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Do Pediatric Medical Subspecialty Residents Experience Moral Distress?

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by

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Abstract

Moral distress is a human experience arising when an individual knows what is ethically appropriate but is unable to carry out that action due to institutional constraints. It affects healthcare professions when there is a psychological disequilibrium and can lead to burnout. In this research, descriptive phenomenology was used to investigate whether pediatric subspecialty residents experience moral distress. The results indicate that they do experience moral distress for reasons including issues regarding futile treatment, barriers that prevent effective communication, inadequate resources and strenuous relationships with parents of patients. Residents in this study cope with moral distress by talking with colleagues or senior staff members about the difficult situations they encountered. Recommendations from this research include the introduction of regular rounds sessions to deal with difficult cases and regular orientations on support services available to medical subspecialty residents.

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Chapter 1: Introduction

For many centuries, ethical thought on medical practice has been undertaken in many societies including the Graeco-Roman, Buddhist, Islamic and other civilizations where medical practice is influenced by moral values (Jecker *et al.,* 2007). Through the ages, as medicine formed into a profession, conscious thought on medical practice contributed to the development of the field of bioethics. Fritz Jahr, a protestant minister from Germany, is believed to be one of the first to describe the term "bioethics" in 1927 (Goldim, 2005). He published the article; "Bioethics: A Panorama of the Human Being's Ethical Relations with Animals and Plants" where he highlighted the importance of respecting animals and plants as research subjects. In 1965, Van Rensselaer Potter, also often accredited for developing the modern concept of bioethics, introduced a renewed focus in the article titled; "Bioethics bridge to the future". Potter highlighted the importance of moral appreciation of developing biomedical sciences and technologies while ensuring moral values and integrity are maintained (Potter, 1965). Through the years, bioethics has developed into a prominent area of study and is being introduced into medical institutions around the world to ensure that patients are receiving the best care possible. This is done to ensure that the main principles of biomedical ethics introduced by Beauchamp and Childress in 1985; of autonomy, non-maleficence, beneficence and justice are maintained.

In Canada today, medical ethics education is continuously evolving to prepare future doctors to deal with the ever-changing complex medical needs of society. In the past, it was argued that the methods used to train future physicians in ethics were focused only on developing interpersonal skills for clinical settings (Miles et al., 1989). Today, medical ethics has developed into a core subject area in the curriculum of all medical schools across Canada with the goal to provide physicians with the appropriate set of skills to effectively deal with ethical

dilemmas by appropriately considering philosophical, social, and legal issues from varying perspectives. Although training in ethics has greatly advanced over the years, there have been recommendations on ways to improve the training students receive (Hafferty and Franks, 2008). This entails a shift from the theoretical classroom approach of learning to exposing students to realistic scenarios that stretch their moral reasoning to enable them deal with complex ethical dilemmas of real life medical practice. If such recommendations are not made, there is risk that trainee physicians will continue to struggle and endure the tolerance of hardship that is well known to be associated with the physician training culture.

A 2006 survey study by Bourdeau *et al.,* showed that out of 1,161 physicians in Alberta, 48.6% to 55.5% were identified to have an advanced phase burnout while 45.7% of 2,251 other physicians across Canada also experienced advanced phase burnout. Reasons for burnout in the study were described to include feelings of helplessness, job dissatisfaction and increased workload. Another study by Bischoff *et al.,* (1999) showed that stress due to ethical considerations can be a major source of burnout in the workplace and that training in ethics and organizations promoting strong ethical practices can help mitigate some of the effects. These results suggest that improving ethics training in medical education and the presence of adequate support services are an important tool to combat burnout. Although there are a number of other factors that may give rise to burnout amongst physicians (McManus *et al.*, 2002), one important cause that relates to ethical decision-making is moral distress (Sundin-Huard and Fahy, 1999). Research on the impact of moral distress in medical education has not been fully established and there is a need to understand moral distress in order to deal with it effectively. This should be an important goal for medical institutions to ensure the well being of healthcare practitioners.

1.1. Literature Review

Moral distress is a complex human experience that can be a painful feeling or psychological disequilibrium that arises on occasions where an individual knows what is ethically appropriate but is unable to carry out that action or carries out what is believed to be the wrong thing due to an institutional constraint (Jameton, 1984). The institutional constraints that prevent health care providers from executing their moral judgments often arise from conflicts between the care provider's values and their perception of supervisory expectations from senior staff, institution management and institutional policies. Other institutional constraints entail inappropriate resource allocation, triaging and interpretation of laws that prevent the provision of optimal care in the care provider's moral judgment (Raines, 2000). The feelings of moral distress that result may also be due to disputes with other healthcare providers, parents or other family members and even one's own actions as a result of institutional policies. In such situations, the individual experiencing moral distress feels that they are unable to deal with the situation which can also be due to barriers such as the lack of appropriate training to deal with the specific situation, being low in the medical hierarchy, a shortage of time and/or resources, an inability to act due to legal constraints, inadequate staff support as well as procedures and policies that they believe are difficult, not possible or futile in meeting the patient's needs (Corley *et al.,* 2005). To appreciate the current understanding of moral distress we need to review the historical groundings of this phenomenon, which stems from research carried out in nursing.

The ethicist and nursing researcher, Andre Jameton, first provided a definition of moral distress. He stated; "moral distress arises when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" (Jameton, 1984, P. 6). Jameton also described a lingering feeling of distress that an individual experiences over time

due to an initial experience of moral distress. Although Jameton called this lingering distress "reactive distress" Webster and Bayliss, (2000) further described this phenomenon in the commonly known term of "moral residue". Moral residue refers to the lingering feeling that an individual experiences after a morally distressing situation where the individual has compromised a personal moral conviction. The pattern or time frame of moral residue is not consistent and can occur weeks, months or even years after the morally distressing issue is first encountered (Webster and Bayliss, 2000). This long lasting experience can also lead to personal changes including depression, anxiety as well as severe changes that can lead to burnout.

The research carried out by Jameton provided a basis for subsequent research in nursing practice by Wilkinson (1987), Fenton (1988), Rodney (1988) and many others that relates to the moral distress experienced by nurses as well as its coping mechanisms. Fenton (1988) and Rodney (1988) both carried out essential research to clearly establish the ethical issues that critical care nurses faced which resulted in distressing situations. This added to the work done in 1987 by the nursing researcher, Judith Wilkinson who had studied the impact of moral distress on nurses and how it affects their practice in a paper titled: Moral distress in nursing practice: Experience and effect. Wilkinson was able to generate a theory of moral distress relating to patient care and the moral aspects of nursing practice. She provided a refined definition of moral distress amongst nurses, stating that moral distress is "the psychological disequilibrium and negative feeling state experienced when a person makes a moral decision but does not follow through by performing the moral behaviour indicated by that decision." (Wilkinson 1987, Pg. 16). She found that nurses who had suffered from moral distress experienced a loss of self-worth; personal relationships were affected as well as a manifestation of other psychological and physical symptoms. Such resulting effects of moral distress highlight how such an experience

can lead to a major crisis.

More recent research has shown that symptoms such as sleeplessness, nausea, migraines, a sense of isolation and stomach upsets due to anguish can be caused by moral distress (Hanna, 2002). Some of the coping mechanisms to deal with the pain and psychological disequilibrium among nurses include denying the responsibility of the situation and caring for the patients in other ways despite the institutional constraints (Corley, 2002). The burden of moral distress can result in nurses leaving specific working environments in the health care system or leaving the nursing profession entirely (Corley 2002, Wilkinson 1985). Conversely moral distress in nursing can also be empowering in unique situations. For example, a senior decision maker can compromise the moral principles of a nurse to the point that the nurse decides to become a whistleblower by reporting the situation to an appropriate authority. This shows that if the choice and consequences of whistleblowing can be managed well, moral distress can develop moral character (Hanna, 2002). Nevertheless moral distress is still generally seen as a negative experience as there is usually hesitancy when a nurse is considering reporting an action carried out by superiors or colleagues that the nurse deems to be wrong (Hanna, 2002).

The importance of the pioneering work of researchers such as Wilkinson, Jameton and others to highlight moral distress in nursing is that it can shed light on this problem in other fields of work. A 2004 study found that most studies on moral distress were predominantly in nursing (Hanna, 2004). Subsequent research has revealed that moral distress exists in other healthcare professions. These include pharmacy (Sporrong, 2008), psychology (Austin, 2005), podiatry (Iglesias, 2010), medical residency (Hilliard, 2007) and even amongst fully trained physicians (Førde et al. 2008). Even though the current data on moral distress are primarily focused on nursing, such emerging studies indicate that there is moral distress in other

professions in the healthcare system where there is the potential for a psychological disequilibrium. There is a need to ensure that the problem of moral distress is appropriately managed in the healthcare system. There is a new focus on the experience of medical students and residents. This is because there is a perceived lack of power and autonomy in this area. As it has been established, the phenomenon of moral distress is known to affect nurses. This is because nurses are at the front line of patient care but in many instances do not have the authority to apply moral decisions that reflect their values into the work they do. This is principally due to the lack of their control on their practice that they believe is in the best interest of the patient and this subsequently can lead to moral distress.

Much of the literature cited above relates to Western society. However, moral distress also has an international dimension that has materialised within the last few years. Moral distress has been seen to exist amongst healthcare practitioners in Asia, Japan (Ohnishi et al., 2010), Africa, Uganda (Harrowing and Mill, 2010) and in the Middle East (Iran), (Shorideh et. al., 2012). Although not a subject of this dissertation, there is a need for further studies to be conducted in order to assess the existence as well as the similarities and differences between moral distresses experienced amongst healthcare practitioners in different regions of the world.

1.2. Moral Distress: Medical Students and Residents

Medical students and residents face challenging moral situations and ethical dilemmas in their practice as they seek to provide care to ill patients (Hicks *et al.,* 2001). This means that they may also be exposed to situations, which can bring about moral distress. Medical schools currently use a curriculum that aims to appropriately prepare students and minimises the negative effects on the mental and emotional health of the student. A number of techniques to educate

students are continuously evolving and include; mentoring, supervised practice, problem based learning, simulated patients and lectures (Berger, 2013). Ethics and humanities education is also provided at all undergraduate medical training institutions and although the ethics curricula reflect the prevalence of a number of complex ethical issues, there is still a lack of consensus on the material that needs to be covered (Carese, 2011). It has also been difficult to measure how effective undergraduate medical ethics training is to dealing with ethical issues that are encountered in medical practice (Cordingley, 2007). This creates a problem in the system, as certain practitioners are not equipped with the appropriate training in ethics to deal with specific cases that have ethical dimensions (Self *et al.* 1993 and Patenaude *et al.* 2003). In fact, there has been concern that some medical students and residents may even regress in moral reasoning rather than grow as they go through medical training (Patenaude *et al.* 2003 and Feudtner *et al.* 1994).

Medical students can also be vulnerable to a number of other stressors due to the complex nature of training. In Dyrbye's (2005) study of the causes of distress faced by medical students, it was found that exposure to death and human suffering, ethical conflicts, being victims of student abuse, personal life events and educational debts were all major factors in distress experienced by medical students. This study also indicated that the effects of such distress could bring about cynicism, academic dishonesty, impaired academic performance, substance abuse, depression, burnout and even thoughts and acts of suicide in extreme cases. Although Dyrbye's study did not specifically evaluate moral distress amongst students, Wiggleton *et al.* (2010) carried out a survey on third and fourth year medical students to investigate the prevalence of moral distress and established that medical students do experience moral distress on a regular basis and situations that posed an immediate potential to harm others by insult or injury, caused the

greatest amount of distress. These findings support the work of Lomis *et al.* (2009) who also investigated moral distress amongst senior medical students and discovered that specific situations may gave rise to moral distress. These situations included issues with communication, severity of the patients' illness, patient safety, medical error, unprofessional behaviour, negative role models and student inaction.

As medical students can experience moral distress, it is important to assess the prevalence of moral distress once medical school has been completed. In medical residency, Hilliard *et al.* (2007) showed that pediatric residents experience significant ethical conflicts and moral distress. It is important to note that the dimensions of moral distress amongst residents or medical students are increased in paediatric care. This is mainly because care extends not only to the child that is being treated but also to the parents or guardians and to societal obligations such as ensuring child welfare and a duty to report violations of their welfare. This is further compounded by the fact that when caring for children there is a heightened compassionate element to the care due to the vulnerability of this patient group, hence, in such situations moral and ethical obligations are often heightened, therefore there are more opportunities for disagreements to arise. This highlights the need to understand how pediatric practitioners cope in such a work setting. Janvier *et al.* (2007) investigated pediatric residents working in the neonatal intensive care unit and concluded that they suffered from moral distress due to frequent moral disagreements especially relating to resuscitation practices.

Although there is currently not an abundance of research on moral distress in medical education as seen in nursing, the current investigations published do indicate that medical students and medical residents experience moral distress. A number of coping strategies that they use to cope with moral distress have been described. These include; morally disengaging from

cases, denial, the use of gallows humour, blunting, or avoiding the situation by passing cases on to others (Berger, 2013). There is also a risk that medical residents and students will choose specific specialties where the risk of developing moral distress is not high.

The findings from this review of the current literature highlight the need for further research in establishing whether moral distress exists in other areas of medical education and training. The literature for medical students and residents experiences of moral distress has been assessed but there is still inadequate research on establishing if moral distress is experienced in more senior stages of medical education such as in subspecialty training. Medical subspecialty residents in pediatrics are licensed physicians who have completed medical school, a residency program in pediatrics and are qualified pediatricians. Although the subspecialty residents are licensed practitioners, enrolling in a subspecialty program entails that the trainee undergo further years of training, usually two to three years in an area of specialization. Subspecialty pediatric residents are the focus of this research. This is a valuable group to study because the trainees have had extensive clinical experience but subspecializing in a particular branch of medicine means that they still require supervision, are under the mentorship of a more experienced physician and are within the confines of a learning environment. It is clear that for this relationship to work, the trainee and the other overseeing staff deciding on a treatment for a patient need to communicate effectively. However in situations where ethical deliberations arise, it has been seen that there is usually an institutional focus on performing procedures with ethical consultations or dialogue being crowded out due to time constraints and power imbalances as described by Levi (2002). The toll of such decision-making on trainees needs to be further evaluated to ensure subspecialty programs are aware of the scope of this issue and have structures in place to effectively deal with issues such as moral distress.

Currently, the only study in this field was carried out by Chiu *et al.* in 2008 and indicated that subspecialty medical residents in pediatrics can suffer from moral distress. This investigation administered an online survey to subspecialty medical residents training in surgery. Of the 40 respondents, it was found that a majority had not received enough training in bioethics and lacked adequate expertise to deal with certain situations, which attributed to their moral distress. Other reasons that attributed to experiences of moral distress included; the intensity of the training program, lack of senior staff involvement in patient care, moral conflict between the trainees and staff surgeon on patient care with the trainee performing the procedure recommended by the senior colleague only to observe a bad outcome for the patient, the failure of colleagues to provide the appropriate standard of care and disagreement between other medical services about continued aggressive treatment which the trainee perceived as futile care. Further research on moral distress amongst subspecialty medical residents is required to fully understand the extent of this phenomenon amongst this group. There is also a need to assess whether other areas of subspecialty training in pediatrics apart from surgery are affected, the coping mechanisms the trainees use and whether the findings are similar to the current literature.

Moral distress has detrimental effects not only to the clinical practitioners who experience this phenomenon but it can also affect patient care. The current publications on moral distress in the work nurses do can serve as a basis for other areas in healthcare such as medical education, where there is psychological disequilibrium. There is a need for further research in establishing whether moral distress can affect medical practitioners who are still in medical education. Paediatric subspecialty trainees are an ideal group for this study because they are faced with several complex issues relating to moral judgment as they provide care to their patients.

1.3. Research Question

This research aimed to expand the current discourse by identifying and describing the experiences of moral distress amongst pediatric subspecialty residents. The research aimed to answer the following main research question:

Do pediatric subspecialty medical residents experience moral distress and if so, what is the extent of the experience?

This research will also aimed to address the following questions:

1. What are the causes of moral distress among pediatric subspecialty residents?
2. What are the consequences of dealing with these causes of distress?
3. Do the support structures currently available help deal with moral distress?
4. What other support mechanisms are useful to help deal with moral distress?

Chapter 2: Methods

Qualitative methods were used to explore the lived experience of moral distress in this research. This is because an experience brings about the feeling of moral distress, which could be evoked by the participant through an interview process.

2.1. Qualitative Analysis: Phenomenology

The choice of a qualitative methodology for this study was to appropriately assess the accounts that were provided by the participants in order to obtain an understanding of moral distress. This research analysis falls into the naturalistic paradigm due to accounts of past experiences that were given during the interview process. In the naturalistic paradigm, reality is presumed not to be fixed but based on subjective realities and is relative to the individual. This allowed for phenomenology to be the qualitative methodology chosen for data collection and analysis in this investigation of moral distress amongst paediatric subspecialty residents. Phenomenology is the study of phenomena as experienced from an individual's point of view. It aims to understand the structures that enable consciousness to be experienced. Phenomenology is subjective, inductive and dynamic and enables the gain of knowledge through interaction between the researcher and the participant. As already highlighted, the phenomenon of moral distress is a complex human experience that allowed for phenomenology to be the methodology of choice because the focus in such a methodology is to better understand the lived experience. Data were derived by obtaining accounts of situations that brought about moral distress amongst the trainees. Thus, the descriptions from the participant's views become the phenomenological stance in this study.

Phenomenology is a description of human experience in its true form rather than a definition of the experience rendered by natural sciences (Martins & Bicudo, 1989). This method was founded by the German Mathematician and Philosopher, Edmund Hurssel, who asserted that all pre suppositions are to be suspended during research and the research should directly relate to the individual's experience (Polit & Beck, 2005). This further lead to the development of descriptive phenomenology where all preconceived notions are bracketed while there is a focus on the consciousness in question. Martin Heidegger, a student of Husserl also created another phenomenological school of thought known as interpretive phenomenology, which does not directly look into descriptions but aims to seek meanings that may be embedded in the events. Various authors including Paul Francis Colaizzi, Helen J. Streubert, Max Van Manen and other philosophers also contributed to the various schools of thought in the field of phenomenology. This has created a body of phenomenological research approaches that include; Phenomenology of Essences, Phenomenology of Appearances, Constitutive Phenomenology, Reductive Phenomenology and Hermeneutic Phenomenology (Wojnar and Swanson, 2007).

2.2. Descriptive Phenomenology

This investigation made use of Descriptive Phenomenology. This type of phenomenology is used to describe lived experiences while biases are bracketed. For the purpose of this research, the following steps were carried out:

A.) Bracketing: Field notes were used as a reflective diary to ensure that the researcher's thoughts, assumptions and observations of the research were noted down to avoid any bias in the research process. Data collection and analysis was carefully done which included cautiously

noting familiar concepts shared by the participants and suspending personal judgments.

B.) Analyzing: This was done by referring to field notes and the analysis of the interview transcripts. Transcript analysis was done using Colaizzi's (1978) method. This method consists of 7 steps, which are:

1.) Reading and re-reading the transcript to get a general sense of the content
2.) Extracting significant statements that pertain to the phenomenon
3.) Formulating meanings from the statements
4.) Creating categories of themes, clusters of themes and validating with the transcript
5.) Describing moral distress related to the findings
6.) Member checking
7.) Making changes based on participant feedback

C.) Intuiting: As the researcher in this study, it was important for me to understand the reality of the experience described by the participants. This entailed active listening, critical reflection, and being aware of the common themes in the data.

D.) Describing: An exhaustive description of the experience of the phenomenon of moral distress was structured to enable elements of moral distress amongst subspecialty trainees to rise from the data. This entailed the identification of themes as well as point five in Colazzi's method of describing moral distress related to the findings.

2.3. Personal Reflection

As a researcher, an important factor to consider is the capability to bracket preconceived ideas, opinions and notions about the research while actively conducting the investigation and during analysis. With relation to this research, other than the information from my literature review on moral distress, I did not have any major expectations as to what to expect to hear about the subspecialty medical residents experiences in their medical practice. This is mainly due to the fact that I am not a health care professional actively practicing medicine. I believe this has benefited this research and ensured that the investigation and analysis using descriptive phenomenology ensured for the themes to materialise directly from the descriptions provided by the participants.

Nevertheless, as a researcher, I have always had a keen interest in ethics in medical practice. I first gained this interest during my undergraduate studies at the University of Westminster in the United Kingdom where I specialised in Biomedical Sciences with a focus on Medical Ethics. Long before completing my undergraduate studies, my interest in ethics materialised from my upbringing. As a youth, I lived in different countries due to the nature of both my parent's professions as diplomats and realised that the way different people coped with certain issues was different from place to place. An example of this is the ways corrupt ethical practices in various professions such as in policing, politics and even healthcare in my country of birth, Nigeria is almost seen to be a normal way of life. Such a view on corruption was drastically different from what I experienced in the other countries I lived in such as in Japan, France and now as a Canadian, I can also notice the different perspective to ethical practices in society.

2.4. Participant Selection

The participants were recruited by sending out emails (Appendix A) to program directors in twelve different departments of pediatric subspecialty training programs. The program directors were asked to forward invitation emails (Appendix B) to pediatric subspecialty residents. All participants in this research were in a subspecialty medical resident training program at the time this research was initiated. This means that the trainees had completed medical school and a medical residency-training program. A subspecialty practitioner who had completed a subspecialty-training program was also included but this was because the practitioner began participating in the research before the completion of the subspecialty-training program.

2.5. Interviews

A semi-structured interview format was used for data collection. Interviews were conducted with 6 participants. The interviews were carried out using a select number of structured questions (Appendix B), which were followed up by unstructured questions as per responses during the interviews. The interviews were scheduled for times ranging from 45 minutes to an hour. These were conducted in a private room with all interviews recorded and transcribed with informed consent given by all participants. The interviews began with an introduction of the research with the aid of the consent form, to refer the participant to the definition moral distress. An informal unrecorded portion of the interview was then initiated with the participants to provide further information and to ensure that they understood what the interview was going to be about. Once the participants appeared comfortable and ready to begin

the interview, a general question requesting the participant to describe a situation that they had experienced where they felt helpless to act in the best interest of a patient was asked. During the interview, general questions on experiences where asked which were sometimes followed by questions on clarifying or expatiating on details relating to the participants experiences. Direct questions relating to accounts of the participants were sometimes asked without intentionally leading the participant to a response. The additional details obtained from the participants in the interviews enabled for supplementary description that enhanced the accounts of their experiences. A member check interview was also carried with one of the participants in this study while the themes from the research were sent to the other participants to review for feedback.

2.6. Questionnaire

Although descriptive phenomenology was the main method used to analyse information from the interviews, a questionnaire (Appendix C) was also presented at the beginning of the interviews to gain some socio/demographic and educational variables from the participants. The data gained from the questionnaire aimed to present an insight into the resident's professional background and to check if such data could be correlated to experiences relating to moral distress.

2.7. Ethical Considerations

All participants in this research provided full informed consent. All interviews were conducted in a private room to ensure that accounts giving by the participant were heard only

between the participant and the interviewer and by also changing the names of participants to further ensure confidentiality. The interviews were also recorded and transcribed with key identifiers changed (such as departments or names of staff). The recordings were deleted from the tape recorder once the audio files were successfully transferred into digital format and password protected. The transcribed data and analysed information from this research were saved on a network secure, password protected computer with access only via private correspondence by the principal investigators. The main thesis document on the computer was also password protected with the use of Microsoft Word's password protection service with only the main investigator having access to the file.

It is important to note that during this investigation, a number of sensitive issues were discussed such as experiencing the death of young patients or other events that brought about severe emotional distress amongst participants. To mitigate further feelings of emotional distress the participants were informed that they could terminate the interview at any time or pause for a break. The researcher also served as an empathetic ear to the accounts that were shared by indicating an understanding of the experience. There was also the availability of medical assistance from a physician if required. As this research involved interaction with human participants, ethics approval was obtained from the Conjoint Health Research Ethics Board (CHREB) at the University of Calgary. The investigator completed the Tri-Council Policy Statement (TCPS) CORE Tutotial: Ethical Conduct for Research Involving Humans. Confidentiality of all the participants in this research was strictly maintained in accordance with TCPS and CHREB.

Chapter 3: Findings

The interviews were transcribed and analysed for themes that relate to moral distress with the use of Colaizzi's (1978) method. The themes have been listed in Table 1 below. Descriptions of significant statements were also extracted from the transcript and are attached to these results.

1. **Dealing With Futility**
• General: Dealing with futile cases • Dealing with futile situations while also dealing with care preferences from parents
2. **Relationship with parents**
• General: Dealing with parent • Experiencing child abuse cases • Dealing with futile situations while also dealing with care preferences from parents
3. **Access to Resources**
• Lack of adequate access to resources • Inability to provide care to patients beyond the scope of legal care requirements
4. **Communication**
• Holes in communication within medical teams • Caught in the middle of opposing opinions of senior team members • Having a different medical opinion from other staff members and avoiding confrontation by not advocating for the patient • Availability of staff support
5. Personal
• Inadequate time • Lack of control on overall patient care • Personal errors

Table 1: *Themes and Sub-Themes Relating to Moral Distress Experienced by Subspecialty Trainees*

3.2. Significant Statement Extracts of Themes relating to Moral Distress

The following descriptions embody the statements from subspecialty medical trainees relating to distressing situations that were extracted from the transcripts of the research's recordings. This was done by reviewing and analyzing the transcripts to assess and excerpt the descriptions that relate to an experience of moral distress by the subspecialty trainees:

1. Dealing With Futility

A. Dealing with futile cases

In this research, subspecialty trainees who did not advocate or express their opinion on care for a patient undergoing treatment, which the trainee deemed to be futile, experienced feelings of moral distress. Such cases brought about challenging experiences that were difficult to cope with. This was described to occur mainly in situations where the medical team chose an intervention and the subspecialty trainee disagreed with the choice of treatment because they deemed it to be futile in meeting the patient's needs. If the trainee was unable to advocate for the patient, moral distress did arise. Resident A experienced such a "traumatic" case and described the event by explaining that "*The child had a cardiac arrest during the surgery and so the patient was very sick when he came into ICU and so it seemed to me like it was really kind of futile to continue to try to prolong this patient's life. On the one hand palliation may have been the better option to begin with and basically we spent 8 hours just trying to keep him alive and everything was saying that he wasn't going to make it. It was horrible. It was really traumatic for me...".* Such an experience caused moral distress because the trainee is going against his or

her own moral values and going along with the care plan decided on by individuals within the medical team. This stress can be further heightened when directly communicating with family members on the events relating to the treatment the patient is receiving. Resident A explains the situation by indicating that *"You are going based on what you believe is the level of care that we should be providing or what has been documented so if there is a disconnect then it's hard because the family is unhappy on the one hand and the interaction can be quite distressing because you know that they are in a difficult situation."*

Formulated Meaning: The act of providing care to a dying pediatric patient can be morally distressing to a subspecialty medical trainee especially when the trainee is directly communicating with the patient's family members and uncertain about the appropriate course of treatment.

B. Dealing with futile situations while also dealing with care preferences from parents

In other cases, it was non-institutional voices that resulted in the moral distress that was experienced when dealing with futile situations for a patient. In pediatrics, surrogate decision makers can often be the parent or guardian of the patient. This occurred in this study where parents wanted treatment for patients that the trainees deemed to be futile in meeting the patients' needs. The trainees consequently faced a significant amount of moral distress because they were unable to change the outcome of the situation due to the parents' wishes taking precedence over theirs in that situation. Such a scenario was experienced by Resident F who explains how *"The parents refused to withdraw any level of care for this child and events were happening fast enough, it became difficult and you know its too hard for us to push things forward and try to get a resolution for the parents, while allowing the child to be more*

comfortable so we ended up spending several days with this child in extreme discomfort with the parents not coming around to the fact that their child was not only going to die but was suffering because we prolonged his life and it was hard to work in that room ".

In these types of situations, there are institutional policies to ensure that parents or surrogate decision makers are able to make decisions for patients in accordance with the patient's wishes or directive or from a care seeking point of view. In some situations care providers can disagree with the parents approach and can appropriately advocate for patients even up to the extent of seeking injunctions to withdraw or administer care via the legal system. Going through such an event can lead to moral distress especially if there aren't any support measures to assist clinicians to advocate for a patient against the parent's care preferences. However, it may still be difficult to clearly advocate for a patient as a subspecialty trainee because in such situations they are usually not the primary care giver. Furthermore, it may be difficult to argue against the basis of refusing to withdraw treatment for a patient especially if their decision is based on their culture, beliefs and even emotional attachment of the parents to the child. Resident C explains some of the challenges that are faced by indicating that**;** "*I think one of the problems that I have faced is when parents don't want you to carry out a certain procedure, whether because of their faith or that they simply aren't educated on what we need to do. I find that to be quite distressing, as the child won't receive the care that they need. For example, we had this specific child that had a strange genetic disorder, she was four years old but she weighed twelve pounds. She wasn't growing and we knew that she wasn't meant to live a long life and medically we know that but the parents asked for everything to be done and she spent a lot of time in the intensive care unit which was a lot of money and the care I provided proved to be futile and dealing with situations like that can be very tedious."*

Parents usually do look out for the best interest of the patient when dealing with a chronically sick or dying neonate or a young child. In such situations they can be under a significant amount of emotional distress and can be emotionally ill equipped to make medical care decisions. This means that in such situations it is the physician or other primary care provider's responsibility to attempt to understand the decision maker's position, empathise with that position and also try to motivate or influence a rational decision from the surrogate decision maker. This is clearly a difficult task and in situations where the parent or guardian does want futile treatment to continue there is a possibility for moral distress to arise when the subspecialty trainee knows that the patient will eventually die and they are unable to do anything to prevent the futile treatment.

Formulated Meaning: Pediatric subspecialty trainees may experience distress when dealing with parents who want to prolong the care for their patient whom they believe treating is futile.

2. Relationship with parents

A. Dealing with parents

In pediatrics, parents are usually the responsible individuals, other than the physicians, also concerned with the progress of treatment for a sick child. The relationship between a physician and a parent or other surrogate decision makers can at times be stressful and as already highlighted, parents can be under severe emotional distress when experiencing the ill health of a child which can lead to stressed behavior. As the trainees are at a senior stage of their learning experience, there is an increased responsibility of having to directly deal with the concerns of

parents. This can bring about moral distress amongst the trainees in unique situations when the trainees are unable to act in the best interest of their patient. These findings indicate that moral distress occurs when the parent is non-cooperative on matters relating to complex care scenarios and end of life issues in which the trainees and medical institutions are unable to take further action. Resident B gives an example in situations where parents refuse vaccination of their children by indicating that *"...Another situation that I find distressing is when parents refuse vaccinations. First vaccinations are usually done at 2 months old and we have sick babies who are as old as 3 months, 4 months and if we don't have consent from parents we cannot give the baby immunization. We have had situations where parents don't give consent and so we are unable to give the immunization."* Resident B also explains this experience by talking of the complexity of dealing with parents who refuse blood transfusions. The residents explains that; "*for us that is a moral issue because their religion does not allow them to give blood to their children so here we had this baby who needed a blood transfusion and if the baby did not receive the blood the baby's condition would severely deteriorate, the baby was extremely anaemic. We could not go ahead with the transfusion because we could not get the consent from the parents."* Although most hospitals have procedures to deal with parents and when they are non-co-operative, it was noticed that these procedures did nothing to relieve the distress expressed by the trainees in this study. The power bestowed on parents by institutional respect for culture and beliefs as a basis of care can add to the moral distress faced by subspecialty trainees.

Subspecialty residents in this study felt the need to act on a beneficent basis but they also felt like they were unable to make a difference that would result in the child receiving better care. This feeling was present even though they followed standard operating procedures as far as it would let them to raise issues that parents had a different opinion on care that was not benefiting

the patient. Resident D explains the complexity of the situation by indicating that*: "I think in pediatrics that is the main source of distress, that is feeling like there is a conflict between parents and yourself and everyone wants the best interest of the kids and sometimes there are just differing opinions on what that means."*

Formulated Meaning: Pediatric subspecialty trainees may experience distress when dealing with parents who refuse to give consent for their child because the parents have a different care preference from the opinion of the subspecialty trainee.

B. Experiencing child abuse cases

Significant issues relating to the relationships with parents are when subspecialty residents experience cases where their patient might have been physically or psychologically abused by a parent. Subspecialty trainees are required to appropriately report such suspected cases of abuse. The trainees can use their judgment to assess whether a child has experienced abuse but they have limited powers in fully establishing evidence of abuse. They do however have the ability to forward such cases to the appropriate support services within the hospital and follow other standard operating procedures, which may require the involvement of law enforcement such as the police if applicable. The challenge in such situations occurs when the trainee or the support services are unable to substantiate evidence of abuse. In such situations the trainee can experience moral distress because they are unable to further advocate for the patient and in situations such as the one described below, the parents usually do not come back to the hospital for care. Resident D explains this situation by explaining that*"We had some concerns as to whether there was some abuse happening in the home but there wasn't enough. It was more of*

a feeling. There wasn't anything concrete that you could actually call C.A.S about. The parents also refused to meet with our social worker and our psychologist, which is part of our standard process for meeting new families. On follow up, the dad refused to speak to anyone, wouldn't let his wife speak to anyone and they refused to come to any further appointments with our clinic. So I felt helpless because I felt like there was something that this kid needed, not just the medical supervision for her diabetes but also, we all very much felt like there was something going on in the home but didn't really have anything to back that up with, except that they didn't want to come back to our clinic."

It is important to recognise the triggers of challenging parent encounters to ensure that escalations and issues such as child abuse are effectively dealt with to bring about a concerted care environment for the sick child and also prevent feelings of distress that may be experienced by the care provider. If the moral distress caused by inability to appropriately advocate for a child that experienced child abuse arises and lingers, it may develop into moral residue if the trainee is unable to appropriately advocate for the patient using the tools available. Resident F explains how dealing with such cases creates such feelings of distress by explaining that*: "Child abuse is another thing that I have a lot of trouble with, when I see a non accidental trauma case, it is just awful in every way there is no way that you can turn that to something in your mind that is ok and so those things you take a lot of distress from"*

Formulated Meaning: Subspecialty residents who observe evidence of child abuse or suspected child abuse cases may feel helpless/distressed if there are no resolutions.

C. Dealing with futile situations while also dealing with care preferences from parents

(Refer to point 1B)

3. Access to Resources

A. Lack of adequate access to resources

A major issue for the subspecialty trainees was the inability to access certain resources within the hospital such as laboratory specimen testing, imaging services, or other consultation services. This was either because the resources were unavailable during certain times, such as late at night or on weekends. Resource allocation and management is a complex issue relating to distributive justice that can be challenging to manage in healthcare. In an ideal world all services and consults would be available at all times, however, hospitals have to appropriately manage staff, departments and budgets to ensure maximum efficiency. Consequently, there can be a difficulty or delay in getting medical information from other consultation service departments or diagnostic laboratories, as accounted for by the subspecialty trainees in this research. Resident C explains this by indicating *that; "A lot of it comes in the middle of the night where there isn't a lot of people around and you have a very sick child and it's just yourself and for example a staff. First of all you have to learn to ask for help from your staff, otherwise they are going to leave you alone. Sometimes there is just too much to do in the middle of the night and you are not trained to take care of them at such a high level. To make matters worst, a lot of the services are closed at such late hours, which can be very frustrating".* Another resident also supports these assertions by further indicating tha*t***;** "*Night time and weekends but weekends are getting better*

now but night times are a huge issue. You can be like, I think this is really important and they will be like, the tech just went home. It is very common."

It is clear that being unable to access all the tools that should be at the disposal of a physician can have a significant effect on the care that a patient can receive. In situations where a closed service can prevent a patient from receiving care and the patient's condition deteriorates, moral distress may ensue due to the subspecialty trainee being unable to appropriately come up with a solution due to the limited service.

Formulated Meaning: Medical services are not always accessible, which may be distressing to subspecialty trainees trying to provide a medical solution for a patient in a timely manner.

B. Inability to provide care to patient beyond scope of legal care requirements

Experiences of moral distress were not only seen to relate to issues confined to the hospital setting. The inability to provide care for patients after they left the hospital also affected subspecialty trainees. Subspecialty trainees are well-trained physicians and as such, they can possess a significant amount of compassion for patients. In situations where they establish a strong physician-patient relationship, the care and concern can extend beyond the confines of the hospital environment. Resident D describes such an experience by indicating that; *"There was a patient who had a very rare medical diagnosis, which led to infertility in her and culturally that was very difficult and she had told me that that was the worst news that I could possibly give her; was that she would not be able to have children. Her parents were very supportive but I definitely got the sense that she was very depressed and withdrawing and that she didn't want to*

come back to the clinic again. I think that was a source of distress for a lot of us. We were very worried that she wasn't coping well and wasn't willing to access any of the resources that we wanted to set her up with. I still worry about her and it's been over a year since I last saw her."

It can be challenging for a subspecialty trainee in cases where the patient no longer wants to receive care or communicate with the care providers. The physician's ability to empathize with the patient means that the subspecialty trainee would be in a position to understand the risk of adverse effects for a patient not seeking treatment. This can create a valid distress that the trainee cannot act on due to legal and professional boundaries. This results in a feeling of moral distress because there is an institutional constraint that prevents the trainee from being a moral cavalier and stops physicians from seeking patients outside a professional environment to provide additional care. The interesting finding from this theme is that signs of moral residue can also result. The subspecialty trainee conveyed this due to being unable to provide care to the patient beyond the scope of standard care requirements by noting that; "I still worry about her and it's been over a year since I last saw her." Moral residue arises in such situation because of questions left in the mind of the trainee. These include questions such as; what happened to that patient? What would have happened to the patient if I had acted? If such questions are not resolved, moral residue may result.

Formulated Meaning: Subspecialty trainees may experience distress because they are unable to provide care beyond the requirements of the patient-physician relationship.

4. Communication Issues

A. Caught in the middle of opposing opinions of senior team members

A main theme that relates to moral distress amongst subspecialty trainees in this study is the barriers that prevent effective communication. Communication within clinical teams occurs on occasions when the team discusses issues relating to the care and treatment of a patient. In such situations, subspecialty trainees can feel caught in the middle of opposing opinions of senior team members. As important decisions on the appropriate care a patient should be receiving are often undertaken in team settings, during such discussions all parties present usually have the best interest of the patient when making decisions. However, subspecialty trainees may experience cases where differing opinions are brought forward by members of the team and the trainee feels inclined to side with one decision but does not do so because they perceive their trainee status as a junior position amongst the other team members. In an examples given during this investigation, a senior physician recommends a radical form of surgery, which the subspecialty resident and some of the other team members disagreed with. Resident A describes the case by indicating that: *"So before he went for surgery there was a lot of debate about whether the surgery was indicated or not, where a physician had actually recommended palliating the patient and then another physician suddenly recommended this rather radical surgery. The second physician that recommended the surgery was looking after the family and so the family decided to go with that. I was in ICU after the surgery had happened and unfortunately it didn't go well.* The trainee goes on to explain another situation by indicating that *"...I have been in a case where I have a very senior neurologist who is an expert in epilepsy and he is not doing anything because he wants to look through records and make a decision and I*

have ICU sort of angry with me for not doing anything, well it is like, how do I approach a senior who knows exactly what he is doing. Obviously he knows what is going on, he doesn't need me to say but that has definitely been distressing."

Such examples of cases of differing opinions on how care should be advanced highlights the unique position that subspecialty residents may find themselves within a team of senior physicians and other experts. The inability to advocate on behalf of a patient due to the feeling of having the status of a trainee or not enough experience can lead to situations where the trainee feels caught in the middle and can also bring about moral distress. In such a situation, to avoid suffering in silence, it is advisable for subspecialty residents to be respectful but still voice their opinion, provided their opinions have been carefully thought through and are appropriate to the case. Even if the trainee is wrong, such situations can serve as an important learning experience to the trainee.

Formulated Meaning: Subspecialty residents may experience moral distress when caught in the middle, between senior staff members who have differing opinions on care that should be provided to a patient.

B. Having a different medical opinions than other staff members and avoiding confrontation by not advocating for the patient

Another barrier to effective communication was seen to occur when the subspecialty trainees worked in teams with staff from other departments. In such scenarios when the subspecialty trainee had a different medical opinion with the other staff members but there were

no ways to overcome the disagreement relating to the care the patient should receive, moral distress was seen to arise. Resident F explains how such a situation was averted by transferring a patient to another hospital after having a disagreement with staff member at a clinic. The subspecialty trainee indicated that "*So I think my moral distress in that case is that I didn't stand up for my patient strongly enough because I didn't want to get into it with the staff knowing that I could cheat so it leaves the systemic problem in place and in a way you are not doing the right thing for your patient again. I still could have been wrong, especially as a learner there is that parameter where you think maybe I am wrong but I felt uncomfortable enough and the patient was sick enough that at the other Hospital people were monitoring him very closely because I was uncomfortable enough and I took steps to change things for that patient but I think a lot of the time the moral distress is caused by myself because I am not strong enough to stand up sometimes when I think it is right.*"

Subspecialty medical trainees are on occasion required to work within such multidisciplinary teams with other healthcare professionals who have diverse skill sets, which aims to provide multidimensional and comprehensive healthcare for the patient. The clinical team can include other subspecialty services and, or primary healthcare services and in such a care setting there is usually a primary physician who is responsible for the leadership of the clinical team. In such a team setting there can be a difference in opinion for the care that a patient is to receive and when such a disagreement occurs there should be a comprehensive way to deal with such issues which can include the primary physician defusing tension amongst the care team, or accessing other solutions such as those carried out by Resident F in order to prevent moral distress from occurring. It is imperative for trainees to advocate for their patient. In such

situations the presence of oversight can bring about a valuable learning experience, especially if the trainee is wrong.

The disagreements that subspecialty medical trainees may experience with other staff members is not limited to members of the clinical team that they have no direct relationship with outside of that setting but can also include their supervising staff. The relationship of a supervising medical staff and a subspecialty trainee is a unique one as they both work in the same field but the supervisor has authority over the trainee who is also learning from the supervisor. The authority of the supervisor entails assessing and evaluating the resident's performance. Although subspecialty residents are not experts in their field yet, it is possible for them to disagree with their supervising staff. When the trainees disagree with the opinion of their staff, it can often be seen as a learning opportunity as accounted for by residents in this study. However, not all the residents felt that every disagreement was a learning opportunity. Resident A expressed the difficulty of speaking up to the person who will be evaluating performance by indicating that; "*I feel like things could be better but then, I have somebody experienced, it's hard to argue with them."* Resident A goes on to explain that "*For residents, at least for me, Its sometimes very difficult to speak up because the person you would be disagreeing with or confronting, the person will be evaluating you at the end, I need to get by and complete my program so you don't want to ruffle too many feathers when you are in this position, so that's a big problem."*

The feelings of moral distress occurs in such situations where a resident disagrees with a supervising staff and the residents does not press the issue further for fear of retaliation from a supervising staff in the form of the resident receiving a bad evaluation mark and the patient consequently experience a worsening condition. The ability of supervising staff to clearly

communicate with their subspecialty trainees in such scenarios can avert such situations. This can be done by being as open and transparent as they can especially when discussing care plans for a patient. In situations where the residents cannot voice an opinion clearly to a supervising staff on the spot, it is advisable for the resident to fully investigate the issue and provide evidence for their viewpoint before approaching their supervising staff or even a program director, in a respectful manner. This is not an easy task but clearing the air is highly advisable to avert moral distress when working close to a supervising staff in a care setting. Such an experience can also result in a valuable learning experience.

Formulated Meaning: Subspecialty trainees may find that having a different opinion from other staff members may bring about distress that can be heightened if they do not appropriately advocate for the patient especially when disagreeing with a supervising staff.

C. Holes in communication within medical teams

While working within a multidisciplinary team, it was observed by a participant that sometimes care plans being communicated were not as inclusive of all opinions as they could be. Furthermore, sometimes, more junior team members such as residents would communicate important care issues with each other while other senior members or the primary care providers were left out, creating a gap in the communication thread. Resident F explains this by indicating that; *"There are a huge amount of holes in there and as a resident you don't have the authority of the staff nor necessarily the expertise and I think it is particularly bad when you have resident on resident communication where there is a level of trust between us, we work together and we miss the staff, things maybe happen for the patient or don't happen for the patient based on staff*

judgments or the value of that lower level conversation so there is a lot of places where the thread of communication becomes lost and we don't do a good job and I think sometimes in the subspecialty area you feel fairly powerless to make the communication gap full."

The basis for an experience of moral distress was indicated by the participant as having a feeling of being "*fairly powerless*." It appears that in such situation opinions from more senior care providers may take precedence to the opinions of trainees or other junior residents. Resident F further explains this by indicating that, "*...a lot of the time in the subspecialties you are not the primary care giver for the patient and when you have an umbrella care giver for a complex patient there is maybe two to five subspecialties involved plus the primary group and the primary group is made up of maybe a clinical clerk or a junior resident and a senior resident and the staff or maybe two staffers. So you end up with this huge group of people, many of whom talk to the patient or to the family or to only one level of that primary care group and often we just don't sit down and make a clear picture of what we think could happen for the patient."* If junior multidisciplinary team members such as subspecialty trainees are unable to appropriately advocate for a patient or clearly communicate within a clinical team they may face moral distress. In such scenarios it is the role of the lead physician to ensure there is good clinical governance within the clinical team they are leading. This should entail effective time management, mutual respect, trust, clear communication and inclusiveness of all team members.

Formulated Meaning: Subspecialty residents may find it distressing when they are unable to effectively communicate their opinions with other team members.

D. Availability of Staff Support

In other situations the trainees may sometimes feel that the supervising member of staff does not provide sufficient support. In one case in this study, the trainee believed this led to a near miss event[1] that was very distressing. Resident C explains the situation by indicating that "*I called my staff and he said okay. But I felt that he should come in to the hospital so ultimately he is the most responsible physician but I mean its the middle of the night and they are tired and you can't really understand them on the phone but in the end I had to call another service, I had to call anaesthesia to come and help me. And then they call it a near miss event because things had progressed for so long and they felt that they could have been involved earlier. But I felt in the end the staff could have come in from his house but instead I was left there unable to carry out the procedure for my patient...*"

Given that subspecialty trainees are much more senior medical practitioners compared to medical residents, a higher level of independence is usually expected when providing care. However in this situation, the residents believed that support was warranted due to their lack of experience. Such examples indicate the importance of the need for supervising physicians to clearly define the roles and responsibilities of trainees especially in difficult circumstances. This includes the provision of resources or other professional who can be of assistance and can be accessed during emergency situations when the supervising member of staff is unavailable. It is also important for trainees to feel that they have an adequate amount of support for their learning experience. Resident F explains a situation where a staff did not provide such support by indicating that *"One time in oncology I had quite a scary experience where I had a patient who was seizing but the mom had thought the patient was having a tantrum and they didn't even call*

us for quite a while about fifteen minutes into the seizure I was eventually called for the child not settling from a tantrum and the staff just wouldn't come. I called the staff, I called for the ICU step team which is like a code blue triage team so they come right away and help. So I eventually called a code blue for the patient but I felt not helped or not heard and maybe it was because the staff had confidence that I could manage it but I really wanted the staff to be there."

Formulated Meaning: Subspecialty medical residents may find it distressing when dealing with medical emergencies with no direct guidance from a supervising staff.

5. Personal

A. Inadequate time

Another issue that came from the findings of this research was that subspecialty trainees experience a number of personal issues relating to how they deal with their workload. One of such personal issues is the challenge of dealing with time constraints during practice. Resident F shares this concern by indicating that; "*Sometimes you just don't have time to get through your day in a timely fashion. If you come in on a Monday and you have twelve new patients and seven consultations to do, your last consult might get done at five PM and you triage it based on your knowledge but your knowledge base isn't great because you haven't seen the patient yet so sometimes you'll find out, oh my goodness I should have done this procedure on this kid today, it is five o'clock, what is going to happen, the operating room is closed so it is another possibility where you can have gaps in care."*

Although trainees are taught to manage their time appropriately by triaging, it can still be

stressful especially when trying to ensure that all patients are appropriately cared for. This can lead to an experience of moral distress because the lack of adequate time to see all patients may be a result of inadequate staffing which, serves as the institutional barrier. In such situations it is essential for the trainee to communicate the problems relating to scheduling with the supervising physician and/or the program director if available. This should be done to ensure that appropriate time is allocated for all patients that the subspecialty trainee is assigned to.

Formulated Meaning: The large workload and lack of time to complete tasks can bring about moral distress to subspecialty trainees.

B. Personal errors

Another personal issue that can result to distress amongst subspecialty trainees is how they deal with personal errors relating to their practice. Subspecialty trainees go through an intense training program, which involves carrying out complex procedures for patients that can be challenging. As the trainees are still in the formative stage of their professional work, they have limited clinical knowledge and rely on a supervising physician for assistance. Consequently, medical errors can occur during subspecialty medical training. Although this experience does not equate to the traditional definition of moral distress where the individual knows what is ethically appropriate but is unable to carry out that action due to institutional constraints, there is still a potential for a significant amount of distress to be experienced in such scenarios. Resident F explains this by indicating that; *"The last one for me is my own personal errors and failings. That causes me a huge amount of distress, whether it is because I make a mistake or because I have my own weaknesses, like I'm a wimp and I don't stand up to people if*

I believe strongly in something necessarily, I mean honestly I'd defer to the janitor if they spoke strongly on a medical point. So then I kick myself and think, I really shouldn't have done it that way, even if you are wrong the staff can correct you but if you don't stand up then that opinion stays in your mind and then maybe you were right and maybe the patient suffers."

This form of distress occurs due to personal reservations or fear of reporting an error. This raises the importance of trainees being aware of the errors that are made in practice, reporting them appropriately and attempting to seek out how to prevent such errors in future. This may be done by consulting with a senior supervising physician or colleagues. Trainees who commit an error are faced with ethical issues, including whether the error should be disclosed to colleagues, supervising staff or the patient. Such errors can lead to distress when they are not reported. Reporting of personal errors to an educator provides the opportunity for the faculty staff to provide life long learning pertaining to the case and model professional values such as accountability and integrity. Furthermore reporting an error can minimize the feelings of distress experienced by the trainee.

Formulated Meaning: Dealing with medical errors can bring about distress to subspecialty residents especially when the mistake entails the resident's moral character

C. Lack of control on overall patient care

As previously discussed, subspecialty trainees are on occasion required to work in a multidisciplinary team, headed by a primary physician. Within such teams the trainees may be present to represent a senior subspecialty staff or to provide their own professional opinion. Nevertheless, it may be difficult to advocate on certain issues such as more intense care or

withdrawal of certain treatment if the primary physician or other more senior team members refute such opinions. Such a lack of control on the overall patient care can lead to moral distress if there aren't any measures present to ensure that the professional opinions of all team members are carefully considered. Resident C explains this concern by indicating that; "*I find that if they are not on the same page as the medical team, then you don't know what to do because ultimately they are the ones giving consent for the child. We are a consulting team so we are subspecialist and most often the patients are taken care of by other teams so if there is a difference in opinion, so we are only giving our opinion, a lot of the time for patients who are admitted to the hospital so if the admitting team has a different road that they are going on and your opinion differs from their opinion then I guess that would be another barrier."* Resident F also supports these claims by indicating that; *"as a subspecialty resident you make recommendations, you lack control and you sometimes lack even the ability to really clearly delineate what is important and why it is important in your subspecialty opinion and have that actually happen for your patient. Its harder work for advocacy and its harder work for communication to make things realistically happen."*

Formulated Meaning: Subspecialty residents may find it distressing that they provide their professional opinion to a primary care provider who may in fact decide on using another course of action.

3.3. Coping Mechanisms

The following themes and sub-themes were extracted from the transcript. They are essential to the understanding of how Subspecialty residents live through the distresses they experience and the strategies they use to cope with such distressing situations.

1. Support from fellow Professionals
• Speaking with colleagues as a coping mechanism • Speaking with supervising staff as a coping mechanism • Formal team rounds to discuss cases as a coping mechanism
2. Appropriately Dealing with Emotions
• Showing Empathy for patients or family as a coping mechanism
3. External sources of Support
• Talking with family members such as spouses as a coping mechanism • Extracurricular activities as a coping mechanism

Table 2: *Coping Mechanism Themes and Sub-Themes*

3.4. Significant Statement relating to coping strategies extracted from the transcript

This research established that subspecialty trainees work in a stressful environment which at times can result in moral distress. Although some of the residents are aware of the physician helpline and know that there are other professional support services available to them through the hospital, none of the residents who took part in this study had used or planned to use any of the services in future. However it appeared that all the subspecialty trainees in this study had their own ways to deal with the stress of their day-to-day activities. These entailed the support they received from fellow Professionals, external sources of Support and being able to appropriately Deal with Emotions. The following descriptions of

statements embody quotes from subspecialty medical trainees relating to coping strategies that were extracted from the transcript of this research.

Of all the support the trainees had access to, the support the trainees received from fellow colleagues in the form of informal discussions about difficult experiences they had experienced appears to be the most beneficial in managing stressful situations. Resident F indicates this by stating that "*I think having a good relationship with your staff and colleagues are essential. They are the ones who will help you deal with the tough situations when you are at loss."* This is because the trainees believe their colleagues have an understanding of dealing with such situations, are trustworthy and are able to listen and provide appropriate feedback. Also, the ability to talk difficult cases over with a supervising physician was helpful especially in cases where clarity on the issue was given which in turn enabled the trainee to experience the situation as a learning opportunity. Resident C indicates this by saying that *"I find talking with my staff can lead to a solution, which may resolve the situation and my distress often disappears after that."*

Formal discussion settings were also used by some of the trainees as a way of coping with difficult situations. Resident C also found these to be useful and stated that; "...Every week we have case rounds where we talk about things that are difficult or that we are struggling with, so that is quite useful"

Sources of support outside the hospital environment include talking with family members such as spouses, engaging in activities such as sports and using faith as an outlet in the form of prayer. These are supported by Resident D who indicates that **"***Sure, so definitely talking things out with colleagues and with my husband. Sort of de-identifying everything but talking about what I struggle with, prayer is important for me, I think those*

are probably the biggest things." Resident E also explains how external support helps by indicating that; ***"****I try to preoccupy myself with things to do outside of the hospital environment. I love the outdoors and go biking very often; I also play a lot of sports, mainly volleyball and basketball which definitely takes my mind of things."*

Another coping strategy that was useful to a trainee was being able to manage emotions by empathizing with parents and family members while also expressing feelings, which is helpful in certain situations. Resident F explains how effectively dealing with emotions proved to be a good coping technique by indicating that *"I think it is ok to feel along with the parents so long as you are not over feeling and your weeping and the parents are fine, that's not good but you know its ok for them to see that you share their distress to a certain extent and that in it' self is a coping mechanism to know that you can be a human so you are effective and functioning professionally."*

3.5. Other Themes: Themes relating Learning Experiences of Subspecialty trainees

Other important information accounted for by the participants in this research was that there was an experience of more distressing events in early on in their first residency due to lack of preparedness to deal with complex medical situations. It was also accounted that there were more stresses in subspecialty training due to more responsibility to deal with patients as well as their parents however the fact that they handled more complex situations enabled them to deal with such issues better in future as a result of the learning experience. There was also an account that it is important to have a good relationship with colleagues and supervising staff who are extremely helpful in coping with moral distress.

Themes relating Learning Experiences of Subspecialty trainees
• Experiencing more distressing events in residency due to lack of preparedness • More stress in subspecialty training due to more responsibility • Handling situations better as a result of experience • Experiencing difficult cases as a good learning tool • The need to have a good relationship with supervising staff • Different opinion with staff as a learning opportunity

Table 3*: List of Other Themes relating to Learning Experiences*

3.6. Questionnaire Results

The responses from the questionnaire indicate that although the trainees experienced moral distress, they were reasonably satisfied with their programs as indicated by their noted level of satisfaction. Four residents awarded a score of four out of five for their level of satisfaction with their program while the other two residents awarded a three out of five level of satisfaction. Such an outlook may indicate that the subspecialty trainees see their training including moral distress along with coping strategies as valuable learning experiences that will help shape them to become better practitioners once training is completed.

Most of the subspecialty residents had completed their residency program in the city they currently practice in and had not taken any time away from practice between the completion of their residency and start of the subspecialty program. The questionnaire also shows that a wide range of subspecialty programs were included. Accordingly, this study indicates that moral distress is not limited to any one specific are of subspecialty training but that multiple areas in medical training may be susceptible to such an experience.

At the time of the interviews all of the subspecialty residents lived with a spouse. This indicates that having a spouse does not prevent moral distress but they can be valuable

to cope with such experiences, which is indicated as an external source of copping strategy in the result section.

A. Personal
1. **Marital Status:** All of the subspecialty residents in this study were married and living with a spouse. 2. **Children:** The responses from the questionnaire indicated that 4 of the 6 residents had children.
B. Education
1. **Location of first residency program:** 4 of the 6 residents completed their residency the city they currently practiced in. 2. **Gap years before the start of subspecialty program:** 5 out of 6 residents started their subspecialty program immediately after their residency. 3. **Year Medical Degree received:** Responses from the questionnaire indicated that the residents completed their residencies between the years of 2002- 2008 4. **Start of Subspecialty Program**: Responses from the questionnaire indicated that the residents started their subspecialization between the years 2008 - 2012
A. Practice
1. **Areas of Subspecialization:** Neonatal-Perinatal Medicine, Respirology, Neurology, Endocrinology 2. **Level of Satisfaction with Subspecialty program:** Responses from the questionnaire indicated that 4 of the 6 residents had a 4/5 level of satisfaction with their program while the other 2 residents had a 3/5 level of satisfaction with their program.

Table 4: *Questionnaire Results*

3.7. Exhaustive Description: The Essence of Moral Distress Amongst Subspecialty Medical Residents

This research aimed to establish whether pediatric subspecialty medical residents experience moral distress and if so, to establish the extent of the experience. The findings are that moral distress was experienced amongst the subspecialty medical trainees due to certain experiences when dealing with parents, providing care while unable to access resources, navigating issues relating to communication and other personal issues. The causes of moral distress described by the participant, other than personal issues such as errors in practice or personal mismanagement, deal with the trainee's social relationship within their organisational hierarchy as well as the limitations of the self-component of their moral action. In other words, a number of situations that were out of the control of the subspecialty medical trainees brought about a feeling of moral distress while an awareness of personal limitations served as a barrier to moral action whilst working within the healthcare system.

The notion that moral judgment and identity relate to one another is explained by Kristen Monroe's research on Categorization and Identity for Moral Action. Monroe explains that "Through identity, focusing on the human capacity for inter-subjective communication and the need to distinguish boundaries via categorization. Once people create categories, furthermore, they feel they must accord equal treatment to all members within that class. This suggests the drive toward morality emanates in human psychology and that we must honour the humanity of others in order to claim it in ourselves" (Monroe, 2001, pp 491). In the context of this research, the subspecialty residents "honour the humanity" of the members of the network of people within the hierarchy of their practice as well as outside their hierarchy (e.g. parents) whom they deal with on a daily basis. As such, honouring these categories (i.e. a senior physician, hospital

policy or a family member) and knowing whether or when to be morally active can be challenging to identify. It is at the point where there is no moral action that moral distress can occur. One of such situations is seen where Subspecialty trainees are faced with a senior physician or a parent wanted to prolong care for a patient that the subspecialty trainee deemed to be futile. In these situations the inter-subjective communication between the physician or the parents were limited by boundaries such as not wanting to question the intelligence of the senior physician giving the order to continue futile care for the patient. This issue is also seen in the case of an emotionally distressed parent who is a decision maker for the patient and wants any treatment available to prolong care for a non-responsive patient and a subspecialty trainee does not want to intervene on a basis of protecting the patient's autonomy as well as trying to show compassion for the parents, who are going through a difficult time. The moral distress occurs in these sort of situations if the care persists without the subspecialty trainee taking the moral action to speak up for what they believe is in the best interest of the patient because they are unable to do so due to constraints such as the ones mentioned.

Another situation that brought about moral distress amongst the subspecialty trainees occurred when they faced parents who had a care preference that was different from theirs. In these situations the inability of the trainees to act on their care plan due to a respect for autonomy of the patient as represented by a parent, who in these cases were the decision makers for the patients. The main issues that brought about moral distress include situations where parents refused consent for procedures such as vaccinations, immunisations or blood transfusion due to personal reasons, prolonging futile care on compassionate grounds or wanting a specific course of treatment that the subspecialty trainee did not agree with. The moral distress that occurred made subspecialty trainees feel as if there was a conflict between themselves and the parents

with no way of reaching their preferred solution which they thought was in the best interest of the patient.

The other issue that caused moral distress when the subspecialty trainee dealt with parents occurred when they experienced possible signs of child abuse but they had no concrete evidence to indicate that there was abuse. In these situations the trainees recognised the need to appropriately forward these cases to the follow up services that deal with such issues but were unable to do so due to the lack of evidence. The parents in this case further refused to see a social worker and psychologist voluntarily. In this situation the subspecialty trainee felt helpless to act as there where no further guiding protocols to additional care beyond medical care which the trainee felt that the patient needed.

Moral distress was not only caused by the constraints of an inability to deal with other individuals. This is evident by the frustration the subspecialty trainees experienced when they did not have appropriate support services available. The lack of adequate resources such as other consultation or laboratory testing services made it difficult for the subspecialty trainees to carry out their duty especially in situations where there was a solution for a patient complaint that required the unavailable resource. Although one of the residents explained that some of the services they had issues with were getting better, it was also indicated that closed services especially late at night were still a major issue.

In other situations, the inability of the subspecialty trainee to see a patient after the patient had come to clinic and refused to come back brought about a degree of moral distress. The moral distress arises as the professional, legal and personal constraints prevent caregivers from actively seeking patients that do want treatment. Nonetheless, this caused the trainee to experience moral distress because the trainee knew that the patient might be worse off if no treatment was sought.

This issue persisted with the trainee to the point that the trainee felt moral residue after a year of initially treating the patient. This moral residue arose because the trainee was unable to find an appropriate resolution to the issue of not providing the care that the patient needs which was the initial cause of the moral distress.

Another major concern that brought about moral distress amongst the subspecialty trainees involved issues relating to communication with colleagues and senior staff members. Effective communication is an important tool that is required to bridge the self-component of moral action with the social constituent of moral consciousness (Habermas, 1990). Consequently navigating the issues relating to effective communication caused feelings of moral distress amongst the trainees. The findings on the issues relating to communication that brought about moral distress occurred on occasions where the subspecialty trainee felt caught in the middle between opposing senior team members debating on a course of action for a patient, when there was debate between the subspecialty trainee and another member of the multidisciplinary team on the level of care a patient required, when the subspecialty trainees did not act to fill the holes in communication within the care team and communication strains with supervising staff.

The accounts by the participants in this study on the process clinical teams use for consideration on the treatment or level or care that a patient needs indicate that cooperative discussion can often lead to intense debate. In situations where there are senior team members debating care, subspecialty trainees can at times side with a view. Although the subspecialty trainees are part of the medical team assisting with the care of the patient by giving their opinion, they recognise certain boundaries relating to their position within the team hierarchy, especially when caught in between senior team members intensely debating on a care plan. Although the

moral distress can occur during the discussions where the trainee sides with a senior team member and does not appropriately advocate for the opinion or advocates for a particular course of action that is not pursued further, it is in witnessing the patient experiencing an adverse effect that the moral distress becomes evident.

It is important to note that subspecialty trainees have a unique position within the hospital hierarchy. As trained physicians they are able to have and provide their medical opinions as a consult service and advocate on issues that they have a strong moral conviction on, while as medical trainees they are still learners within the system. Navigating this position in the system can be challenging especially in cases where the trainees see a need to intervene in the care of a patient. As such, a communication issue that can arise can involve trainee disagreeing with another member of the clinical team. In this situation, such as the one experienced by a subspecialty trainee in this study, the trainees can experience moral distress if they do not advocate for their patient effectively or they advocate appropriately but the trainee's opinion is ignored and the patient experiences an adverse outcome. A trainee in this study narrowly averted this experience, even though the trainee did not fully advocate for the patient due to the challenges of engaging in a debate with the other clinical team member, the trainee was able to use other means (convincing a senior staff member to intervene) to achieve the desired outcome. This indicates that moral distress can occur in situations where the subspecialty trainee working within a team setting is unable to effectively advocate to other team members on behalf of a patient.

As mentioned earlier, subspecialty trainees are trained physicians as well as learners within the medical system. As such, they often have opinions on care from their viewpoint. When working with their supervising staff they can, on occasion, have a different opinion with

the staff member. Although their expertise is not at the level of their supervising staff, it is possible for them to have a view strong enough that they feel a need to speak out. In such situations moral distress can occur if the patient experiences an adverse effect and the trainee was unable to speak out because of fear, as the person they will be debating with will be evaluating their performance. In such situations, the trainees may not argue because they see the experience as a learning opportunity.

Another issue relating to subspecialty trainees and their supervising staff that brought about feelings of distress was on occasions where the supervising staff did not provide the adequate clinical support that the trainee deemed to be necessary. This situations brought about moral distress because the trainees knew the right thing to do was to contact their staff for support but barriers such as a trainee scheduled and working late at night when the support staff was at home in the event of the emergency or the supervising staff not responding to the emergency. In these situations the lack of support as well as the expectations of support coupled with experiencing a patient's adverse outcome can result in feelings of moral distress.

Another issue that relates to moral distress and communication amongst subspecialty trainees are when there are holes in communication within the multidisciplinary clinical team. As already discussed, deciding on care that a patient may need can often involve heated debate or situations where the trainees feel caught in the middle of senior team members debating on care. As such, on certain occasions, medical subspecialty residents feel more comfortable discussing care plans with certain team members such as residents, subspecialty trainees or other junior team members. This results in gaps in communication when other team members are not briefed in the event of a new development such as a solution to a patient's issue. In these situations the subspecialty trainees feel "powerless to make the communication gap full" because they feel that

little value is given to the lower level communication streams. Moral distress can result in such situation if the patient experiences an adverse effect due to the gap in communication.

The final essence of moral distress as accounted for by subspecialty medical residents in this study involved how they dealt with personal issues relating to their practice. This entails navigating issues such as time management, personal faults and their lack of control on overall patient care. The lack of adequate time in a trainee's opinion served as a barrier to preventing optimal care to patients. Although triaging within the care system is an important aspect of training, it can lead to moral distress in situations where a patient experiences an adverse effect due to the insufficient time to attend to the patient's issue. Even though this time management is a personal issue, intuitional policy and support staff can play an integral part in guiding subspecialty trainees to ensure there is appropriate allocation of time for patients.

Another personal issue that brought about moral distress amongst the trainees are dealing with personal errors. The example used in the study is the fault of the trainee in making mistakes and not advocating for a patient appropriately. Moral distress can occur if there is fear of reporting a medical error due to a constraint in the reporting system such as fear of being reprimanded. This raises the importance of trainees being aware of the errors that are made in practice, reporting them appropriately and attempting to seek out how to prevent such errors in future.

The last personal issue deals with a perception by the trainees of a lack of overall control on patient care. As discussed, subspecialty trainees provide their medical opinion, which can be within a clinical team setting. Moral distress may arise in situations where the subspecialty trainees feel that their opinions are not being considered in its entirety or being ignored. This issue along with the other personal issues present a different moral perspective of the

subspecialty trainees due to their inward reflective nature. Although there is still a social element of such personal issues, as they exist within a social construct, it is important to note that a change in moral consciousness (through for example, identifying inadequate time allocation, or care limitations and effectively addressing these issues) can result in moral action that can prevent or help cope with moral distress in such situations.

The consequences of the resulting moral distress that arises due to the issues discussed is that training to become a subspecialty medical practitioner can result in working under a significant amount of moral distress which can at times be overlooked due to the situation being seen as a learning opportunity as opposed to a problem that needs a solution. Consequently, there are a number of coping strategies that are used to avert some of the feelings of distress. These include support from fellow professionals by discussing with colleagues, supervising staff and informal rounds. It is important to note that although talking about the case that brought about the moral distress provides a certain amount of relief to the trainees it was apparent that informal discussions with fellow colleagues helped more than other forms of discussions such as with family members. This was explained to be due to the technical nature of the discussions as well as confidentiality issues surrounding their patient's case. Nevertheless, trainees who had family members who practiced medicine found them to be also helpful in dealing with such situations.

Other ways that the subspecialty trainees found helpful in coping with moral distress include appropriately dealing with emotions such as by empathising with family members after an adverse effect had been experienced. Engaging in stimulating activities such as prayer and participating in sports were also useful to some of the trainees. The subspecialty trainees in this study also highlighted the need to have a good relationship with colleagues and supervising staff, as they can be very helpful in coping with moral distress. Although subspecialty medical trainees

in this study experienced a number of stresses including moral distress and moral residue, the questionnaire indicates that they have an overall good level of satisfaction with their program, which may be due to the availability of informal support to help cope with the moral distress that they face.

Chapter 4: Discussion

The practice of medicine is known to be a moral endeavour where medical practitioners strive to provide care to patients to the best of their abilities. The provision of care can at times require the need to advocate on behalf of a patient. While advocating in some situations, there may be conflicts between different views based on moral values as practitioners provide care for their patients (Greer *et al.,* 2012). Moral distress can occur in situations where such conflicts are not resolved and especially when the patient experiences an adverse outcome. Advocating on behalf of a patient can be complex, nevertheless, the revised CanMEDS Physician Competency Framework by the Royal College of Physicians and Surgeons of Canada clearly states that advocacy is a duty of a responsible physician. Series I of this document states that; "As Health Advocates, physicians responsibly contribute their expertise and influence to improve health by working with the patients, communities, or populations they serve to determine and understand needs, develop partnerships, speak on behalf of others when needed, and support the mobilization of resources to effect change". This document goes on to inform practitioners to leverage their positions as physicians and to establish key relationships with other health professionals that will enable appropriate advocacy. This is a challenge for subspecialty medical residents, as they are still trainees within the system and consequently navigating their network of colleagues and leveraging their position may not always be straightforward as a result of their unique position within the healthcare system.

It has been reviewed from the literature that moral distress is an experience that can be a painful feeling due to a psychological disequilibrium which arises when an individual knows what is ethically appropriate but is unable to carry out that action or carries out what is believed to be the wrong thing due to an institutional constraint (Jameton, 1984). Establishing the impact

of moral distress on professions within the healthcare system is important because there is a need to understand how such an experience affects the well being of the practitioners, how they can be supported to ensure appropriate advocacy and also because experiences of moral distress by healthcare practitioners can also affect patient care (Ganz & Berkovitz 2012). Although a number of professions in the healthcare system can experience moral distress, it was first studied amongst nurses and consequently a wealth of research in this field currently exists. These works have contributed to the current knowledge base of moral distress and has shown that its effects on an individual can include a loss of self-worth, personal relationships are affected by the experience as well as a manifestation of other psychological and physical symptoms such as nausea, migraines, sleeplessness, a sense of isolation and stomach upsets due to anguish (Wilkinson, 1987, Hanna, 2002). Such effects amongst nurses have led to some transferring to another position in nursing or leaving the nursing profession entirely (Wilkinson, 1985, Elpern *et al.,* 2005, Corley *et al.,* 2005). These findings indicate that there is a need to fully establish the impact of moral distress in healthcare fields where a psychological disequilibrium exists. An important workforce that can experience a psychological disequilibrium in practice that may lead to moral distress are students who are actively practicing medicine. These include medical students, medical residents and subspecialty medical trainees (Chiu *et al*., 2008. Hillard *et al.,* 2007, Wiggleton *et al.* 2010).

Studies on moral distress in medical education have recently emerged as a focus in medical research, however there is still the need for more in-depth research to fully understand the scope of it's impact as well as what support measures are most effective and how these support measures can be promoted to help deal with cases of moral distress. This study set out to add to the current works on moral distress in medical education by aiming to establish whether

pediatric subspecialty medical residents experience moral distress. The findings indicate that the participants in this study experienced moral distress due to situations they faced when dealing with parents, being unable to access resources required for patient care, navigating issues relating to communication and other personal issues.

4.1. Findings Related to Other Studies

A previous investigation on moral distress by Chiu *et al*., (2008) amongst pediatric surgery subspecialty trainees found that moral distress was also experienced due to a number of reasons that are similar to the findings of this study. The issues that caused moral distress amongst that study group include dealing with issues pertaining to end-of life such as withdrawing care and futility of care involving neonates, other futile procedures that brought about complications leading to suffering of the patient and/or families, a lack of expertise "to properly counsel families, the lack of the opportunity for trainees to discuss palliative care decisions with senior staff, lack of trainee expertise in certain situations, a lack of staff support, poor communication between supervising staff leading to conflicts on treatment plans, disagreeing with an attending physicians and experiencing a bad outcome for the patient after the procedure the trainee objected to is carried out. Finally this study indicated that the ability of the trainees to deal with such issues varies depending on their level of training. The findings from this study encompass four of the five thematic findings of this research. These include dealing with futility, relationship with parents, access to resources communication and personal issues. Even though the study by Chiu focused on one subspecialty group and this research investigated multiple subspecialty areas, the fact that the findings are similar to the ones reported in this study

indicates that the causes of the experiences of moral distress during training across the subspecialties may be similar. Further research is needed to fully compare moral distress amongst the different subspecialty medical training programs.

Another study amongst pediatric practitioners involved an investigation by Hillard *et al.,* (2007) on pediatric residents. This study found that the residents experienced moral distress due to their lack of experience, conflicts with colleagues in a higher position within the residency hierarchy, conflicts in care opinion with senior staff members, not knowing how to respond to unprofessional and unethical behaviors. Although the medical residents in the study preferred formal processes for resolving ethical conflicts, they mainly sought support from their peers to deal with their moral distress. The group used in that study is less experienced compared to subspecialty trainees in this research however there is a similarity in the type of support they access to deal with their moral distress. Although a lack of experience was not a major issue for the subspecialty trainees in this study, their recognition of the boundaries of their practice is similar to the findings amongst medical residents by Hillard *et al.,* (2008).

A number of researches have been carried out to establish the impact of moral distress on the nursing. As previously mentioned, such research provided a basis for its investigation in other professions in healthcare. These studies include the work of Elpern *et al.,* (2005) on medical intensive care nurses who experienced moral distress due to dealing with issues relating to futility of treatment for patients, disagreements with nursing colleagues or physicians on the level of care a patient needs, feelings of being powerless to act in situations and lack of appropriate support. These findings are also similar to some of the causes of moral distress in this study. Another investigation by Zuzelo (2007) showed similar findings amongst registered nurses who experienced moral distress due to having different care opinions with physicians,

dealing with family members who wanted futile care for patients and inadequate staffing. The resources that the nurses in this study accessed for support include nurse colleagues, managers and supervisors, ethics committee consultations, chaplains, risk managers and physicians.

Studies in nursing, such as the one carried out by Elpern *et al.,* (2005) and Corley *et al.,* (2005), have also established that a significant number of nurses have left a position in the past because of moral distress. Although the findings from this study do not indicate that subspecialty medical trainees considered leaving their area of subspecialty training, the causes of moral distress amongst nurses compared to subspecialty trainees are similar. The research done in the fields of pediatric surgery subspecialty training, medical residency and nursing indicate that the experience of moral distress can occur where the psychological disequilibrium exists or where the individual feels powerless to act in the best interest of a patient as also indicated in this research.

4.2. Research Limitations

Although the information that was obtained from this research provides an insight into the moral distress faced by medical subspecialty trainees, there were some limitations. A limitation with using a descriptive technique is the challenge of ensuring the validity of the information provided by the participants, this might also result in difficulty in replicating the results. This is a concern in this research as "qualitative research occurs in the natural setting, it is extremely difficult to replicate studies" (Wiersma, 2000, pg. 211). However techniques to go over details were employed during the research to minimise this limitation. This included verification of the data with the participants and analysing the transcripts for inconsistencies. These techniques proved to be useful and similar findings in other research with a similar study

group provides further basis on reliability of the findings of this study. It should also be noted that a small sample size was used in this research, which does not guarantee identical results if a similar study design is used with a larger sample size or if other areas of subspecialty training not covered in this study are included.

4.3.Recommendations for Practice

Effectively dealing with moral distress to avert or help pediatric subspecialty trainees appropriately cope with such an experience is imperative to ensuring the health and well being of practitioners and to also ensure that patient care is not affected. Accordingly ten specific recommendations to practice that this research provides a basis for are listed below.

The crux of the recommendations is two-fold; an emphasis on continuous training in ethics and communication and conscious and continuing enquiry from the residents themselves on what would improve support. The ethics and communication training might take place in the form of lectures, seminars and practical scenarios. During these communication and ethics training sessions feedback should be sought from Subspecialty Residents on what supports are needed. The detailed recommendations are:

1. Medical institutions should continue to improve training in ethics to ensure that students are able to appropriately identify complex moral situations, appropriately deal with them and understand the effects of issues such as moral distress. This should also encompass the key competencies covered by the CanMEDS Physician Competency Framework on being a medical expert. This includes information on being a healthcare professional, health advocate, scholar, effective

communicator, collaborator and manager.

2. Students entering a subspecialty program should understand the scope of responsibilities in their subspecialty and institutions of medical practice should continue to highlight moral distress, burnout and other related stresses that may occur in their practice as well as provide information on how to effectively deal with such challenges.

3. Supervising physicians should also clearly define the responsibilities of Subspecialty trainees. This also includes the provision of resources or other professionals who can be of assistance and can be accessed during emergency situations when the supervising staff is unavailable or appropriate contact information for the supervising staff if accessible.

4. Subspecialty trainees and other healthcare staff should have access to information relating to the opening and closing times of services they may need to consult in their practice. They should also be able to appropriately deal with situations where resources are limited and should communicate effectively with the patient, parents and family members to ensure that they have realistic expectations.

5. Subspecialty trainees should have access to communication training, which should encompass skills training on how team members can actively communicate and participate within medical teams.

6. Other extensive communication training should also be available to trainees and should cover communicating with parents and family members. This should focus on dealing with complex situations and escalations. The ways physicians communicate with parents can affect their

satisfaction with medical care which highlights the need for appropriate communication training sessions on parent and family interactions for all trainees entering any area of subspecialisation. This can be done by organising training sessions where senior subspecialty practitioners or supervising practitioners are present to give advice to new trainees on techniques they use that are effective. Practical scenarios can also help in exposing subspecialty residents to the reality of providing care under difficult circumstance, which is an invaluable experience that can be developed as a skill set.

7. Subspecialty medical residents should be made aware of all support services available on a regular basis. From this research it appears that most of the residents were made aware of such services at their initial orientation but subsequently forgot about how to access the services because they did not make use of them.

8. The introduction of regular rounds sessions with other subspecialty medical residents and staff members in attendance would be beneficial to departments where rounds are not currently taking place. This can be done within teams in the clinic or between members from different teams.

9. Primary physicians in charge of multidisciplinary teams that are collaboratively providing care for a patient should continue to ensure that mutual respect, trust, clear communication and inclusiveness exists within the team.

10. Supervising staff of subspecialty residency programs should be made aware of how moral distress and moral residue can affect their apprentices and they should also understand ways that they can avert such situations.

4.4. Recommendations for Future Research

Further research that can be carried out include investigating moral distress amongst other areas of subspecialty training that were not included in this study to establish whether the findings here are a concern for other training programs. Findings from one participant group can also be compared with another to establish if there are unique causes of moral distress and the different ways support is accessed. Such a study should include a large sample size to assess for generalizability of the findings. Other research that can be carried can include enrolling junior and senior medical residents as well as subspecialty trainees to establish whether they experience moral distress in different ways and the similarities and differences in the ways they cope.

Further future studies in moral distress should also encompass focusing on other groups of practitioners that deal with vulnerable populations where concerns from a moral standpoint can be heightened. These can include but are not limited to practitioners in training who are taking care of patients with chronic conditions or terminally ill patients, practitioners that care for geriatric patients and more studies amongst pediatric practitioners that deal with end of life situations. Such works will add to the current literature on moral distress in medical education. Other works should focus on the effective support strategies, coping mechanisms and solutions for dealing with moral distress in medical education.

Chapter 5: Conclusion

Moral distress is an experience that can be a painful feeling due to a psychological disequilibrium that arises on occasions where an individual knows what is ethically appropriate but is unable to carry out that action or carries out what is believed to be the wrong thing due to an institutional constraint. It is a negative experience that is well studied amongst nurses which provides a foundation for its investigation amongst other healthcare providers. This study found that medical subspecialty trainees experience moral distress. Descriptions from the physicians who took part in the research indicate that there is are informal peer support networks that play a crucial role in helping them cope with moral distress but there is also a need for the recognition of the daily challenges that trainees at a senior level of medical education face. In addition, there is a need for the provision of support services that subspecialty medical residents will feel comfortable enough to access without fear of stigmatization, penalisation or reprisal. Future research on the effects of moral distress on students in medical education as well as the appropriate tools, programs and other solutions that help alleviate such experiences will be imperative in effectively dealing with moral distress. With the continued population growth across Canada, it is important that the health care industry fully recognises and addresses the problem of moral distress in medical education to ensure that all pediatric practitioners have tools, resources and adequate support to avert or help cope with experiences of moral distress.

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Appendix A: Email to Program Directors

Email to Program Directors to Invite Subspecialty Residents to Participate in Research

Dear Sir/Madam

I am a Masters student specializing in Medical Bioethics at the University of Calgary. As part of the requirements of my program I will be carrying out a research project titled "Moral Distress Amongst Pediatric Subspecialty Residents".

I would like to enrol residents in your program in my research who have not already taken part. This will involve the completion of a short survey, a one on one interview on experiences during medical training and I will also be conducting a focus group session. These will entail an introspective analysis by residents on their practice, which may be beneficial to their training.

I would really appreciate it if you could please pass the attached letter to all residents in your program again.

The sessions will be scheduled from now until the end of February and times will not interfere with the resident's work or training schedules. Ethics approval has been obtained from the University of Calgary's Conjoint Health Research Ethics Board. Informed consent will also be sought from the residents who chose to participate in this research.

If there is any additional information you would like me to provide, please do not hesitate to contact me.

Thank You

Sincerely,

Adeolu Adesugba BSc.
MSc. Candidate: Medical Science (Medical Bioethics)
University of Calgary
Phone: (403) 891-4147
Email: aoadesug@ucalgary.ca

Appendix B: Invitation Email to Pediatric Subspecialty Residents

Invitation to Participate in the Research on Moral Distress Amongst Pediatric Subspecialty Residents

Hello,

I am a Masters student specializing in Medical Bioethics at the University of Calgary. As part of the requirements of my program I will be carrying out a research project titled "Moral Distress Amongst Pediatric Subspecialty Residents" and I would kindly like to invite you to take part in this study.

The purpose of my research is to find out if subspecialty pediatric residents do experience moral distress, the main causes of the distress and to also find out how subspecialty residents cope with such distressing situations. This will involve your participation in a 45 minute interview and the completion of a short survey. A final focus group session might be held to validate the findings of the interviews.

You may find that discussing issues related to difficulties in your training program and the solutions to the problems are beneficial to you however revisiting past events that were upsetting may also be distressing.

The interview dates will be scheduled from today until February and I am flexible to meet the times that will be convenient for you. If you would like to participate please contact me at the email address: aoadesug@ucalgary.ca

Your participation will be voluntary and there are no consequences if you decide to withdraw. Please note that the confidentiality of participants who chose to take part in this study will be strictly maintained. Ethics approval has been obtained from the University of Calgary's Conjoint Health Research Ethics Board.

If you have any questions about my research or the interview process, please do not hesitate to contact me.

Thank you.

Sincerely,

Adeolu Adesugba BSc.

MSc. Candidate: Medical Science (Medical Bioethics)
University of Calgary
Phone: (403) 891-4147
Email: aoadesug@ucalgary.ca

Appendix C: Questionnaire

Questionnaire for the Study of Moral Distress Amongst Subspecialty Residents

1. **Sex:**
   ☐ Male ☐ Female

2. **Age:**
   ☐ 20-25 ☐ 25-30 ☐ 30-35 ☐ 35-40 ☐ 40+

3. **Marital Status:**
   ☐ Single ☐ Married/Living with Partner ☐ Divorced ☐ Widowed

4. **Do you have children?**
   Yes ☐ No ☐

5. **What year did you receive you MD?**

   _____

6. **Where did you complete your residency program?**

   Calgary ☐ Out of Calgary ☐

7. **What Year did you complete your residency program?**

   _____

8. **Did you take time out between the completion of your residency and the start of your subspecialty program?**

   ☐ Yes ☐ No

9. **When did you start your subspecialty program?**

   _____

10. What is your area of subspecialization?

_____

11. How satisfied are you with your subspecialty program?

	1	**2**	**3**	**4**	**5**	
(Very Dissatisfied)						(Very Satisfied)