. As shown by many examples in this study, nursing inherently involves a strong advocacy role on behalf of a patient. As a result, nurses may demonstrate an ethic that involves developing a personal caring relationship with their patients (Woods, 1999). What happens if this advocacy for the individual does not align with the public good? Nurses may be left in a moral distressing position because they cannot act upon what feels right and their role as a nurse is diminished.

The relationship between nurse and patient is unequal. This power imbalance requires the patient to trust, as is the case in many professional-client relationships (Dawson, 1994). Understandably, a patient may not see a distinction between a public health nurse and a clinical nurse; more likely, they see the nurse in the traditional role. Thus, a patient may place trust in the public health nurse to advocate for his or her best interests. Is there a perception (by either the patient or the nurse) that the trust is breached when a public health nurse must instead act in

the best interests of the family or the community? This consideration may be particularly salient for nurses with clinical experience. Notably, over half (54.6%) of all participating public health nurses in the present study reported 16 years or more experience in a clinical field.

The following example from the open-ended responses in this study further illustrates this potential role conflict. A public health practitioner described a recent moral dilemma involving the strict enforcement of patient discharge policies. The practitioner felt that this policy did not allow for extenuating circumstances, such as establishing "therapeutic relationships" with hard-to-reach families. In this dilemma, the practitioner may have felt it was not in the best interest of his or her clients to follow this rule and discharge them when it may have been difficult to connect with them in the first place. However, if the worker must go against what they feel is right, moral distress could result. A researcher categorizing ethical conflicts of community nurses in British Columbia summarized this idea: "the broad scope of community health nursing practice has, in itself, been … a source for ethical conflict … should the focus of nursing care be the individual, the family or the community?" (Duncan, 1992, p. 1039, in Oberle & Tenove, 2000, p. 426).

Not to belabour the point, despite a mandate for the *public good*, public health nurses and other front line providers work very much with the *individual good.* Sometimes there may be tension between the mandate and the context. Oberle and Tenove (2000) found that "the contextual nature of the concerns and the focus on relationships seemed to reflect the very nature of public health nursing" (p 428). So, while the system provides general rules and resources, front line providers often must make ethical choices that are tailored to specific circumstances and that are affected by relationships. For example, in the present study, a participant articulated the dilemma that occurred "when a child who [was] 6 yrs or over refused to be vaccinated for

booster due to fear of needles". The "parents want[ed] nurses to proceed with immunizing [the child] even if [they] had to hold his/her arm down." The participant found this to be "unethical." Should the practitioner have complied with the parents' wishes? The law and organizational rules may have allowed the nurse to proceed with the parents' informed consent, but the practitioner, guided by an established relationship with both parents *and* the child, felt differently in the context of the situation. Variations of this scenario of conflicting moral obligation were reported by multiple participants.

Role conflict also appeared to be not exclusive to nursing. Another participant reported a situation where "knowing that according to the law, charges should be laid against a food premises for failing to comply with regulation", but being uncertain about issuing the fine because the business was struggling financially. On the whole, it would seem that these practitioners were having difficulty enacting their moral agency in the face of conflicting moral obligations. The rules may not be flexible enough to incorporate the personal, professional *and* social-mediated processes inherent to ethical nursing practice (Peter & Liaschenko, 2004)—and seemingly other front line practice such as inspection and enforcement.

**Quality and Systemic Factors in Moral Problems.** Systemic issues have been alluded to within the preceding factors. Clearly, many of the factors influencing moral problems in the study were interconnected. The previous example not only implied a relationship and contextual issue, but also one of a systemic nature; the rules may not have reflected the realities of practice. In this next section, quality and systemic issues are discussed in tandem, as they overlap to describe the practice environment for staff and management at TBDHU.

Quality was identified as a factor in moral problems in this study. For example, the second-most moral distressing situation for public health nurses (and front line providers)

alluded to a quality as well as a relationship issue: "witnessing the questionable practices of a coworker." As public health nurses perform patient care, one might expect commonalities with clinical nurses (beyond the relationship factor described above). Quality concerns would also seem to be one of them. Zuzelo (2007) reported moral distress levels above the midpoint for clinical nurses working with physicians who in their opinion were incompetent. These nurses were also distressed by the perceived incompetence in other professions as well, including their own.

Moreover, the situation with the highest levels of moral distress for front line providers on average was "maintaining quality in the face of diminished resources." This item implied a quality issue, as well as a systemic issue involving limited resources. The issue also cut across the boundaries of public health and clinical practice. Corley et al. (2005) highlighted unsafe staffing levels as having the highest frequency and intensity of moral distress for clinical nurses. Likewise, Pauly et al. (2009) reported the same item scoring the highest mean moral distress intensity (well above the mid-point) and frequency in clinical practice—both at much higher levels than the present study. Inadequate staffing has been shown to lead to a complex mix of factors that influence moral distress, including "decreased frequency and quality of communication; decreased time for collaborative teamwork; decreased ability of the nurse to really know the patient; increased turnover resulting in less experienced staff who do not know how to navigate the system to resolve conflicts; and difficulty prioritizing these issues above the need to 'get the work done'" (Hamric, 2000, p. 201; Corley et al., 2005).

While the issues of quality and limited resources may be systemic, the result affects patient-practitioner interaction and relationships, showing that the multiple factors in the present study may be interwoven and complex. Further examples of systemic issues were seen in

common sub-themes of moral dilemmas at TBDHU such as fairness, resource distribution, knowledge sharing and managing expectations. Moral problems may result for practitioners who feel that there is an unmet public expectation of not being able to deliver for those in need.

**Working within the System: Rules, Choices and Control**. Some issues are considered "systemic" in different ways. Front line providers experienced "perceiving provincial standards and guidelines as inconsistent with practice" and "allocating resources and setting priorities" within the top five highest levels of mean moral distress. Again, these issues suggest front line providers' moral choices may be constrained due to a lack of control over their environment (rules and resources). Similarly, in an example from the present study mentioned previously, one participant outlined a situation where parents must be encouraged to screen for developmental concerns in children as early as possible in order to achieve a better outcome. However, once a concern was identified, the children were then placed on a long waiting list for further care. In this situation, there would seem to be two systemic components that the practitioner had no control over: the policy to advise parents about developmental screening and the apparently-excessive waiting time for appropriate care. The practitioner was conflicted – or perhaps experiencing a *situational bind* in the context of moral reckoning (Nathaniel, 2006) – between an interest in providing the parents with more knowledge about their child's development and an interest in managing the parents' expectations and not causing undue stress for the family. What is the point of early testing when early intervention may not be possible? There would seem to be elements of futility and frustration to this practitioner's work.

In yet another example, a participant reported difficulty balancing the rules, public health benefits and economic realities as a recent moral dilemma. A daycare needed melamine dishes replaced. However, the daycare operated in a poor section of the city and could not afford to

replace the dishes. The choice became whether to enforce compliance to purchase dishes that met standards, or to overlook the issue and allow the operator to spend the money on much-needed groceries. One health objective (to replace the dishes) was competing with another health objective (to provide healthy food). The latter objective would seem to be the greater good, but rules made the former an actionable priority. The practitioner was then faced with a choice between his or her moral obligation to the organization and profession (and their rules) and his or her moral obligation to help the daycare operator and the children. Making a choice to enforce compliance could lead to moral distress.

Public health practitioners in Michigan ranked similar ethical issues highly: determining appropriate use of public health authority; making decisions related to resource allocation; and negotiating political interference in public health practice (Baum, Gollust, Goold, & Jacobson, 2009). Moreover, Oberle and Tenove (2000) also found system function to be a major theme of ethical problems for public health nurses. As in the present study, participants identified issues with resource distribution, programming choices and policies and laws.

**The Management Connection.** Much of the discussion to this point has focused on front line providers (who dominate the sample). However, despite the relatively small (but highly responding) sub-group of managers and supervisors, significant differences in how they experienced moral problems warrant separate analysis.

Interestingly, a key result was that managers and supervisors experienced higher levels of moral problems than front line providers. The differences in mean moral uncertainty and mean moral dilemma were significant for PHAC categories. In both cases, managers and supervisors had higher scores than front line providers. The mean moral dilemma intensity and mean moral distress intensity scores met or exceeded the mid-point (3.00)—the only such occurrences for

general responses among the PHAC category sub-groups. Similarly, managers and supervisors reported more situations with mean moral distress frequency and intensity at or higher than the mid-point than front line providers, public health nurses and the sample. At first glance, this was unexpected in light of the influence of patient interaction and urgency proposed above. Why is management experiencing higher levels of moral problems? What makes this group different?

Managers and supervisors are responsible for major programs and functions. They may come from professions outside of public health and may rely on the expertise of other professionals (Last & Edwards, 2008). They have accountability for the actions of their staff, but they still report to more senior levels of management. Ultimately, management is accountable to the Board of Health who may bring a broader community or provincial perspective, and even a political perspective, to public health. Is there tension involved in connecting the broader focus of the Board of Health (and the provincial government) to the client or project focus of staff? When specific situations were ranked from highest to lowest mean moral distress, managers and supervisors were the only sub-group to have organizational or systemic items as their entire top five. The top average moral distress score was identified for situations involving working in a system of political guidance and supervision. Perhaps management identified with this issue more prominently than other sub-groups as they work closer to the political level. Organizational factors appeared to influence higher moral distress in managers.

Another possible explanation for increased moral distress in situations involving "organizational" or structural issues may relate to the level of responsibility that managers and supervisors are entrusted with. While front line providers or public health nurses may necessarily have responsibility for individual patients or clients, managers and supervisors are responsible for entire programs, and as an extension, the health of entire populations. Notably,

four out of the six situations that resulted in mean moral distress intensity levels at or above the mid-point implied a population-level consideration:

- Allocating resources and setting priorities;
- Balancing population health benefits with economic benefits;
- Potentially conflicting choices between individual interest and the public good; and
- Considering the cost of programs / activities to society.

Holistically, these issues would seem to suggest that managers and supervisors were particularly troubled by establishing priorities (which essentially means choosing between various public goods), whether due to limited resources or competing interests. The fact that they were more troubled by these events than front line providers were may be because they bear more responsibility for these issues.

On the other hand, relationships were identified infrequently as a factor in moral problems for this sub-group. Relationships between managers and employees were mentioned for recent moral or ethical dilemmas or additional issues only seven times, contrasting with 68 total references to relationships overall. Many of the seven responses may have come from staff. Moreover, managers and supervisors had the lowest mean moral distress frequencies (M=1.11, S.D.=1.96) and intensities (M=0.33, S.D.=0.71) for situations involving relationships with the same profession. The group had somewhat higher mean moral distress frequencies (M=1.56, S.D.=1.88) and intensities (M=1.00, S.D.=1.41) for situations involving relationships outside of their profession, but they were still at low levels. Overall, relationships appeared to not influence as high levels of moral problems on average for managers and supervisors as they did for other sub-groups.

**Key Demographic Factors.** Few significant differences were found when comparing moral problems by basic demographic variables. Markedly, moral distress in specific situations involving interactions with others, handling client information, and quality was affected by highest level of education attained. The relationship was not linear ( i.e. the more education you had, the less moral distress you experienced). Those with a diploma experienced the highest level of moral distress for the above factors. Then, the moral distress levels dropped sharply at the next level of education—the bachelor degree. The levels increased somewhat for participants who reported having a master's degree.

Does education affect moral distress or is the result a proxy of profession? The bachelor degree sub-group accounted for the majority of the sample (N=41) and was composed mostly of front line providers (approximately 70%), while those with diplomas (N=9) and master's degrees (N=13) accounted for relatively small proportions. About one third of those with master's degrees were managers and supervisors and over one half was front line providers. This likely explains the small increase in moral distress levels from the bachelor degree sub-group. Approximately half of participants with a bachelor degree were nurses, while two-thirds of those with diplomas were nurses. Diploma registered nurses at TBDHU generally perform clinical duties (personal correspondence, Mr. Ken Allan, February 25, 2011). The increased moral distress for this latter group could stem directly from work duties, or it could also reflect a different level of education. More education could help resolve moral problems, or it could help recognize more moral problems. More study is needed to make this determination.

**Additional Ethical Issues Identified at TBDHU**

For an overarching perspective of the above issues, some of the top additional ethical issues (not otherwise discussed) identified by staff are examined here.

**Sharing Public Health Knowledge**. Given the opportunity to share an additional ethical issue that participants found important, "knowledge sharing" was the most frequently identified theme within the responses. Knowledge sharing included issues related to encouraging behavioural change, obtaining informed consent, truth-telling and the effectiveness of health promotion. The higher frequency of this response may imply a perceived disconnect in the level of "health knowledge" between public health practitioners and the communities that they serve. The following situation demonstrated how a lack of health knowledge by the public may lead to a moral problem for a practitioner:

> "There was a recent need to have a pediatric client taken into child care, as there was non-compliance with treatment from the parent. This was disturbing as the non-compliance stemmed from ignorance of the need for treatment and was not the fault of the parent. However, the decision was made with the long term health of the child and family in mind".

While the practitioner sympathized with the parent's lack of health knowledge, the practitioner was still compelled to act against the parent's wishes. There are numerous components to this dilemma, but the issue of inadequate public health knowledge resonates. Along these lines, other responses included better communication about the need for vaccination, a needle exchange program and the proposed use of fluoride in the drinking water supply.

The effectiveness of health promotion campaigns was another issue that arose. One participant described the difficulties of practitioners trying to promote "healthy weights" messages for obesity prevention without having a negative impact on eating disorders, while

another expressed difficulty choosing language/imagery for a health campaign suited to a target audience that wasn't offensive to others. Weighing risks versus benefits appeared to be an important ethical responsibility of health promotion planners.

A final notable aspect of knowledge sharing related to managing the expectations of the community. This adds a communications component to the systemic issues introduced above. A participant highlighted the "profound question of limited resources and not communicating this to the public … leading to unrealistic expectations". This ethical issue suggested that practitioners may bear a disproportionate moral burden associated with the consequences of limited resources, resulting in moral problems. Weed and McKeown (2003) suggested that "at the core of professional public health practice is a promise to help society by preventing disease and promoting health" (p. 4). Of course, what is not made explicit is that public health practitioners cannot prevent every disease or help everybody. Better engaging the public in the resource conversation may alleviate the implied public dissatisfaction with a public health unit that does not deliver all of their needs, especially if an alternative is raising taxes or implementing user fees.

**Different Perspectives, Conflicting Values and Competing Objectives.** Another commonly occurring and related theme involved "conflicting values" at a personal, organizational, and community level. In one case of conflicting personal values, a participant raised an ethical concern regarding personal biases or beliefs interfering with professional responsibilities. One practitioner "won't do abortion counseling but wants to work sexual health or genetics". Further, ethical tensions may have occurred when the advice or care that a practitioner is compelled to give is contrary to religious beliefs: "I've had women terminate their

pregnancies - I am Roman Catholic." However, religious beliefs were also portrayed a source of strength: "my profession and religious background provide a strong moral and ethical base".

Next, conflicts between organizational values were reported. One participant described an ethical issue with the TBDHU procurement policy. The organization promoted "buying local." However, internally, staff were not allowed to procure a vendor "just [because] they are local." Recommending a practice that the organization itself cannot follow may have led to tension for staff who were charged with upholding both of these principles.

It was not surprising to learn of conflicting values between public health practitioners and a serviced community composed of numerous and diverse sub-groups and stakeholders. For example, practitioners worked to develop programs to encourage active and safe routes for children to get to school, while school boards and parents were more concerned with safe arrival than the health benefits of walking to school.

Another participant described a conflict of values between the Board of Health and a group of TBDHU staff. When describing the media-sensitive debate about whether or not to fluoridate the city of Thunder Bay water supply, it was suggested that TBDHU staff had a different set of values than some in the public. The participant also felt that the Board of Health seemed to change positions, resulting in organizational "values that [were] not what [practitioners] espouse[d] in public health." Staff may have experienced moral problems when their senior leadership took a position contrary to their professional values. However, this issue could also have described conflicting or competing duties for the Board of Health: to the values of the public and to the values of the profession.

It is important to emphasize that values need not be necessarily at conflict, but could instead be better described as being in competition with one-another. As demonstrated in many

open-ended responses, there were often choices between many possible *public goods.* The task for the public health practitioner, then, becomes choosing between these goods. The same is true for apparent competition between individual and public interests. Hester (2004) argued that this process of ethical adjudication between competing health objectives through a perspective of "communally situated individuals" must be at the heart of public health practice (p. 13). In other words, rather than viewing individual and group interests as a dichotomy, one must consider that individuals are inherently constructed, in part, by their social environments. The interests are not necessarily separate—healthy communities promote healthy individuals.

Difficulty with the reconciliation of (or competition between) individual and public goods, as well as challenges with the prioritization of multiple public goods, would not seem to necessarily involve moral distress, so much as moral uncertainty and/or moral dilemma. As shown in many cases in this study, the problem is not one of being forced to take a position contrary to one's personal values; it is more of a problem of not being able to determine which good should take precedence. While high moral distress scores were identified for many issues related to allocating scare resources, (particularly among managers and supervisors who may bear the most responsibility for adjudicating these goods), general total moral dilemma and moral uncertainty scores were higher in the total sample and most sub-groups. Therefore, more attention to this issue may be needed to address moral ambiguity in the roles of public health practitioners.

How could practitioners be better supported in making these difficult choices? As mentioned above, perhaps grounding practice in a public health ethic which includes the relational and social aspects of identity would help clarify duties to individuals and duties to the public; the thought being that further education may reveal that the problem does not

necessarily need to be an "either / or" type of decision. Or perhaps offering guidance through a microethical approach as proposed by Nikku and Eriksson (2006) would help adjudicate the often contextual components of competing health objectives. Possible supports are further discussed in the latter part of this section.

Finally, one participant response summarized how conflicting values and relationship issues are related: "most of us know the right thing to do, sometimes the hardest part is doing it when there could be conflict with people around us."

**Social Justice.** In addition, themes related to the equality and equity of treatment – especially for disadvantaged populations – were commonly reported. The needs and care of children, women and families were frequently identified. Also, "fairness" and "addressing social determinants of health" were common themes in this thread. Again, resource distribution also came into play. One participant described people on waiting lists for service being bumped out of their spot by someone else. Another identified the need for additional programs for vulnerable populations:

> "e.g. Rise in Aboriginal youth [population] in schools, high suicide rates, social isolation and racism, but not sure of how and limited resources to make a difference. This is my most troublesome area of my career….effects of poverty as a health determinant and we have such little power to make an impact."

Witnessing actions or policies that practitioners felt were unfair or unjust appeared to result in moral problems. As a consequence, one participant suggested that "sometimes it feels

like we 'inflate' outcomes to justify our actions" to address perceived unfairness in resource distribution.

Who bears the burden of deciding fair distribution when there is a scarcity of resources? Moral problems may result when front line providers perceive political direction to be unfair, not present, or disconnected from the realities "on the ground." These problems may be further compounded in a public health emergency. Describing the recent H1N1 pandemic, some participants stated that the community was fortunate to have an adequate supply of vaccine (in fact, one participant describes moral distress related to the decision to communicate this surplus, thus risking loss of the supply), but it was also recognized that inadequate supply (such as in other Ontario communities) could have been a problem. In the end, decisions had to be made about which groups were to get the vaccine in the first wave.

Broader ethical concerns occur when considering public health practice during a pandemic. Hence, careful pandemic planning is important to be prepared during the heightened ethical tensions of an emergency. In this regard, Kotalik (2005) has emphasized the importance of attention to the bioethical issues of mass vaccination programs during the pandemic planning process. As a related ethical issue, Kotalik has also described the need for the "good-will and cooperation of health care workers" (2005, p. 429) in circumstances such as the vaccination of all front line care staff. In the present study, the ethical issue of compelling staff to receive immunization was identified by at least one participant who described TBDHU policy "where everyone - all health unit employees should be forced to get the H1N1 shot or face suspension if you get sick and will not receive available free antiviral and will not receive any sick leave pay while off for the [mandatory] 3-4 weeks" as "dictatorial." However, pandemic planning may not

mitigate moral distress resulting from practitioners not being able to immunize or provide other rationed treatment to certain less vulnerable patients.

## Ethics Capacity at TBDHU

**Recognition and Resolution of Moral Problems.** Moral problems have been identified at TBDHU, but is there sufficient capacity to address them? And do they need to be addressed? As in previous work in public health nursing by Folmar et al. (1997), most participants in the present study agreed they could recognize moral or ethical problems in their work but slightly less felt that they could resolve them. This is consistent with more recent work that showed many public health practitioners recognized ethical issues to be those "that were difficult to resolve and that required judgments about what actions were 'right' and how to balance competing concepts of what is right" (Baum, Gollust, Goold, & Jacobson, 2009, p. 370).

**Education is Needed.** However, in the face of the recognition and confidence displayed in both Folmar's and the present study, a majority of participants also agreed that more education was needed on public health ethics and they would be willing to take it. The majority of the sample reported receiving a relatively low amount of training in the past 3 years. Without comparative information, it is difficult to determine if the level of moral problems at TBDHU warrant urgent intervention, or are relatively normal compared to other public health units in Ontario or the general population. However, the fact that a majority of participants want training suggests that it may be needed.

What form should training take? Focus groups have suggested that public health practitioners may prefer ethics education based on actual cases in actual practice, proposing that good training could include internships and job-shadowing of professionals interacting with various stakeholders (Bernheim, 2003). The Canadian Nurses Association acknowledged the

differences in the role of public health nurses (compared to clinical nurses), noting that there is a need for ongoing dialogue, mentoring and discussion to support public health nurses as they work through everyday ethical situations (Canadian Nurses Association, 2006, p. 10). In the present study, similar solutions were proposed by the participants, including workshops that present "the most common ethical issues with examples and practical solutions."

It has been demonstrated that awareness and education helps reduce the impact of moral problems. As mentioned above, Beumer (2008) reported measurable success in reducing moral distress for critical care nurses after hosting an ethics workshop and follow-up education. The moral distress-specific workshop included the administration of a moral distress questionnaire, shared experiences, definitions, signs and symptoms, identification of barriers and causes, presentation of the American Association of Critical Care Nurses' 4As, development of an individual action plan, development of unit action plans and the importance of self-care (Beumer, 2008, p. 265).

**Support and Guidance in the Workplace.** Formal ethical support systems such as clear protocols and a workplace ethics committee were met with lukewarm support from participants. Still, the "single most important thing" the workplace could do by far was to provide "specific guidance". Specific guidance or support was a theme that coded for many options, including ethics committees and mentorship. The key feature was that participants wanted help with specific issues, as opposed to broader, generalized supports. This idea has occurred throughout this study: tensions occur when general ethics principles do not fit with or do not provide adequate support for the situations experienced on the ground (i.e. everyday ethics). This would imply the need for a microethical approach which starts with the routine and ordinary issues and focuses on specific situations and context (Nikku & Eriksson, 2006).

Conversely, the need for an ethical code was not commonly mentioned. This may be because most participants reported already having a professional code of ethics that they find useful. However, at least in the United States, efforts are underway to establish a unifying code of ethics for public health practice (see Public Health Leadership Society in the Introduction section), recognizing that public health brings together a variety of professions who may already have their own code (Callahan & Jennings, 2002). Perhaps a Canadian equivalent could provide a useful and unifying framework.

On the other hand, objections have been raised to ethical codes of practice. Dawson (1994) has raised two philosophical concerns (first proposed by others) that may result in codes being considered inadequate or even unethical. First, when codes are imposed from the outside, the responsibility of the professional to be accountable for his or her ethical actions and choices may be minimized, responding to rules over individual needs. In other words, the important contextual factors described above may be ignored. Second, ethics codes may provide a false sense of security, implying that the code offers a complete picture of all ethical issues and abrogates professionals of any responsibility to probe further and enhance their own moral development (Dawson, 1994). If moral problems are resulting from routine, highly contextual choices, then it may be difficult to develop an adequate code of ethics that addresses the many possible permutations of daily practice.

Indeed, one may find it surprising, but it may be for these very reasons just described that a value-laden enterprise such as public health does not have more ethical direction (such as a code of ethics) mandated from professional oversight bodies such as the Public Health Agency of Canada (via core competencies) or the Ontario Government ministries responsible for public health (via public health standards). However, such direction (e.g. ethical competencies) could

be a double-edged sword: it may force the discussion, but may not fit the diverse environments of public health, leading to additional sources of tension.

This discussion begs the question: is it even possible to define a public health practice ethic? Or specifically, a public health nursing ethic? Woods (1999) suggested that a (clinical) nursing ethic could serve as a framework for ethics education in clinical nursing, provided that it is delivered in ways that reflect upon both "reality and idealism" (p. 432). In the same way, developing a unique public health approach may help provide a baseline for ethics education. Further, as suggested by Baylis et al. (2008), and mentioned above, developing a uniquely public health ethic grounded in collective values may address inadequacies inherent in the application of clinical and research bioethics, moving away from individualistic principles toward an enshrinement of the public good. Until such an ethic is developed and translated to practice, ethical tensions remain for front line providers and others adapting clinical focus and training to public or community health work.

In summary, it is important to note that there was not a single or simple approach identified in the present study to address moral and ethical problems in public health practice. There are multiple perspectives and approaches to analysis in public health ethics. For example: *professional ethics* seeks out values and standards developed by public health practitioners over time (e.g. Professional nursing standards); *applied ethics* seeks to devise general principles that can be applied to real conduct and decision-making; *advocacy ethics*, strongly oriented toward social justice, involves taking a stand for reducing inequities to improve health and well-being; and *critical ethics* is directed toward the specific issues and problems of public health, combining strengths of the other perspectives to an egalitarian and human-rights oriented discourse (Callahan & Jennings, 2002). Participants in the present study would seem to employ

all these perspectives and more. While knowledge of macroethics theories may provide an important framework, even more important may be a microethical approach to the everyday decision-making faced in individual practice.

**Limitations**

There are several possible limitations to this study. The convenience sample was relatively small and had a higher proportion of public health nurses than the population (TBDHU). It is impossible to rule out non-response bias. One cannot necessarily draw conclusions about the population; however, particularly in the case of public health nurses, an important exploration of everyday ethical issues and response to those issues was presented.

Moreover, this study was essentially a pilot for the adaption of the MDS to public health practice. While the MDS has been shown to be reliable in clinical nursing, in most clinical studies, the situational items in the instrument were more specific and consistent (Corley et al., 2001; Corley et al., 2005). In the present study, many items were necessarily generalized for relevance to a more diverse array of professionals. Many of the items, then, may not have been as easily identifiable to personal experience as in the original MDS. In addition, the generality may have resulted in the omission of specific details, as in the case of the Moral Distress Assessment Questionnaire developed by Kälvemark Sporrong et al. (2006) for use in both clinical and pharmaceutical practice.

Another consideration involves the theoretical framework and use of terminology. Did participants have the same level of understanding of the different moral problems, or should more work have been done beforehand to define the meaning? As mentioned above, moral distress has been criticized by a small group of researchers for lack of conceptual clarity.

This could lead to questions about what was actually measured; for example, if participants do not fully understand the definition of moral distress, perhaps they were ranking items higher because they were common complaints that they felt should be addressed (McCarthy and Deady, 2008; Hanna, 2004). Steps were taken to mitigate this last possibility. At an all-staff session preceding the implementation of the survey, the researcher delivered a brief presentation which included key definitions. Moreover, in the questionnaire, participants were first introduced to the three moral problems in a general sense (Section B, question 1, 2 and 3). This may have provided an opportunity to reflect on the meaning before going over a page and simultaneously considering particular issues (Section B, question 4).

A further influence may have been the H1N1 pandemic that started in fall 2009. Delivery of the questionnaire was delayed 2-3 months due to the heavy engagement of TBDHU in response to this public health emergency. It is possible that this recent, unusual experience illuminated moral or ethical issues that otherwise may not have surfaced. It also may have heightened or minimized existing concerns.

Finally, one must acknowledge the potential effect of the social desirability response bias (Randall, & Fernandes, 1991; Tan & Grace, 2008 as cited in Issel, 2009). In essence, participants may have reported behaviours more favourably if they were perceived to be more socially acceptable or desirable. These possibilities must be taken into account when interpreting the data.

**Recommendations**

This study has measured and analyzed moral problems occurring at TBDHU and the capacity to resolve them. In response, several preliminary recommendations are made for future research and possible interventions at TBDHU. It is acknowledged that further research and

consultation is necessary to fulsomely assess the feasibility and effectiveness of the recommendations. However, as the recommendations flow from information provided by staff and management, it is hoped that they will stimulate further discussion at TBDHU.

**Further Research.** More research is needed to explore ethical issues in public health practice, including:

1. Further test the validity of the instrument used in this study and work to standardize it as tool applicable to multiple settings. The instrument used was an extensively adapted version of Corley's Moral Distress Scale (MDS). Most of the clinical nursing-related items on the original MDS were replaced with general public health-related items drawn from the literature. Therefore, focus groups and other qualitative research could be used to establish content validity and determine any missed or inappropriate items.
2. Further study at TBDHU, such as regular monitoring through post-test implementation of the instrument to assess changes in levels of moral problems over time or in response to interventions. The use of additional tools, such as McDaniel's (1997) Ethics Environment Questionnaire could be explored and used to measure perceptions of support in the work environment for addressing ethical issues. This tool has previously been used in conjunction with a moral distress scale (Hamric, 2007; Corley et al., 2005).
3. Expand study to other Ontario and Canadian public health units for comparative purposes. The systemic and/or professional factors in moral problems could be further analyzed.
4. Further analyze the effects of age, education and other demographic factors on moral problems. For example, additional reference data is needed in order to be able to

determine whether or not moral problem levels at TBDHU are higher or lower than normal.

**TBDHU Actions.** The following recommendations are specific to the TBDHU:

1. **Continue to evaluate, emphasize and promote an ethical work culture. The organizational culture should acknowledge the presence of everyday moral problems in the workplace and commit to a supporting environment.** One employee articulated a common sentiment: "support and back employees who feel they are making the right decision." Employees and managers should feel that they can discuss issues without fear of reprisal or retaliation.
2. **Offer proactive and reactive support. Mechanisms to provide ethics supports for specific moral and ethical problems should be developed, implemented and evaluated.** Context has been shown to be an important consideration in moral problems, and staff identified that guidance is needed for day-to-day moral and ethical issues. Baum et al. (2009) suggested that public health practitioners could benefit from the establishment of formal frameworks as one method to encourage thorough and rigorous ethical decision-making and analysis, potentially leading to reduced or managed tensions by identifying the sources. At TBDHU, staff proposed a variety of mechanisms that could be explored and tested. Care should be taken not to implement a mandatory "one size fits all" model. Again, the results suggest that there is no clear consensus on the means, but there appears to be agreement on the overall need. And it should not be so rigid that all potential issues must be filtered through. Overall, the majority of staff felt that they could recognize and resolve moral and ethical problems in their work.

3. **Offer suitable ethics educational opportunities to management and staff.** Levels of formal education affected frequency and intensity of moral problems in this study. Gaps in knowledge may be addressed through workplace education and professional development. Overall, participants indicated receiving little ethical training in recent years. It is important to note that Folmar et al. (1997) suggest that public health nurses will face greater ethical challenges in the future on account of diminishing budgets, decreased legislative support, conflicting values among community residents and influence from external groups. This is in the American context, but the warning is applicable to Canada as well. In response, the group proposes efforts to advance public health ethics through continuing education.
4. **Share public health knowledge. Proactively make connections between groups internally and externally, improving health communication, sharing perspectives on ethical issues and distributing the potential moral burdens of decision-making**. A recurring theme throughout the study involves ethical issues resulting from inadequate communication or understanding between individuals, groups and organizations. Senior management should make it a priority to discuss ethical issues between all levels (from the Board to front line providers) to share perspectives on the impact of decisions. Also, further work appears to be needed to communicate expectations, limited resources, public health objectives and the associated ethical issues to the community at large. At least two of the values behind the principles for the ethical practice of public health identified above are applicable here: "each person in a community should have an opportunity to contribute to public discourse"; and "knowledge is important and powerful" (Public Health Leadership Society, 2002, p. 2-3). To be most successful,

public health requires buy-in of all members of the community. An essential component is building trust and community solidarity. For example, in the context of a public health emergency, Kotalik (2005) suggests the launch of a public education campaign could help build needed trust, because "an optimal response to a pandemic will require the collaboration of not only all levels of government but also of public, private, and voluntary sectors as well as every citizen" (p. 430).

## Conclusion

This study has provided an introductory look at everyday ethical issues in public health practice. Diverse public health practitioners at Thunder Bay District Health Unit were asked to complete a questionnaire about moral and ethical issues at work and about the capacity to address these issues. This study represented the first known attempt to quantify Jameton's (1984) concepts of moral uncertainty, moral dilemma and moral distress in a public health setting, as well as the first known attempt to adapt the Moral Distress Scale to a public health setting (Corley et al., 2001; 2005).

Overall, nearly a third (32%) of all TBDHU employees responded and the sample that did respond was somewhat overrepresented by public health nurses, as well as managers and supervisors. However, the study provided preliminary information to answer the six research questions posed at the start of this study:

1. Public health professionals at TBDHU experienced moral uncertainty, moral dilemma and moral distress at low frequencies (i.e. below the scale midpoint). Moral uncertainty (M=2.18, S.D.=1.22) and moral dilemma (M=2.10, S.D.=1.28) were reported with comparable average frequencies, while the frequency of moral distress was notably lower (M=1.51, S.D.=1.33).
2. Public health professionals at TBDHU experienced moral uncertainty, moral dilemma and moral distress at low intensities. In general, the intensity of moral problems on average was reported slightly higher than the frequency. In contrast to the frequency results, average moral distress intensity (M=2.70, S.D.=1.99) was higher than moral uncertainty (M=2.44, S.D.=1.54) and moral dilemma (M=2.46, S.D.=1.53).

3. Overall, several situational factors were identified within the MDS. Factors included situations involving interactions with others, organizational and systems issues, handling client information (data analysis), quality and scope. For the sample, the highest five ranked moral distress scores included a mix of situations involving interactions with others, quality and organizational and systems issues. Situations involving "maintaining quality in the face of diminished resources" had the highest mean moral distress score overall by a notable margin. A large proportion of participants reported high levels of moral distress frequency (27.7%) and intensity (30.8%) for this situation.
4. Several personal and professional characteristics influenced ethical issues at TBDHU:
    a. *Front line providers* experienced moral problems of all types at a slightly higher frequency and intensity than the sample mean. Significant differences in means were revealed between public health nurses and the rest of the sample when experiencing moral uncertainty frequency and intensity. Similarly, significant differences between sub-groups based on PHAC categories (including front line providers) were revealed for moral uncertainty frequency and moral dilemma frequency, intensity and score.
    b. The small, but highly participating sub-group (N=9) of *managers and supervisors* experienced moral problems of all types at higher levels than the sample. They also experienced higher levels of most moral problems (with the exception of moral uncertainty intensity) than front line providers.
    c. *Urgency and context, relationships, systemic, and quality factors, as well as issues around social justice, knowledge sharing and conflicting or competing*

*values* appear to be interwoven, but influenced the experience of moral problems, particularly moral distress.

5. Overall, participants provided mixed responses in terms of capacity present to address and support ethical issues at TBDHU. While only a small proportion (20%) of participants were satisfied with the present ethics supports and a low number reported receiving ethics training in the past 3 years, a large majority of participants (81.6%) agreed that they were able to recognize moral and ethical problems at work and nearly two-thirds (61.5%) reported being able to resolve these problems.
6. Participants offered many suggestions to provide suitable ethical and moral support at TBDHU. While individual responses vary considerably, consistent themes revealed a need for: ongoing specific guidance (e.g. ethics committees, mentoring, debriefings, and peer support groups); education (e.g. workshops, all-staff sessions, and guest speakers); policies (e.g. overall policy statement, procurement policies, and standards for front line providers); awareness (e.g. communicating issues between management and staff, raising awareness of issues and sharing, and defining ethics and morals); and improved communications generally.

In response to this analysis, it is determined that additional research is needed to further explore everyday ethics in public health practice. While this study provided an introductory look at these issues at one public health unit, follow up is needed, namely to validate and standardize the instrument for repeated use and conduct comparative analyses to determine how levels of moral problems identified in this study compare to other health units and even the population at large. Notwithstanding, four general recommendations for preliminary action at TBDHU were suggested: evaluate and promote an ethical organizational culture; offer

proactive guidance for ethical issues; provide relevant ethics education to staff and management; and actively share public health knowledge and ethical issues internally and externally. It is hoped that preliminary work could be undertaken at TBDHU to understand how some or all of these recommendations could be implemented, paying particular attention to the specific context of different work units and their needs.

Finally, as noted throughout the literature, ethical issues in public health only stand to become more complex as practitioners navigate through an era of rapidly-emerging technologies, greater scientific knowledge and limited resources. In order to be able to continue to do the *right thing*, policy-makers, leaders and others influencing the public health system must stay mindful of the barriers at the practice level to implement the *public good* — or reconcile competing *public goods.*

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# Appendix I

Instrument

# Practicing the Public Good

# Exploring Ethical Issues in Public Health Practice

# Research Questionnaire

Please do not put your name on this document. Please do not remove the staple.

9 pages including this cover page.

PARTICIPANT # _____

*Thank-you for your participation!*

## Section A – Anonymous Demographic Information

Please complete the following by checking (√) the answer that applies to you:

1. What is your age?

| 19 and younger | 20-29 | 30-39 | 40-49 | 50-59 | 60 and older |
|---|---|---|---|---|---|

2. What is your gender? Male ____ Female ____ Other ____

3. What is the highest level of education you have attained?

| High School | Diploma | Bachelor's Degree | Master's Degree | Doctorate | Other |
|---|---|---|---|---|---|

4. What is your current employment status at Thunder Bay District Health Unit (TBDHU)?

| Full-time | Part-time | Casual | Other |
|---|---|---|---|

5. How many years of experience do you have in:

| | 1 – 5 ↓ | 6-10 ↓ | 11-15 ↓ | 16-20 ↓ | 21-25 ↓ | 26 + ↓ |
|---|---|---|---|---|---|---|
| Your current public health role? | | | | | | |
| The public health field? | | | | | | |
| A health care / medical field? | | | | | | |

6. What is your work position at TBDHU according to Public Health Agency of Canada (PHAC) Core Competencies listed below? (Please check the most appropriate one).

| Position: | Check √ |
|---|---|
| **Front Line Provider**<br>Front line providers work directly with clients (individuals, families, groups and communities). Responsibilities may include information collection and analysis, fieldwork, program planning, outreach activities, program and service delivery, and other organizational tasks.<br>Examples: public health nurses, public health/environmental health inspectors, public health dietitians, dental hygienists and health promoters. | |
| **Consultant / Specialist**<br>Consultants/Specialists provide expert advice and support to front line providers and managers although they may also work directly with clients.<br>Examples: epidemiologists, community medicine specialists, environmental health scientists, evaluators, nurse practitioners and advanced practice nurses. | |
| **Manager / Supervisor**<br>Public health staff who are responsible for major programs or functions. Typically, they have staff who report to them. | |
| **Administration and Support Services** (not a PHAC core competency – added by researcher)<br>Roles not directly related to public health practice, involving the maintenance of the building, administrative duties, communications, finance, etc. | |
| **Other –** Your position is not described above. | |

7. Expanding on the previous question, are you a:

   a) Public Health Nurse? YES NO

   b) Public Health Inspector? YES NO

8. Please select the primary area of responsibility (based on the mission statement of TBDHU) which relates to your work the most: (Please check the most appropriate one).

| Primary Area of Responsibility: | Check √ |
|---|---|
| **Health Protection**<br>Important activities of public health in food hygiene, water purification, environmental sanitation, drug safety and other activities that eliminate as far as possible the risk of adverse consequences to health attributable to environmental hazards. | |
| **Health Promotion**<br>The process of enabling people to increase control over, and to improve their health. It not only embraces actions directed at strengthening the skills and capabilities of individuals, but also action directed towards changing social, environmental, political and economic conditions so as to alleviate their impact on public and individual health .<br>Examples: Reorienting health services, enhancing personal skills, strengthening community action, creating supportive environments, building healthy public policy | |
| **Disease Prevention**<br>Developing, implementing or evaluating strategies to prevent disease from occurring, spreading or causing further morbidity and mortality.<br>Examples: Immunization, screening and early detection, reducing complications through treatment and rehabiliation. | |
| **Administration and Support Services** (not from the mission statement – added by researcher)<br>Roles not directly related to public health practice, involving the maintenance of the building, administrative duties, communications, finance, etc. | |
| **Other** | |
| **Don't Know** | |

9. In your current job, are you licensed or accredited by a professional association?

| Yes | No |
|---|---|

## Section B – Ethical Issues at Work

The following questions are based on experiences in your **current position** at TBDHU. Please read the question, definitions and any situations closely. Rate **how often** the moral or ethical problem occurs and **how intense** these problems are by checking the most appropriate box.

1. **Moral uncertainty** refers to situations where you want to take the right course of action, but you are unsure of what moral principles or values apply, or even if there is an ethical problem in the first place.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| a) **How often** do you experience *moral uncertainty* in your current job? → | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | Don't know ? |
| b) **How intense** or how disturbing do you find these experiences? → | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | Don't know ? |

2. A **moral dilemma** exists when you wish to make a decision and there are two or more clear moral principles that guide you, but each supports different courses of action.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| a) **How often** do you experience *moral dilemmas* in your current job? → | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | Don't know ? |
| b) **How intense** or how disturbing do you find these experiences? → | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | Don't know ? |

3. **Moral distress** is a negative reaction that occurs in situations when you know the right thing to do based on your moral principles or values, but you don't do it. This moral lack of action may be due to personal or external constraints, failures or barriers.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| a) **How often** do you experience *moral distress* in your current job? → | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | Don't know ? |
| b) **How intense** or how disturbing do you find these experiences? → | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | Don't know ? |

4. Using the definition of **moral distress** provided in the previous question, rate **both a) the frequency and b) the intensity** of moral distress that you may have experienced in a situation(s) involving the following items in your work at TBDHU:

| Situations that involve... ↓ | | | | | | | | | Not Applicable | Don't Know |
|---|---|---|---|---|---|---|---|---|---|---|
| | a) | **Frequency:** How often do you experience moral distress? | | | | | | | | |
| | b) | **Intensity:** How intense or how disturbing is the moral distress? | | | | | | | | |
| **1. Using the legal authority given to public health professionals.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **2. Potentially conflicting choices between individual interest and the public good.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **3. Balancing population health benefits with economic benefits.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **4. Working in a system of political guidance and supervision.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **5. Questioning the role or scope of public health practice.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **6. Allocating resources and setting priorities.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **7. Considering the cost of programs / activities to society.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **8. Ensuring quality standards of practice.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **9. Maintaining quality in the face of diminished resources.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |

4. Moral Distress (cont.)

| Situations that involve… ↓ | | | | | | | | | Not Applicable | Don't Know |
|---|---|---|---|---|---|---|---|---|---|---|
| | a) | **Frequency:** How often do you experience moral distress? | | | | | | | | |
| | b) | **Intensity:** How intense or how disturbing is the moral distress? | | | | | | | | |
| **10. The potential risk of imprecision and inaccuracy in data assessment and reporting.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **11. Collecting, reporting and using research data about particular subgroups in the population** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **12. Viewing policy and law as a support or constraint.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **13. Perceiving health unit policies as inconsistent with practice.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **14. Perceiving provincial standards and guidelines as inconsistent with practice.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **15. Putting your health or safety at risk.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **16. Putting your self at risk of legal action.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **17. Maintaining relationships with other health professionals within the same profession.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **18. Maintaining relationships with other health professionals outside of your profession.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |

4. Moral Distress (cont.)

| Situations that involve… ↓ | | | | | | | | | Not Applicable | Don't Know |
|---|---|---|---|---|---|---|---|---|---|---|
| | a) | **Frequency:** How often do you experience moral distress? | | | | | | | | |
| | b) | **Intensity:** How intense or how disturbing is the moral distress? | | | | | | | | |
| **19. Witnessing questionable practices of a coworker.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **20. Protecting a client/patient's information.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **21. Caring for the infectious client / patient** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **22. Caring for or providing service to a non-compliant client / patient.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **23. Obtaining informed consent.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **24. Respecting the autonomy / rights of groups, including families, businesses, corporations, community groups etc.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |
| **25. Respecting the individual autonomy / rights of clients / patients.** | a) | 0 Never | 1 | 2 | 3 | 4 | 5 | 6 Often | N/A | ? |
| | b) | 0 Not disturbing | 1 | 2 | 3 | 4 | 5 | 6 Greatly disturbing | N/A | ? |

## Section C – Ethics Capacity

This section deals with education and resources available to use for guidance or support when you encounter ethical issues (i.e. where you can turn to for help).

Please check the answer that applies the most.

1. How satisfied are you with the present ethics support or resources in your workplace?

| Very Dissatisfied | Dissatisfied | Neutral | Satisfied | Very Satisfied |
|---|---|---|---|---|
| | | | | |

2. How many hours of formal training on ethical issues specific to your work have you received in the past 3 years?

| None | 0 to 5 | 6 to 10 | 11 to 20 | 21 or more |
|---|---|---|---|---|
| | | | | |

3. Do you agree with the following statements?

| Statement: | Strongly Disagree ↓ | Disagree ↓ | Neutral ↓ | Agree ↓ | Strongly Agree ↓ |
|---|---|---|---|---|---|
| I am able to recognize moral and ethical problems in my public health work. | | | | | |
| I am able to resolve moral and ethical problems in my public health work. | | | | | |
| In my workplace, there is a need for continuing courses on public health ethics | | | | | |
| I would be interested in taking a course on public health ethics. | | | | | |
| My profession has a code of ethics that provides useful guidance in my current work | | | | | |
| More detailed or clear protocols or standards are needed to provide additional ethical guidance in my work. | | | | | |
| A workplace ethics committee or other support established to provide guidance and advice on moral or ethical problems is needed. | | | | | |

## Section D – Reflection

Please answer the following short answer questions in legible print. Feel free to elaborate on any responses from previous questions. Please do not use names in your responses.

1. Describe the most recent ethical or moral dilemma that has occurred in your public health work.

2. Describe any additional ethical issues that you find important in your professional experience.

3. Briefly identify what you think is the single most important thing your workplace can do to provide suitable ethical and moral support for you in your public health work.