

UNDERSTANDING THE WELL-BEING OF TRAINEES AND THEIR PARTNERS

PAGING LOVE: UNDERSTANDING THE EXPERIENCE OF POSTGRADUATE
MEDICAL TRAINING AND ITS CONNECTIONS TO MENTAL HEALTH AND
WELL-BEING FROM THE PERSPECTIVE OF TRAINEES AND THEIR INTIMATE
PARTNERS

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A Thesis Submitted to the School of Graduate Studies in Partial Fulfillment of the
Requirements for the Degree Master of Science

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MASTER OF SCIENCE (2024)
(Health Science Education)

McMaster University
Hamilton, Ontario, Canada

TITLE:

Paging Love: Understanding the Experience of
Postgraduate Medical Training and Its
Connections to Mental Health and Well-being
from the Perspective of Trainees and their
Intimate Partners

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NUMBER OF PAGES:

xiv, 169

LAY ABSTRACT

Being a physician-in-training can be gratifying and professionally fulfilling. However, undergoing this training is commonly associated with stresses and work demands that can negatively impact the mental health and well-being of physicians-in-training and their intimate partner relationships. To date, there has been limited research on the role that intimate partners play or could play in supporting trainees and enhancing coping. This thesis aims to better understand the connections between the experiences of training, intimate partner relationships, and mental health and well-being. In this qualitative study, trainees and partners participated in one-on-one interviews to explore their perspectives. This study identified key issues faced by physician trainees and their partners during training, including the difficulty of the training program and its notable impacts on trainees' well-being and personal relationships. These findings will inform the development of actionable individual, dyadic, and organizational strategies to address these issues and cultivate a culture of well-being.

ABSTRACT

Introduction: Postgraduate medical training is often an exciting phase of professional and personal development. However, it is also commonly associated with stresses and work demands, which impact trainee well-being, mental health, and intimate partner relationships. To date, there has been limited research on the role that intimate partners play or could play in supporting trainees and enhancing coping. This thesis aims to better understand the connections between the experiences of training, intimate partner relationships, and mental health and well-being.

Methods: This qualitative study used an interpretive descriptive approach. An invitation to participate in 60-minute one-on-one interviews was sent to all McMaster postgraduate medical trainees and their partners. A total of 23 postgraduate medical trainees and 15 partners were selected to participate in semi-structured interviews. All interviews were transcribed, and reflexive thematic analysis was used to analyze the data, which involved an iterative process of data coding, developing and refining themes, and writing the thematic narrative.

Results: Seven themes were developed: (1) The inflexible and unforgiving nature of postgraduate medical training, medical culture, and practice: The inhumanity of it all, (2) The mental, physical, and emotional toll of training on the couple, (3) A battle of identities and responsibilities: Whose identity is prioritized? Who shoulders the burden?, (4) The trainee-partner relationship as a protective ‘bubble’, (5) Threats, fractures, and repairs to the relationship ‘bubble’, (6) Expanding the ‘bubble’: The importance of other

personal and peer relationships for trainee and partner well-being, and (7) Need for advocacy: A call to change the culture of medicine.

Conclusion: This study has identified salient issues which trainees and their partners face during postgraduate medical training and will inform a future experience-based co-design approach in which trainees, partners, and educators will identify and develop potential individual, dyadic, and organizational strategies to address these issues.

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to everyone who has supported me in completing this thesis. First and foremost, I extend my heartfelt thanks to my incredible research team, I am so fortunate to have such a supportive and encouraging team to rely on. I am deeply grateful to my ever-so-encouraging co-supervisors, Dr. Catharine Munn and Dr. Anita Acai, for their continuous guidance and mentorship which have been instrumental in shaping me into the researcher I am today. The quality of this work is a testament to the excellence and support of my research team.

To Dr. Munn, thank you for always believing in me, even when I pursue my most ambitious goals. Thank you for encouraging and supporting me, unwaveringly, throughout this entire research journey. I have learned so much from your mentorship, your depth of knowledge, and by observing your dedication to your (many) roles and the (many) people you serve and support through those roles. Thank you for inspiring me to approach research, and life, with humble curiosity and determination.

To Dr. Acai, thank you for your kindness, encouragement, and mentorship; you have made this research journey so enjoyable and enriching. Thank you for always being there to support me and to answer my many research questions. I have learned so much from your expertise and I look forward to applying that invaluable knowledge throughout my career. You made me love qualitative research; now I see everything as a narrative!

To Dr. Enas El Gouhary, thank you for mentoring me into the researcher I am today, I have learned many valuable skills from you. Thank you for encouraging me to

pursue new endeavours, no matter how challenging, and teaching me that determination is all I need. I learn so much from your inspiring work ethic and your research expertise.

To Hayley Harlock, thank you for planting the seed for this work and for advocating for the voice of physician partners long before this study was designed. Thank you for mentoring me, for always checking in on me, and for every uplifting conversation that motivated me to write this thesis. I am so grateful for your kindness and support.

To Monica Boutros Salama, thank you for transcribing 40+ hours of interviews and for encouraging me at every stage of this research. Thank you for all our focused study sessions together; I would not have been able to complete my writing without them.

I would also like to thank the many others who have supported me in this journey of being a graduate student and navigating the research process; Dr. Kestrel McNeill, Dr. Jillian Halladay, and Emma Bruce, thank you for your invaluable advice and guidance.

Thank you to Dr. Acai's research group members for all their feedback on my research. Thank you to my fellow graduate students who have been so supportive and made this journey so much more fun – Kat, Sakshi, Spencer, Simran, Jasmin, Ruchika, and Charlotte. Thank you to the MSc of Health Science Education Graduate Program, Dr. Lawrence Grierson, and Courtney Wright for supporting me throughout my research journey.

Additionally, I greatly appreciate the financial support of the Royal College of Physicians and Surgeons of Canada, McMaster Postgraduate Medical Education, McMaster's Department of Pediatrics, the McMaster Okanagan Office of Health & Well-

being, and the MSc of Health Science Education Program, whose generosity and support allowed me to pursue this degree and complete this research.

Finally, I would like to express my utmost thanks to my parents, my grandparents, my sister, and my friends for their unconditional love and steadfast support. Thank you for listening to all my stories throughout this research journey, for encouraging me to continue writing, and for always supporting me. I am beyond grateful to each of you.

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LIST OF ABBREVIATIONS AND SYMBOLS

ACGME: Accreditation Council for Graduate Medical Education

CAIR: Canadian Association of Interns and Residents

CMA: Canadian Medical Association

CMG: Canadian Medical Graduate

COVID-19: Corona Virus Disease 2019

IMG: International Medical Graduate

P: Participant who is a partner

PARO: Professional Association of Residents of Ontario

PGME: Postgraduate Medical Education

PGY: Postgraduate Year

PTSD: Posttraumatic Stress Disorder

R: Participant who is a postgraduate medical trainee, either a resident or a fellow

RCPSC: Royal College of Physicians and Surgeons of Canada

RDoC: Resident Doctors of Canada

DECLARATION OF ACADEMIC ACHIEVEMENT

All aspects of this thesis work were completed by Marina Boutros Salama, including the study design, data collection, data analysis, and thesis preparation, under the supervision of Dr. Catharine Munn and Dr. Anita Acai. Participant recruitment was conducted with the assistance of Dr. Catharine Munn, Dr. Enas El Gouhary, Hayley Harlock, and the McMaster Postgraduate Medical Education office. Hayley Harlock assisted with data collection as described in Chapter 2. The interview data were transcribed with the assistance of Monica Boutros Salama, a paid undergraduate research assistant. Data analysis and the development of themes were completed with the assistance of Hayley Harlock, Dr. Catharine Munn, Dr. Anita Acai, and Dr. Enas El Gouhary. The thesis committee advised on all aspects of this thesis.

CHAPTER 1: INTRODUCTION

1.1 The History of the Culture and Profession of Medicine

1.1.1 Historical Roots of the Practice of Medicine

Medicine, a profession borne out of the human quest for healing and the alleviation of suffering, has evolved from its primitive, ancient practice to a highly sophisticated and multifaceted discipline. The earliest documentation of medical beliefs and practices stems from ancient Egypt with papyri dating back to the period between 2,000 B.C. and 1,500 B.C. (Ackerknecht & Rosenberg, 2016; Frey, 1986). The practice of medicine developed throughout multiple ancient civilizations, including ancient Greece, in which notable figures like Asclepius and Hippocrates considerably influenced medical approaches that have shaped modern medicine (Kleisiaris et al., 2014). In particular, Hippocrates transformed medical practice through his methodological approach to diagnosis, therapeutic techniques, and medical ethics, all of which laid the foundation for modern, evidence-based medicine (Kleisiaris et al., 2014; Fulton, 1953).

Alongside the development of medicine emerged the concept of medical education, which grew as medical knowledge gained in its complexity and intricacy. Beginning in ancient civilizations and continuing thereafter, the apprenticeship model of medical education was used, in which aspiring physicians would learn through their experience participating in patient care under the guidance of an experienced physician (Fulton, 1953). Medical education continued to develop as formal medical schools were established in the Middle Ages, which provided a structured framework for delivering

medical training (Fulton, 1953). Subsequently, the pressing need for regulation of medical practice and a system of licensure incited the advent of medical societies in the 16th century, such as the Royal College of Physicians of London founded in 1518 (Fulton, 1953).

1.1.2 History of Medical Education in North America

In Canada, the first medical school was established in 1824, with the College of Physicians and Surgeons of Lower Canada and the Canadian Medical Association subsequently instituted in 1847 and 1867, respectively (Roland & Marshall, 2006). Until the late 19th century medical training in Canada was exclusively available to men, it was only in 1883 that the first woman, Dr. Augusta Stowe-Gullen, graduated from a Canadian medical school (Smith, 1982). The advent of women in medical training brought about major contributions to the advancement of Canadian medicine, including the work of Dr. Maude Abbott, who revolutionized the diagnosis and treatment of congenital heart disease (Roland & Marshall, 2006).

The first formal residency program was developed by Dr. William Osler, a Canadian physician often referred to as the “Father of Modern Medicine,” at Johns Hopkins University in 1889 (Golden, 1999; Calabrese, 2005). Osler’s residency program consisted of physicians in training living in the hospital (Johns Hopkins Medicine, n.d.). At the time, the length of postgraduate medical training was open-ended, with resident physicians spending as long as eight years in their training program (Johns Hopkins Medicine, n.d.). Osler also introduced the idea of clinical clerkship for medical students, where the primary teaching method involved staff physicians conducting clinical rounds

and engaging in bedside teaching with medical learners (Johns Hopkins Medicine, n.d.). Moreover, Osler's counterpart, Dr. William Stewart Halsted, developed the first surgical residency training program at Johns Hopkins University in 1897, which replaced the apprenticeship training model and introduced a multi-tier model to residency training based on trainees' seniority (Camison et al., 2022; Wright & Schachar, 2020; Wallack & Chao, 2001). More specifically, the Halsted model was hierarchical, where eight surgical interns would be granted positions for one year and only four of those interns would advance to mid-level positions, with only one senior resident position available (Camison et al., 2022). Junior surgical residents learned patient care under the supervision of more senior residents and earned graduated responsibility and independence as they gained surgical experience (Wright & Schachar, 2020). Although Halsted's pyramidal model provided residents with more hands-on patient management, there was uncertainty regarding the timeline of residents' advancements to higher tiers as the duration of training was indefinite (Wright & Schachar, 2020). Additionally, the pyramidal structure of the surgical training program created intense competition among residents for higher positions in the hierarchy (Wright & Schachar, 2020). In addition to the pyramidal model of graduated responsibility, Halsted promoted the concepts of ward service and the restrictive lifestyle in postgraduate medical training, meaning that resident physicians truly resided in the hospital (Wallack & Chao, 2001). Some notable features of this restrictive lifestyle were that resident physicians worked 24 hours per day, seven days a week, and 365 days a year, receiving little to no wages (Wallack & Chao, 2001). Lastly, and most pertinent to this study, is that the Halsted model naturally discouraged resident

physicians from pursuing marriage and developing personal relationships, due to their demanding workload and inflexible schedule (Wallack & Chao, 2001; Slama & Silbergleit, 2016).

North American medical education was also transformed by the publication of the Flexner Report in 1910, a strategic report written by Abraham Flexner discussing the advancement of medical education in the United States and Canada (Flexner, 1910; Stahnisch & Verhoef, 2012; Waugh & Bailey, 2009). The report proposed that schools of medicine should have rigorous standards for the admission of prospective students and establish a scientific approach to medicine as the standard of medical training (Duffy, 2011; Stahnisch & Verhoef, 2012). In light of the Flexner Report, the Council of Medical Education and Hospitals of the American Medical Association published a list of approved hospitals for medical internships in 1914, becoming the first organizations to establish standards for graduate medical education (Camison et al., 2022).

An influential advancement in Canadian postgraduate medical education, in particular, was the establishment of the Royal College of Physicians and Surgeons of Canada (RCPSC) in 1929 (RCPSC, n.d.). The RCPSC was instituted in response to the Canadian Medical Association's concerns regarding the undefined standards of medical specialty practice (Ruedy, 1993). The RCPSC's role was to oversee postgraduate medical training and set standards for specialty medical education (RCPSC, n.d.). The RCPSC maintained these standards by developing a certification system for physicians and surgeons in 1934 and conducting its first certification examinations in 1946 (Ruedy, 1993). The RCPSC also focused on the quality assurance of postgraduate medical training

programs by implementing accreditation guidelines in 1945 and beginning on-site accreditation visits in 1963 (Ruedy, 1993). In 1975, the RCPSC implemented a new accreditation standard that required the transfer of responsibility for postgraduate medical training programs from hospitals to universities, to ensure residency program development and trainees' access to university resources (Ruedy, 1993). The RCPSC also developed the CanMEDS physician competency framework, a framework outlining the seven roles required of a competent physician (RCPSC, n.d.). The CanMEDS 2015 physician competency framework encompasses various physician roles including medical expert, communicator, collaborator, leader, health advocate, scholar, and professional (Frank, et al., 2015).

1.1.3 The Evolution of the Medical Culture and Profession for Postgraduate Medical Trainees

As mentioned previously, the first formal residency training programs in North America placed considerable demands on the personal lives of postgraduate trainees in the late 19th century (Camison et al., 2022; Wright & Schachar, 2020; Wallack & Chao, 2001). In Canada, residency training originated with the “house officer position,” where physicians were hired to live in hospitals to be available to provide healthcare at all times (Ruedy, 1993). By extension, until the 1930s, the senior resident would serve as the assistant hospital superintendent (Ruedy, 1993). Until the mid-1950s, postgraduate medical trainees received small stipends for their work; however, the amounts paid gradually became less acceptable to trainees due to increasing medical school debts, the

proportion of married residents, and residents' work-life balance expectations (Ruedy, 1993).

In response to postgraduate medical education issues faced by residents, the Canadian Association of Interns and Residents (CAIR) was established in 1970, presently known as Resident Doctors of Canada (RDoC; Ruedy, 1993; Thatcher, 2015). RDoC is a non-profit organization founded to improve the quality of postgraduate medical education and training by amplifying the resident voice on national medical education issues (RDoC, n.d.). RDoC collaborates with Provincial Housestaff Organizations, such as the Professional Association of Residents of Ontario (PARO), to provide the perspectives of resident physicians across Canada on topics such as trainees' stipends and duty hours (Urowitz et al., 2003; Pattani et al., 2014). In response to the lack of consensus on work-hour limits for postgraduate medical trainees across Canadian provinces, the National Steering Committee on Resident Duty Hours was formed (Pattani et al., 2014). In 2011, a national survey on resident duty hours was sent to all postgraduate medical trainee members of CAIR, and 1,796 residents participated (Masterson et al., 2014). The survey found that 82% of residents felt that their quality of patient care was compromised due to the number of consecutive hours they worked (Masterson et al., 2014). In a 2013 report, the steering committee outlined a list of principles and recommendations for resident duty hours, including the principle that a duty period exceeding 24 consecutive hours without sleep should be avoided (Gorman et al., 2013; Pattani et al., 2014). Moreover, the report challenged the "one-size fits all" solution and recommended that postgraduate medical education programs develop fatigue risk management plans, which could include

guidelines around shift length and handover, to minimize the impacts of resident fatigue (Gorman et al., 2013; Jaimet, 2013; Pattani et al., 2014).

Although concerns about trainee well-being due to long consecutive duty hours led to widespread and mandatory duty-hour restrictions, studies examining the more immediate effects of these restrictions did not necessarily find any benefit, with some reporting detrimental impacts (Pattani et al., 2014; Bolster & Rourke, 2015; Moonesinghe et al., 2011). However, few studies have considered the broader implications, such as those related to residents' mental health, well-being, and personal relationships. For instance, while duty-hour restrictions can help limit fatigue-related medical errors, some studies suggest that reducing residents' working hours does not significantly improve patient outcomes (Pattani et al., 2014; Bolster & Rourke, 2015; Fletcher et al., 2004; Moonesinghe et al., 2011). A systematic review of the literature on resident duty-hour restrictions, including night float, shorter shifts, and time for sleep, found no impacts on patient outcomes or resident well-being (Bolster & Rourke, 2015). Moreover, some potential risks found with decreasing resident duty hours included an increase in medical errors from an increased frequency of handover, reduced teaching time, negative impacts on residents' education, and increased clinical workloads for attending physicians (Pattani et al., 2014; Bolster & Rourke, 2015; Wong & Imrie, 2013).

Despite the aforementioned short-term effects of duty-hour restrictions, there are other long-term impacts of residents' fatigue that result from working long hours, which impacts the state of residents' mental health and well-being, as well as their relationships. A study by Martini et al. (2006) surveyed 118 postgraduate medical trainees and found

that the prevalence of burnout among trainees working over 80 hours per week was higher (69.2%) than the prevalence of burnout among trainees working fewer hours (38.5%). Moreover, after resident duty-hour restrictions of 80 hours per week were implemented in the United States by the Accreditation Council for Graduate Medical Education (ACGME) in July 2003, first-year residents experienced a 34% reduction in burnout (Martini et al., 2006; McHill et al., 2018). The impacts of the ACGME's nationwide resident duty-hour mandates were further explored in a study including 58 surgical residents and 58 attending surgeons (Hutter et al., 2006). The study found that work-hour restrictions were associated with decreased surgical residents' burnout scores, especially lower emotional exhaustion scores (Hutter et al., 2006). Moreover, surgical residents reported having a higher quality of life both at work and outside of work, an increased ability to maintain their relationship with their significant other, more sleep, and an increased motivation to work (Hutter et al., 2006). Notably, residents' education showed signs of improvement with residents spending more time completing elective readings and participating in conferences, and there were no measurable impacts on the quality of patient care (Hutter et al., 2006). Despite the favourable outcomes, attending surgeons perceived that residents' education, the quality of patient care, and their own quality of life were "somewhat worse" after the work-hour restrictions (Hutter et al., 2006).

Protective factors against resident fatigue have been explored in a cross-sectional study of Canadian internal medicine residents (Yuan et al., 2023). This study found that the highest rates of resident fatigue were associated with the 1-in-4 call schedule, which

requires residents to complete 24-hour in-hospital shifts every four days in a given rotation (Yuan et al., 2023). The study concluded that strong social support outside the work environment is a protective factor against resident fatigue (Yuan et al., 2023). Furthermore, a recent prospective cohort study including 175,543 shift workers, both in and outside of the healthcare field, explored associations between shift work, depression, and anxiety (Xu et al., 2023). The study found that participants' shift frequency was positively associated with higher risks of depression and anxiety (Xu et al., 2023). It was also found that modifiable lifestyle factors including smoking, sedentary time, body mass index, and sleep duration, partially mediated those associations (Xu et al., 2023). These studies are particularly relevant as they address the impacts of postgraduate medical trainees' long working hours and fatigue on their mental health and well-being, as well as the importance of strong social support as a protective factor.

1.2 The Changing Landscape of Canadian Medical Practice

Over the years, there have been shifts in the Canadian medical training and practice landscape including changes in physician workloads, gender distributions and gender norms, as well as the culture of well-being in medicine. The following section will discuss these shifts among postgraduate medical trainees and attending physicians.

1.2.1 Shifts in Physician Workloads

As described in the previous section, resident physicians' long working hours have substantial impacts on their well-being, mental health, quality of life, and personal relationships. Such life-impacting factors may have influenced physicians' weekly work

hours over the years. A study using Statistics Canada data evaluated temporal trends in physicians' average weekly work hours from 1987 to 2021 (Kralj et al., 2024). They found that average weekly work hours decreased from 52.8 hours in 1987-1991 to 45.9 hours in 2017-2021, an approximately seven-hour decline (Kralj et al., 2024). Work hour trends began to notably decline after 1997, when hours worked by male physicians and married physicians significantly decreased, whereas female physicians' work hours remained stable (Kralj et al., 2024). Interestingly, the onset of the COVID-19 pandemic reduced work hours temporarily, however, by the end of 2020, physician work hours returned to pre-pandemic levels (Kralj et al., 2024). The reduced average weekly work hours from 1987-1991 to 2017-2021 suggest a shift away from historically longer work hours that have negatively impacted physician well-being (Kralj et al., 2024). Hence, it is pertinent to consider whether these trends may have been associated with the increasing prevalence of physician burnout, caused by demanding workloads and a limited sense of control, which may have led to reduced work hours or physicians leaving medical practice altogether (Collier, 2017). Additionally, male physicians' declining work hour trends over the last 30 years may suggest long-term cultural shifts in physicians' work preferences to allow for better work-life balance (Kralj et al., 2024).

1.2.2 Shifts in Gender Distribution and Gender Norms

A Canadian study examining the gender distributions of medical students, postgraduate medical trainees, and staff physicians over the past three decades found increases in the representation of women along the stages of medical training (Pickel & Sivachandran, 2024). Despite those improvements, the underrepresentation of women

remains in most surgical residency programs (Pickel & Sivachandran, 2024). Moreover, the literature suggests that women physicians continue to face substantial challenges such as gendered stereotypes, pay inequities, resistance to career advancement, threats to career attributed to pregnancy and child-rearing, role expectations, sexual assault and harassment, and a disproportionate load of domestic and parental responsibilities (Mangurian et al., 2018; Chesak et al, 2022; Jolly et al., 2014). These unique struggles faced by women in medicine also suggest that there is a gendered aspect to physician burnout (Chesak et al, 2022; Yeluru et al., 2022). The Canadian Medical Association (CMA) reports that physician burnout is significantly higher among women than men (59% versus 43%) and that women are significantly more likely to report experiencing frequent fatigue compared to men (64% versus 46%; CMA, 2023). Furthermore, a recent review by Lyubarova et al. (2023) explored driving factors for higher burnout among women physicians. It was found that women physicians face heavier workloads as they spend more time with each patient and in electronic health records and have less autonomy over their workload and schedules (Lyubarova et al., 2023). Women physicians also often face disproportionate family and domestic responsibilities such as childcare and eldercare, and they experience additional organizational culture factors such as pay inequities, leadership inequities, and gender biases (CMA, n.d.; Lyubarova et al., 2023). Women physicians also report lower ratings of perceived appreciation and self-compassion, which can impact their sense of professional fulfillment (Rotenstein et al., 2021; Lyubarova et al., 2023). Given that these factors may contribute to the higher rates of burnout, depression, and suicidal ideation among women physicians, it is imperative

for hospitals, and medical training programs, to address the gender disparities among burnout drivers and co-create interventions to address them (CMA, n.d.; Lyubarova et al., 2023). Although there are few studies exploring these issues among postgraduate medical trainees, it is important to recognize that residents and fellows are physicians too, and these trends are likely to apply to them as well.

While over time there have been shifts in gender norms, there is still progress to be made. A Canadian-wide survey on parental leave during postgraduate medical training found that many men and women residents felt discouraged from taking long parental leaves or attempting to enhance their work-life balance amidst their residency duties (Willoughby et al., 2020). Residents felt pressured to take shorter parental leaves or work longer hours after parental leave to remain competitive for career advancement and to appear dedicated to their training (Willoughby et al., 2020). At the same time, they reported challenges associated with returning to training after parental leave such as sleep deprivation, unpredictable hours, limited time to study, and guilt about being separated from their family (Willoughby et al., 2020).

1.2.3 Shifts in Medical Culture: Considering and Prioritizing Physician Well-being

The culture of medicine has historically promoted self-sacrifice as a necessary and desirable trait among physicians as they care for patients. While prioritizing patient well-being is imperative to the job of a physician and medical trainee, the stress associated with the profession has resulted in higher levels of burnout, depression, and suicide compared to the general population (Mata et al., 2015; Gradick et al., 2022). A meta-analysis by Mata et al. (2015) found a 15.8% increase in depressive symptoms among

postgraduate medical trainees at the onset of their training and that the prevalence of depression and depressive symptoms increased as training progressed. Moreover, a 10-year prospective cohort study of residents and staff physicians found that emotional distress during training was positively correlated with future emotional distress, emotional exhaustion, and depersonalization in medical practice, as far as ten years into practice (Raimo et al., 2018). These serious mental health and well-being impacts, which undoubtedly have relational impacts, have led to the pressing need for a culture shift (Kalmoe et al., 2019; Gradick et al., 2022).

To address these impacts, individual-level strategies can be employed to help postgraduate medical trainees cope with the stresses of their training. In a Canadian study of surgical residents, the most common coping mechanisms used by residents were optimism, engaging in enjoyable activities, consulting others, and exercise (Aminazadeh et al., 2012). Another study found that residents who employed emotion-focused coping strategies including acceptance, positive reframing, and active coping had lower subdomain burnout scores of emotional exhaustion and depersonalization (Doolittle et al., 2013). Maladaptive coping mechanisms like self-distraction, denial, self-blame, and behavioural disengagement were associated with a higher risk of burnout among residents (Menaldi et al., 2023). On the other hand, problem-focused and emotion-focused coping strategies were associated with a higher sense of personal accomplishment among residents (Menaldi et al., 2023).

When developing interventions to address these issues and ultimately shift the medical culture, it is important to note that individually focused coping strategies or

mitigation strategies, such as reducing a physician's anxiety or improving their sleep, are insufficient (West et al., 2016). Rather, a comprehensive approach is necessary where individual-focused strategies are promoted alongside systemic interventions, such as organizational policy changes, in order to meaningfully reduce burnout among postgraduate medical trainees and practicing physicians (Gradick et al., 2022; West et al., 2016). This approach is crucial not only for prioritizing the well-being of physicians and physicians in training but also for maintaining and supporting the medical workforce. It is well known that there is a Canadian primary care physician shortage, with over six million Canadians experiencing irregular or lack of access to primary healthcare (Kiran et al., 2023; Tasker, 2024). It is important to note that physicians in training are part of the broader medical system, and trainee wellness needs cannot be considered in isolation. Therefore, the positive and negative impacts on other providers, including practicing physicians, should be considered when implementing solutions that address trainee wellness needs. For example, attending physicians' workloads, burnout rates, and attrition rates may be impacted when postgraduate medical trainees' workloads are reduced (Windover et al., 2018; Hamidi et al., 2018; Ligibel et al., 2023; Chen et al., 2023). Additionally, fostering the capacity to manage stress and develop healthy coping strategies during training may very well influence residents' capacity to manage their stress in their future practice as the literature has shown emotional distress and burnout symptoms during training carry into medical practice (Raimo et al., 2018). Therefore, the well-being of all Canadian medical learners, both undergraduate and postgraduate, as well as the clinician workforce, from early to late-career, must be considered when developing

supportive interventions aimed at shifting the medical culture to prioritize physician wellness.

1.3 The Impacts of Postgraduate Medical Training on Trainees' Mental Health and Well-being

Although postgraduate medical training can be a rewarding phase of academic and career development that can offer trainees a sense of personal and professional fulfillment, it is also an all-encompassing endeavour often characterized by high-intensity workloads, long hours, and limited autonomy.

1.3.1 Potential Negative Impacts of Postgraduate Medical Training on Trainees

The literature commonly associates postgraduate medical training with several impacts on the mental health and well-being of trainees including stress, burnout, anxiety, depression, suicidality, and work-related trauma exposure. Burnout is an occupational syndrome that results from chronic workplace stress that has not been successfully managed (Maslach et al., 1997; West et al., 2018). Burnout among physicians is characterized by three dimensions: emotional exhaustion, depersonalization in patient care, and a reduced sense of personal achievement (Maslach et al., 1997; West et al., 2018). A recent systematic review by Naji et al. (2021) found that the global prevalence of burnout among postgraduate medical trainees was 47.3% based on studies conducted in 47 countries. In Canada, the CMA's 2021 survey of residents reported a 1.7-fold increase in overall burnout rates from 2017 to 2021, a 1.4-fold increase in positive depression screening, and a 1.5-fold increase in endorsement of recent suicidal ideation

(CMA, 2022). Furthermore, compared to the general U.S. population, American postgraduate medical trainees are more likely to experience burnout, depressive symptoms, and possible posttraumatic stress disorder (PTSD; Dyrbye et al., 2014; Vance et al., 2021). In fact, a meta-analysis of 54 studies found that the estimated prevalence of depression or depressive symptoms among postgraduate trainees was 28.8% (Mata et al., 2015). In addition, residents are at risk of work-related trauma exposure or PTSD due to encounters with traumatic stressors such as patients' critical illnesses and deaths, as well as serious medical errors or complications (Vance et al., 2021). In a nationwide study of U.S. first-year residents, 56.4% of them reported work-related trauma exposure, and 19.0% of those with trauma exposure screened positive for possible PTSD (Vance et al., 2021).

Postgraduate medical trainees encounter several stressors within the learning and working environment, which are identified as primary drivers of burnout and other negative mental health concerns in this population (Dyrbye & Shanafelt, 2016; Vance et al., 2021). These stressors include increased work-scheduling demands, excessive workload, limited autonomy and control over workload, time and performance pressures, number of working hours, insufficient recognition, supervisory relationships, medical program, and balancing the development of their professional identity with their personal life (Dyrbye & Shanafelt, 2016; Linzer et al., 2022; Collier, 2017; Aminzadeh et al., 2012). Specific factors associated with an increased risk of burnout among postgraduate medical trainees include work demands (nearly 3-fold increase), poor work-life balance, long working hours, concerns about patient care, poor mental health support, poor

service-education balance, poor mental or physical health, financial worries, and low self-efficacy (Zhou et al., 2020; Ferguson et al., 2020). The COVID-19 pandemic has also impacted postgraduate medical trainees' mental health with a study by Mendonça et al. (2021) finding that the prevalence of anxiety symptoms among trainees doubled and depressive symptoms tripled during the pandemic (Zhang et al., 2023). Moreover, mistreatment and discrimination of physicians by patients or families have been associated with an elevated risk of burnout (Dyrbye et al., 2022).

In addition, the mental health and well-being impacts of postgraduate medical training not only impact the health of trainees but also impact patient care and the healthcare system at large. Physician burnout has been associated with suboptimal patient care, poor patient outcomes, medical errors, longer patient recovery times, and lower patient satisfaction (West et al., 2018; Shanafelt et al., 2010; Halbesleben & Rathert, 2008). Moreover, physician burnout is associated with career dissatisfaction, reduced productivity, increased turnover, and increased healthcare expenditures (West et al., 2018; Dewa et al., 2014; Dewa et al., 2014; Shanafelt et al., 2009).

1.4 The Impact of Postgraduate Medical Training on Trainees' Relationships and Social Network

The practice of medicine can lead to challenges in developing and maintaining social and personal relationships, given work demands and hours (Dyrbye et al., 2011). Among postgraduate medical trainees, the tensions between their personal and professional lives can lead to role conflict, which has been associated with burnout (Dyrbye et al., 2011; Dyrbye et al., 2011; Kocalevent et al., 2020). Postgraduate medical

training can pose additional challenges such as work-scheduling demands and geographic separation from social supports, which can make sustaining relationships difficult for trainees (Law et al., 2017). In fact, a study by Shanafelt et al. (2013) found that the amount of time spent between physicians and their partners on a daily basis was the strongest predictor of relationship satisfaction, overshadowing any of the physician's professional characteristics.

In one of the few studies of postgraduate medical trainees' personal relationships, a Canadian qualitative study found that the tensions between trainees' professional identity and personal relationships stem from the demands of their training environment (Law et al., 2017). The study concludes that while workload intensity contributed to personal relationship difficulties, the role conflict between trainees' personal and professional identities can also contribute to burnout and have negative impacts on their personal relationships (Law et al., 2017). Another qualitative study explored the impacts of surgical residency training on the well-being of those who support trainees, from the perspective of support persons themselves (Evans et al., 2021). Key themes identified by support persons include the significant tangible and intangible sacrifices they made to support a surgical trainee, the delay of key life events to prioritize training, and a lack of recognition of their needs by the training program (Evans et al., 2021). These themes showcase that the impact of postgraduate medical training extends beyond trainees and that the well-being of both trainees and their support persons are intertwined and should be considered when developing well-being interventions (Evans et al., 2021; DeCaporale-Ryan et al., 2020).

1.5 The Impact of Social Support and Relationships on Mental Health and Well-being

There is robust evidence regarding the important role that social support plays in protecting against burnout, anxiety, and depression among healthcare professionals (Moisoglou et al., 2024; Hu et al., 2020; Huang et al., 2020; Jain et al., 2022). Moreover, there is growing evidence that loneliness or the perception of social isolation is associated with a range of physical and mental health problems including increased cortisol, cardiovascular events, anxiety, depression, suicidal ideation, and all-cause mortality (Mann et al., 2022; Bu et al., 2020; Leigh-Hunt et al., 2017). In the context of postgraduate medical trainees, studies have demonstrated a significant association between loneliness and higher levels of work-related and personal burnout among residents (Shapiro et al., 2015; Rogers et al., 2016; Jain et al., 2022). On the other hand, several social network measures, including friend-based and colleague-based social support were associated with lower levels of loneliness, higher personal accomplishment scores, and lower overall burnout scores (Shapiro et al., 2015; Rogers et al., 2016; Jain et al., 2022). Significant associations have also been found between residents' levels of social support, psychological resilience, and coping styles (Xu et al., 2022). Moreover, a study of Ontario family medicine residents found that residents most often rely on family and friends for mental health support rather than more formal resources such as family physicians, counsellors, and psychiatrists (Earle & Kelly, 2005).

Thus, while less studied, it is also important to recognize the potential protective effects that trainees' intimate partner relationships have on their mental health and well-

being, as well as their partner's well-being. The mental health benefits of a healthy intimate relationship are well-established in the literature among the general population, and they have been found to protect against depression, anxiety, and stress disorders (Floyd & Riforgiate, 2008; Braithwaite & Holt-Lunstad, 2017; Till & Niederkrotenthaler, 2022). It is also crucial to recognize, however, that not all relationships have a positive impact on the mental health of the couple (Till & Niederkrotenthaler, 2022). During stressful periods, an intimate relationship can either serve as a protective factor or a risk factor to the mental health and well-being of each partner (Mehulić & Kamenov, 2021). A study conducted during the COVID-19 pandemic found associations between distinct relationship types (affectionate, ambivalent, and antagonistic) and the mental health of partners (Mehulić & Kamenov, 2021). They found that being in an affectionate relationship, characterized by high levels of dyadic coping, was associated with the lowest levels of depression, anxiety, and stress, whereas antagonistic relationships, or couples with low levels of dyadic coping, had high levels of mental health symptoms (Mehulić & Kamenov, 2021). This finding is consistent with other studies highlighting that relationship dissatisfaction is associated with poor mental health (Till & Niederkrotenthaler, 2022).

Intimate partners are well-positioned to not only provide support to trainees during stressful periods but to also inform training programs about the impacts of postgraduate medical training and assist in developing strategies that promote trainee well-being (Kemp et al., 2022). A recent qualitative study has tapped into the perspectives of surgical trainees' support persons, finding that trainees constantly felt the need to

endure hardship to care for their patients and carry out duties, which support persons reported as having negative impacts on their well-being (Kemp et al., 2022). The support persons also identified that trainees are humans with basic needs and highlighted their need to feel valued as persons (Kemp et al., 2022). Intimate partner relationships may therefore play a pivotal role in the mental health and well-being of postgraduate medical trainees, a population with high exposure to work-related stressors and traumatic events (Vance et al., 2021).

1.6 Gaps in the Literature: The Intersection of Postgraduate Medical Training, Well-being, and Relationships

While there is some existing research on the personal relationships of postgraduate medical trainees, their intimate partner relationships have been the subject of surprisingly little research, given that intimate partners' lives are undoubtedly affected by the demands and constraints of postgraduate medical training (Law et al., 2017; Kemp et al., 2022; Evans et al., 2021). As previously mentioned, a recent qualitative study by Kemp et al. (2022) explored the perspectives of surgical trainees' support persons, however, this study exclusively focused on support persons' perspectives on trainee well-being rather than additionally exploring the impacts of training on the well-being of support persons.

The high prevalence of burnout, depression, suicidal ideation, and other negative mental health outcomes during postgraduate medical training highlights the need for change in the medical culture's approach to well-being (Dyrbye et al., 2014; Vance et al., 2021; Gradick et al., 2022). Moreover, the demands and constraints of medical training

can create role conflicts between trainees' professional and personal identities, which can further strain their personal relationships (Law et al., 2017; Evans et al., 2021). At the same time, there is robust evidence of the benefits of supportive personal and social relationships on mental health and well-being (Floyd & Riforgiate, 2008; Braithwaite & Holt-Lunstad, 2017; Till & Niederkrotenthaler, 2022). It seems likely that high-quality and supportive intimate partner relationships may protect postgraduate medical trainees from developing or worsening burnout and other negative mental health impacts, but this is unknown. Further, this review of the existing literature highlights a gap in understanding the complex interplay among postgraduate medical training experiences, intimate partner relationships, and the mental health and well-being of trainees and their partners, from the perspectives of both partners.

The literature has demonstrated a pressing need for additional, effective individual and organizational well-being interventions, or combinations of those, to improve trainee and physician mental health. To date, there have been no published interventions which target partners or intimate partner relationships. On a pragmatic level, the intimate partners of postgraduate medical trainees are well-placed to identify, prevent, and respond to burnout and other mental health concerns experienced by their trainee partners. However, despite this, there is little research on the observations, experiences, and insights of partners, which could inform training programs about the salient issues faced by trainees and their partners. This could also help programs enhance residents' and fellows' experiences of training, protect mental health and well-being, and preserve their intimate partner relationships. Therefore, such studies have the potential to inform the

development and evaluation of dyadic interventions, targeting both partners and trainees, as well as individual, organizational, or combination interventions that could improve partner and trainee well-being.

1.7 Research Question

The present thesis seeks to explore the impacts of training on postgraduate medical trainees and their intimate partners, including impacts on their well-being and their intimate partner relationship, using the following research question: How do McMaster postgraduate medical trainees and intimate partners of trainees experience and understand postgraduate medical training and the connections between training, relationships, and their mental health and well-being?

1.8 Thesis Overview

Through this qualitative, interpretive study, we aimed to better understand, from the perspectives of postgraduate medical trainees and their partners, their experiences of training at McMaster University. Additionally, we aimed to better understand the intersections among postgraduate medical training experiences, intimate partner relationships, and the mental health and well-being of both partners. Chapter 2 describes the qualitative methodology of this study (using semi-structured interviews), specifically the methodological approach of interpretive description, which was used to understand the perspectives of postgraduate medical trainees and their partners. Chapter 3 describes the findings of this study, including the overall thematic narrative, developed using reflexive thematic analysis. Chapter 4 discusses the findings, as well as their broader

contributions and implications at the individual, dyadic, and systemic levels. Chapter 5 provides a summarizing conclusion for the present thesis.

CHAPTER 2: METHODOLOGY

2.1 Methodological Approach: Interpretive Description

Interpretive description is a methodological approach in qualitative health research that was formed in response to the need for knowledge generation around clinical phenomena that could inform action within the discipline of interest (Thorne, 1991; Thorne, 2016). The development of the interpretive description approach was intended to preserve the integrity of theoretically driven knowledge generation, while also emphasizing the development of frameworks relevant to the discipline (Thorne, 2016). Although interpretive description has epistemological roots in the nursing science discipline, it has become more prominently used in the medical education context in more recent years (Thompson Burdine et al., 2021). Interpretive description's epistemological underpinnings of constructivism allow for knowledge, in the context of medical education, to be co-created alongside our study's participants. Through this approach, medical education phenomena can be explored to capture various perspectives and develop common threads that can be used to inform and drive practical applications to advance medical education (Thompson Burdine et al., 2021). Interpretive description is particularly useful in medical education research as it allows for a deeper understanding of the complexities of medical education, as well as continual development and refinement of educational content, processes, and outcomes to improve the educational experience.

In this exploratory study, interpretive description was used to obtain a comprehensive understanding of the shared and unique experiences of postgraduate

medical trainees and their partners, as well as the connections between training, relationships, mental health, and well-being in this context. Using interpretive description allowed for an in-depth exploration of those experiences and provided insight into potential approaches that educational leaders could use to better support trainees, partners of trainees, and their relationships. Furthermore, this methodological approach was selected to provide purposeful direction on the mental health and social support interventions that could be developed in the realm of postgraduate medical training, based on the lived experiences of trainees and intimate partners.

2.2 Setting and Participants

This qualitative, interpretive descriptive study was conducted at McMaster University, located in Hamilton, Ontario, Canada, from August to December 2023. The inclusion criteria for this study were all postgraduate medical trainees (i.e., residents and fellows) at McMaster University who were in a romantic relationship and/or intimate partnership at the time of the study or have been in the past, during their training. In addition to trainees, intimate partners of trainees were included in the study, irrespective of whether their trainee partner was also participating. For the purposes of this study, an intimate partner was defined broadly, using the legal definition, “a person who is or was married, in a state-registered partnership, or in an intimate or dating relationship with another person presently or at some time in the past. Any person who has one or more children in common with another person, regardless of whether they have been married, in a domestic partnership with each other, or lived together at any time, shall be

considered an intimate partner” (Intimate partner definition, n.d.). Participants who did not have English language proficiency were excluded from participating in the study.

2.3 Sampling Strategy

In this study, a mix of sampling techniques was used to recruit participants. The strategy of purposive sampling was used to broadly define the initial sample of participants that we wanted to ensure inclusion in our study (Thorne, 2016). This included postgraduate medical trainees at McMaster University who were in a romantic relationship and/or intimate partnership at the time of the study or had been in the past, during their training. We also sought to include partners of McMaster postgraduate medical trainees. We aimed to include a loosely defined range of approximately 15-20 trainees and 15-20 partners from the outset of the study, guided by the principles of interpretive description.

Maximum variation, an element of theoretical sampling, was used to ensure a holistic perspective of the phenomena of interest (Thorne, 2016). This technique helped us create a diverse sample within the broader parameters of the purposive sample. We selected participants for interviews from a pool of individuals who met the study’s eligibility criteria and indicated an interest in participating in our study by completing the demographic pre-survey as described in Section 2.5. We selected participants with the aim of including a range of genders, sexual orientations, ages, racial and ethnic backgrounds, training programs (for trainees), years of training (for trainees), professions (for partners), and family structures.

As the interviews progressed, theoretical sampling was used to recruit participants with specific experiences and identities, aiming to further develop our study's preliminary themes and delve deeper into certain concepts. This technique allowed for the refinement of the sample based on preliminary findings that were developed throughout the data collection phase. For instance, international medical graduates (IMGs) and postgraduate medical trainees in their mid-to-final years of training were specifically recruited based on preliminary findings that highlighted their unique perspectives, which warranted further exploration. By intentionally recruiting and including participants with these characteristics, we were able to develop a richer description of the sample and better ensure that our findings reflected a broad range of experiences in postgraduate medical training (Thorne, 2016).

The concept of information power guided the sample size and factors such as the study's aim, sample specificity, quality of the interview dialogue, and analysis strategy were taken into account (Malterud et al., 2016). Due to the exploratory nature of this study and its broader aim, a larger sample size was selected to provide sufficient information power. Moreover, our participant sample included postgraduate medical trainees and partners with a wide range of characteristics and diverse experiences, suggesting sparse sample specificity and necessitating a larger sample size. The interview dialogues provided highly rich, detailed narratives that covered a complex range of topics on the intersections among training, intimate partner relationships, and well-being, reflecting the high quality of communication between interviewer and interviewee, which pointed to the need for a smaller sample size. Lastly, our exploratory study used a

thematic cross-case analysis strategy to deeply understand the lived experiences of trainees and their partners; thus, a larger sample size was needed to offer sufficient information power and overarching thematic patterns across participant cases. Consistent with the information power framework by Malterud et al. (2016), most criteria indicated the necessity of a larger sample size, which justified our decision to include 38 participants in this study.

2.4 Study Recruitment

A multi-pronged recruitment strategy was used. First, emails were sent to the McMaster postgraduate medical trainees and partners of trainees who participated in a previous study surveying trainees and their partners and also consented to be contacted about a follow-up study. These emails invited participants of the previous study to consider participating in the present qualitative study. Second, additional emails were sent by the McMaster Postgraduate Medical Education (PGME) office to all McMaster residents and fellows inviting them to participate in the study. These emails were also sent to McMaster postgraduate medical training program directors and program administrators to share with trainees in their respective programs. All emails to trainees included an additional request to extend the study invitation to their current partner, if applicable, so their partners could have the opportunity to potentially participate as well. Third, the study was advertised through McMaster PGME's Instagram and Medportal pages. Fourth, the study directly recruited partners of McMaster trainees through an organization known as The Flipside Life, a community that connects and supports physician families (The Flipside Life, n.d.). Lastly, the study was shared in resident and

fellow-related meetings held at McMaster University, including the Postgraduate Education Committee and the Resident Wellbeing Advisory Group. Aligning with the sampling strategy of maximum variation and to ensure representation in our study sample, targeted recruitment of participants from the previous survey study of postgraduate medical trainees and partners also took place. The demographic characteristics of trainees and partners, as identified by the pre-survey, were used to select participants who would receive an interview invitation. Additionally, the recruitment email was sent to members of specific resident support groups that were underrepresented in the data.

All recruitment materials, including emails, posters, and social media posts, presented information regarding the study's inclusion criteria and invited participants to participate in a confidential one-on-one interview to share their experiences and perspectives during postgraduate medical training. Participants were invited to register for the study via the link or QR code provided, where they would be emailed a pre-survey immediately upon registration which screened for eligibility and collected participants' demographic information. Incentives of \$30 gift cards were also advertised in all recruitment materials.

2.5 Demographic Pre-Survey and Consent Methods

Participants who chose to participate in the study registered for the study via the McMaster LimeSurvey platform and provided their or their trainee partner's institutional email address (depending on which partners were trainees) for identity verification purposes. All participants also provided their preferred email address for communication

with our research team. Before completing the demographic portion of the pre-survey, informed consent was obtained from all participants. The study's information letter and consent form appeared on the first page of the pre-survey, and written consent in the form of a signature was provided. The limitations of confidentiality (i.e., disclosures of harm to self or others, as well as child maltreatment) were included in the information letter and consent form, as well as verbally reviewed at the beginning of each interview. After consenting to participate in the study, participants completed a pre-survey to confirm their eligibility for the study as well as collect their demographic characteristics. These demographic characteristics included their age, gender or gender expression, sexual orientation, racial and ethnic background, postgraduate medical training program, partner's occupation, parental status, and whether they identify as someone living with a disability and/or requiring academic or workplace accommodations. The demographic variables included in this pre-survey were selected based on preliminary results from an earlier quantitative survey conducted with the same population (i.e., McMaster postgraduate medical trainees and their intimate partners). These initial findings guided the selection of relevant demographic variables, such as gender and racial identity, that could help provide meaningful evidence for this group.

Upon completion of the pre-survey, participants were informed that they would be contacted regarding their potential involvement in a one-on-one interview.

2.6 Selecting Participants and Ensuring Representation

Overall, 51 trainees and 21 partners of trainees registered for the study via the registration link. Of those, 44 trainees and 19 partners of trainees consented to participate

in one-on-one interviews, were deemed eligible to participate, and completed the study's pre-survey. All 19 partners of trainees were contacted to schedule an interview with a designated member of our research team (MBS or HH). Of the 44 eligible trainee participants, 39 trainees were in a current relationship, two trainees had a previous relationship during training, and two trainees were currently in a relationship and also had a previous relationship during training. In terms of training programs, six trainees were in a surgical specialty, 13 trainees were in family medicine, eight trainees were in internal medicine, and 17 trainees were in other non-surgical programs.

Based on the aforementioned various socio-demographic characteristics, participants were selected in a manner that ensured a diverse sample. All our research team members were consulted and involved in the selection of participants and a consensus was reached. Subsequently, 31 trainees were emailed and invited to schedule an interview with one of our research team members (MBS or HH). Participants were informed of their designated interviewer prior to the interview and were informed that they had the option to request the other interviewer at any time.

2.7 Data Collection

The qualitative data collection method selected was one-on-one semi-structured interviews with McMaster postgraduate medical trainees and partners of trainees. Of the 31 trainees invited for an interview, 23 trainees scheduled and completed one-on-one 60-minute interviews. Likewise, of the 19 partners of trainees invited to interview, 15 partners of trainees scheduled and completed interviews. Interviews were conducted by one of two research team members (MBS or HH).

At the beginning of the interview sessions, the interview preamble including the study's purpose and limits of confidentiality was reviewed, and participants were reminded of the resource list provided before the interview and that they were free to withdraw from the session at any time. All semi-structured interviews were conducted online through the Zoom platform and were 45-60 minutes in duration. The length of the online interviews allowed for a rich description of the participants' perspectives and experiences to be obtained. During each interview, field notes were taken to document interview observations. At the conclusion of the interview, participants were reminded of the resources available to them, listed on the resource list, to provide them with any needed psychological and/or social support. Subsequently, participants were emailed an Everything Card e-gift card of \$30 via our study's email account. Audio recordings were taken of all interviews and stored on a password-protected secure drive on a McMaster OneDrive. Access to this secure drive was limited to the interviewers and our transcriptionist, who was a paid research assistant. A local copy of all interviews was also stored on a local, password-protected hard drive.

After each interview, notes were taken, and debriefing conversations were had to document the thoughts and reactions of interviewers following the interview. Each interview's audio recording was then transcribed into textual data and de-identified by our research team's transcriptionist.

2.8 Data Analysis: Reflexive Thematic Analysis

De-identified textual data from the interviews were imported into NVivo, a qualitative data analysis software, and analyzed using Braun and Clarke's reflexive

thematic analysis (Braun & Clarke, 2021). This analytic approach involved an iterative process of the following phases: (1) data familiarization, (2) coding, (3) generating initial themes, (4) developing and reviewing themes, and (5) refining, defining, and naming themes, and (6) writing the report (Braun & Clarke, 2021; Byrne, 2022). In the first phase, the textual data of all interviews were reviewed by our lead student researcher, MBS, to become familiar with the content of all interview dialogues. In this stage, MBS was immersed in the data and gave equal consideration to all data (Braun & Clarke, 2021; Byrne, 2022). In the second phase, textual data were inductively coded, with both semantic and latent coding approaches, and interpretive labels were developed to inform the subsequent development of themes (Braun & Clarke, 2021; Byrne, 2022).

Annotations to each transcript were made on NVivo to inform the coding process and theme development (Braun & Clarke, 2021). Separate codebooks were generated for the trainees' interview data and the partners' interview data. All our research team members were involved in the development of codes and provided feedback on both codebooks. In the third phase, MBS actively interpreted the shared meaning across generated codes for each codebook separately. MBS developed preliminary themes based on initial codes, which were shared with the research team for consideration, open discussion, and refinement.

In the fourth phase, we reviewed the relationships between codes and initial themes generated (Byrne, 2022). Each research team member was provided with three to four interview transcripts to review for coding and theme generation to ensure codes aligned well with the thematic framework. We then reconvened to discuss impressions

and overall themes within our respective transcripts, which informed the development of subsequent thematic iterations. Moreover, thematic framework iterations were reviewed in relation to the entire set of textual data. The fifth phase involved defining and naming the themes, especially as they related to the research question. Discussions in our weekly research team meetings were used to inform the refinement of all themes. We also engaged in reflexivity during team meetings, and we reached consensus at the end of each thematic framework iteration. In the sixth phase, the thematic narrative was written, which further refined the themes developed from previous phases.

2.9 Rigour

Several methods were used to establish rigour in this interpretive description study. First, we collaborated on reflexivity processes throughout the thematic analysis by engaging in thoughtful and open discussion on the research process and how our identities, opinions, and experiences informed the research process and findings. Second, MBS kept a reflexive journal throughout all phases of analysis, which was stored on a secure, password-protected MacDrive. MBS engaged in reflection and reflexivity with our research team throughout the analysis to critically engage with the data. Third, all members of our research team engaged in investigator triangulation, and we ensured consensus was reached concerning each iteration of the thematic framework.

2.10 Reflexivity

Reflexivity can be comprehensively described as, “a set of continuous, collaborative, and multifaceted practices through which researchers self-consciously

critique, appraise, and evaluate how their subjectivity and context influence the research processes” (Olmos-Vega et al., 2023, p. 242). The process of reflexivity in our work has been a continual self-evaluation of how my (MBS) and my research team members’ positions, values, opinions, and experiences have influenced the research process and findings (Braun & Clarke, 2021; Pillow, 2003; Acai, 2024; Dowling, 2006).

2.10.1 Personal Reflexivity

Personal reflexivity refers to researchers’ reflection on how their unique perspectives, experiences, assumptions, and reactions to their research might influence their work (Olmos-Vega et al., 2023). I (MBS) am the student-lead researcher in this study, which is my thesis project in the Master of Science in Health Science Education program. I am a first-year graduate student and a North African, Canadian woman. As a non-medical learner and non-clinician, I have no personal experiences that align with the medical aspects of trainees’ experiences. However, I have close friends currently in undergraduate or postgraduate medical training and have observed the range of positive and negative influences that medical training has had on them, their relationships, and their mental health and well-being. These friendships have prepared me for conducting one-on-one interviews, where I listened to participants share their lived experiences. These included positive sentiments about their training, negative emotions due to its rigorous demands, and mixed feelings where the sacrifices made for the sake of training were questioned. As a graduate student, I empathized with some of the struggles faced by participants, such as the uncertainty they felt concerning the future trajectory of their careers.

While conducting this study, I was in the process of applying to medical schools as I have been aspiring to become a medical learner, and eventually a physician, for the past couple of years. My interest in the medical field and pursuit of a career in medicine was known by all members of our research team. I often debriefed with my team after interviews and specific analytic phases to unpack my expectations of a career in medicine. My research team helped me appreciate the diversity of experiences during medical training by sharing their own experiences around medical training and relationships in medicine. During the thematic analysis, I began to understand the medical training experience, and intersections with relationships and well-being, in a more holistic manner, which informed later iterations of the thematic narrative.

2.10.2 Interpersonal Reflexivity

Interpersonal reflexivity refers to examining the relationships around the research process and considering how they might impact everyone involved, while also being mindful of any power dynamics that may be present (Olmos-Vega et al., 2023). Engaging in one-on-one interviews with participants, who entrusted me with their stories, was a privilege. The vulnerabilities that participants shared with me held notable weight and meaning, all of which I treat with the respect they deserve. I found myself bonding well with many of the participants in this study. Given that I am of a young age (23 years) and outside of the medical context, I noticed that participants were more inclined to speak colloquially and candidly with me than they might have done in other contexts. I also observed that some participants took the time to explain medical terms and practices to me, while others opted to describe their healthcare-related experiences in a more general

manner. The other members of our research team consisted of HH—social worker and founder of The Flipside Life, an organization that supports physician families, who is married to a physician, CM—psychiatrist and assistant dean of resident affairs in PGME, who is married to a physician, AA—PhD-trained education scientist with expertise in qualitative research methodologies, who has a non-physician partner, and EE—neonatologist and faculty well-being director, who is married to a non-physician, all of whom were involved in the data analysis process. The choice of interviewers from our research team, MBS and HH, was intentional and aimed to reduce the power imbalance between the interviewer and interviewee.

2.10.3 Methodological Reflexivity

Methodological reflexivity refers to considering the rationale behind a study's methodological decisions and the associated implications (Olmos-Vega et al., 2023). The methodological choice of interpretive description was selected due to my lens as a medical education researcher. As a medical education researcher who does not have a professional discipline, interpretive description is particularly useful as it serves to realign qualitative research methods with the epistemological foundations of applied disciplines, in this case, postgraduate medical education. Moreover, the interpretive description approach plays a useful role in my exploration of this emerging field of inquiry exploring the role of postgraduate medical trainees' intimate partners as it pertains to their mental health and well-being (Thorne, 2016). This methodological approach not only allows for the development of new insights into the connections between training experiences, relationships, and well-being, but it also allows for such insights to be translated into

practice. Additionally, our research team chose not to use a theoretical orientation at the outset of our study, given that this topic is a relatively new field of research. Instead, we opted to use an exploratory approach to better understand this particular medical education phenomenon.

2.10.4 Contextual Reflexivity

Contextual reflexivity refers to situating a research project within its cultural, historical, and social context (Olmos-Vega et al., 2023). Being reflexive contextually, our study deals with the intersection of medical training, relationships, and mental health. Historically, medical training and its culture have been known to be challenging with many occupational demands and responsibilities (Ebrahimi & Kargar, 2018; Schneider et al., 2002; Collier et al., 2002). The impacts of medical training on the mental health and well-being of postgraduate medical trainees have also been extensively explored (Anagnostopoulos et al., 2015; Ishak et al., 2009; West et al., 2011). However, the intersection of trainees' relationships with the experiences of medical training, and its impacts on mental health and well-being, has only been more recently explored (Evans et al., 2021; Kemp et al., 2022; Grimmer & Jacquin, 2023). Since postgraduate medical trainees' intimate partner relationships are often overlooked when exploring resident wellness needs, our research team ensured that both trainees' and their partners' perspectives were included in this study. Additionally, our study is being conducted in a Western context, which can be highly individualistic. This sociocultural aspect is reflected in our study's focus on the postgraduate medical trainee and their partner, rather than the broader networks of individuals who support them.

2.11 Ethics Approval

Final ethics approval was obtained by the Hamilton Integrated Research Ethics Board (Study #: 16211), following which our study recruitment began.

CHAPTER 3: RESULTS

3.1 Participant Characteristics and Overview of Thematic Narrative

A total of 38 participants completed a semi-structured interview, of whom 23 were postgraduate medical trainees registered at McMaster University and 15 were partners of trainees registered at McMaster University. The majority of participants were in a trainee and non-trainee relationship, with five participants being in a trainee-trainee relationship. Participant characteristics, including gender, sexual orientation, relationship dynamic, postgraduate medical speciality, and whether participants had children, are summarized in Table 1.

Using reflexive thematic analysis, we developed a total of seven themes: (1) The inflexible and unforgiving nature of postgraduate medical training, medical culture, and practice: The inhumanity of it all, (2) The mental, physical, and emotional toll of training on the couple, (3) A battle of identities and responsibilities: Whose identity is prioritized? Who shoulders the burden?, (4) The trainee-partner relationship as a protective ‘bubble’, (5) Threats, fractures, and repairs to the relationship ‘bubble’, (6) Expanding the ‘bubble’: The importance of other personal and peer relationships for trainee and partner well-being, and (7) Need for advocacy: A call to change the culture of medicine.

The themes we developed illustrate a narrative that offers a nuanced understanding of how the postgraduate medical training experience intersects with trainee and partner mental health, overall well-being, and relationship dynamics. The narrative begins by acknowledging the unforgiving nature of the postgraduate medical training

environment and the broader culture of medicine, highlighting the impacts of that ecosystem on trainees and partners—namely, a perceived lack of control over their personal lives and the resulting tolls on their mental, physical, and emotional well-being. In response to these impacts, the third, fourth, and fifth themes explore how different relationships survive or thrive during training, emphasizing the concept of the relationship bubble that provides stability and protection amidst the stress of training. The importance of other personal and peer relationships in supporting trainee and partner mental health is highlighted in the sixth theme. The narrative ends by underscoring the importance of viewing residents holistically and amplifying partners’ voices, as this approach also supports the well-being of trainees. This thematic narrative is depicted in Figure 1.

3.2 Theme 1: The Inflexible and Unforgiving Nature of Postgraduate Medical Training, Medical Culture, and Practice: The Inhumanity of It All

Both trainees and partners discussed the unforgiving explicit and implicit expectations inherent to the practice and culture of medicine, which have historically overshadowed the personal lives of postgraduate medical trainees. Participants highlighted the implicit expectation that medicine be prioritized above all else, such that every facet of their lives revolves around medicine, and is constricted by its demands:

“I felt like there was an unspoken [expectation that] you have to prioritize medicine over everything else in your life” [033, P].

Partners, specifically, vehemently expressed their frustration with programs’ unrealistic expectations of trainees, stating that residency is “*made to break [residents]”*, which is neither “*conducive to good learning [...] [nor] conducive to good patient care”*

[032, P]. One partner described residents' working conditions as "*inhumane*" and that the expectations placed on them are "*completely beyond anything a human is capable of*" and remarked that the program "*disregard[s] that they're humans*" [024, P].

Multiple trainees and partners expressed their serious concern for the safety of trainees and patients, particularly given that some residents were working 26-hour shifts. They emphasized the inhumanity of this, contrasting expectations in residency training to other professions within which such work hours would be unacceptable or not permitted.

"No human should work 26 hours, let alone a human that's responsible for other humans" [004, R].

"I work 12-hour shifts as a nurse, if I'm completely dead and it's not safe for me to function as a nurse after 12 hours, how is someone supposed to be responsible for lives after 12 hours?" [026, P].

The unforgiving culture of medicine was further described by one partner who pointed out the "*ridiculous hierarchy*" inherent in training where residents felt the need to "*impress the staff all the time*" [031, P]. Trainees also described the underlying cultural pressures they experience during training, with one resident explaining that "*there's an implicit understanding that [residents] will do whatever [the staff] tell [them] to do. And if [they] disagree, it's a social no-no*" [012, R]. Navigating complex hierarchical dynamics with staff and other trainees was identified as being "*just as stressful as the number of hours and the shifts that [trainees] work*" [011, R] and often led residents to work beyond reasonable expectations. Trainees recounted instances of receiving harsh feedback from staff that did not constructively contribute to their learning or professional development, but instead left them feeling personally attacked and

doubtful of their professional competency. One resident described how these comments contributed to “*a culture where it's not about learners, and where it's just about, 'How can you serve this service?'*” [017, R]. Out of frustration with the culture of medicine, one partner expressed that they found it disheartening that the staff physicians who care for and treat patients do not seem to care, at times, for their residents and can contribute to poor trainee mental health.

Residents perceived the intense pressures within the practice and culture of medicine as stemming from not only the high external standards set by staff and the profession, but also from residents' own personal expectations. One resident explained this by saying that residents “*expect a lot from themselves and are not forgiving of themselves*” and that “*it's hard to step outside of what's going on, and be kind to yourself*” [017, R].

3.2.1 Theme 1A: The Impact of the Culture of Medicine on Trainees' Personal Lives and Relationships

Both trainees and partners described the impacts of the culture of medicine on trainees' capacity to attend to the needs of their partners, families, and domestic responsibilities:

“It's been extremely impactful. It has been grueling. It's been detrimental. I can't overstate that enough. It has been tremendously hard. [...] Her residency and the hours that it was putting, and the stressors that it was causing on her fundamentally affected and impacted me and our household both before and after childbirth” [025, P].

“The call culture, like not sleeping for [...] 30-something hours and then you come back home, exhausted, and just everything goes out the window. You can't

clean, you can't cook, but you have to prioritize your work ahead because that's just what's expected of residency” [012, R].

“Those 26-hour shifts [were] just absolutely horrible because she was just so exhausted and, again, I don't think any human should work 26 hours in a row. And you could see it on her because she didn't function properly and was just exhausted, tired [and] could not function at home, nothing” [024, P].

Residents in trainee-trainee relationships shared that they try to reassure each other and take turns managing the demands of their residency and home life. One resident discussed this and the importance of her partner's presence in times of exhaustion, saying,

“If it's not a daily, it's at least a twice-a-week conversation that we have of reassuring each other that the worst is right now. [...] We're also dealing with incredibly sick, complicated people and neglecting ourselves completely during that time. Like, I can't tell you how many shifts I've gone where I'm not eating or drinking water because I'm dealing with patients, and that's just the standard expected baseline for this profession. So, to have two people in the relationship that are [in medicine], somebody needs to be able to take care of you, if you can't take care of yourself” [006, R].

Non-trainee partners, on the other hand, often expressed that they did not know how to support their trainee partner because they did not recognize or understand the all-consuming nature of the resident role or realize the consequences residency would have on their relationship and personal lives, especially early in training.

“I became a really poor partner at the beginning of PGY-1 because I wasn't prepared. I didn't understand the expectation on him, and I didn't understand how difficult it would be for him to also transition into the role” [030, P].

“I did not think it would be as much work as it is. I did not think it would be all-consuming. I remember thinking like, [...] ‘We'll go out and grab a coffee when she's on call.’ [...] No, not gonna happen, she barely eats or pees for 24 hours” [038, P].

Even if non-trainee partners understood the inflexible expectations of training, practice, and the culture of medicine, they felt that there was not much that they could do

to support their trainee partners. Those feelings of helplessness were expressed by one partner when they said,

“There's not really anything you can say. Just, it's hard; the fact that there's nothing [or] anything you can really do to help them other than saying, ‘It'll be all right’, or helping with little things” [036, P].

3.2.2 Theme 1B: The Inflexibility of Residency Impacting the Relationship and Future

Planning

While in the previous subtheme, participants discussed how the intensity of residency training impacted their relationships, participants particularly highlighted the inflexible nature of training as a key factor contributing to their perceived lack of control over their lives and future. One resident explained this particular distinction, saying,

“It's not really just being all busy, it's that you have very little control over your schedule. It's that unpredictability that makes it challenging for people outside of medicine to really understand. [...] It's not even about how many hours you've worked. It's just that you don't even know, because it's not up to you” [012, R].

Another resident clarified that her stress is not related to the relationship per se, but rather came from the perceived lack of autonomy that residency imposed on the couple's lives, saying,

“[It's] not really a frustration with our relationship. It's just frustrating that we don't have the autonomy over our lives to be more present” [006, R].

Both trainees and partners described how the rigidity of the residency schedule often dictated their life together, making their relationship more challenging to navigate. They discussed how “*everything needs to fit into the medical schedule*” and that as a couple, they “*need to plan everything around [residency]*” [005, R], with multiple couples delaying the next steps in their relationship and family planning because of the

resident's schedule. Residents in trainee-trainee relationships had the additional struggle of aligning two different rigid schedules for time off together, which was not always granted. Some non-trainee partners became accustomed to the unpredictability of residency and adjusted their expectations accordingly:

"I knew that it was going to be very stressful [...] [and] that she's not going to be in control of her schedule as much as she'd like. [...] I basically don't assume I know when she's going to finish work anymore" [031, P].

Residents often expressed guilt due to the disruptive nature of their training, feeling that they *"have to be the center of the universe, but [...] don't want to be"* since many *"future life decisions were dictated by"* [015, R] their training. Residents and partners also discussed the *"unpredictability that [they] just have to learn to live with"* [012, R], especially when it came to the Canadian Resident Matching Service (CaRMS) Match and the possibility of the couple moving anywhere in the country based on the Match result.

"My worry is that I have dictated the places that we've lived for a few times. So, his job has chased mine a few times. [...] Certainly, with how CaRMS works, I matched somewhere that I did not have control of, [...] which makes me feel like we value my work more [...] and he has made sacrifices to the relationship to be here" [005, R].

The partners shared their sense of lack of control that comes with being partnered with a medical trainee, with one non-trainee partner expressing her experience with CaRMS saying,

"I'm the one that just has to drop everything and go where he goes, but I'll do it, and I'll do it again" [026, P].

Additionally, training's impact on family planning decisions was discussed by multiple trainees and partners who did not yet have children, as they spoke about the

desire to have children earlier but delaying those plans due to training. One resident expressed that if *“I could have it my way, I would have [a child] ASAP”* [012, R]. When asked about why they felt the need to delay family planning due to training, participants shared their concerns about being an absent parent, lack of current financial stability, and the stressors of parental leave, such as finishing training at a delayed time. Residents discussed their concerns about sharing with the program and colleagues that they are taking parental leave because of the culture of medicine, and that taking parental leave would be disruptive to their co-residents' schedules.

Participants also discussed concerns about parenting during residency, such as the challenges of breastfeeding during training and leaving shifts to care for their child(ren) if they became sick. One resident shared her concerns about becoming a mother during training, saying,

“Residency is not made for mothers. It’s not. [...] You’re just squeezing motherhood in it. [...] That’s my biggest fear coming up: how I’m going to juggle those two things. I’m definitely going to make some people upset, but at the end of the day, I’ll just have to do what I have to do and try my best” [012, R].

At the same time, residents discussed the pressure of having children during residency, with one resident sharing that she is in *“peak childbearing age [during] residency”* and for *“someone like [her], it’s either [she has a child] now or never”* and has come to the realization that *“there’s no perfect time for kids in medicine”* [012, R].

Residents who chose to have children during residency shared the stress of attempting to conceive, dealing with infertility, freezing eggs, and experiencing miscarriages amidst the demands of training. One resident recounted her experience of

miscarriage during training and discussed the emotional burden, compounded by the lack of support from colleagues, saying,

“Trying to navigate taking the time you need and also not wanting to share everything with everyone because people want to know, if you're not covering call, [why] you're not available. What's wrong? What's going on? Did somebody pass away? [...] Then other people are making judgments about what constitutes enough to not be there for call. So, it's challenging, the emotional part of it and the difficulty of going through that” [011, R].

Another resident discussed the unique struggles of having a child during residency, while in a long-distance relationship with her resident husband, saying,

“It's different now that we have a child versus before in terms of what you pay attention to and what you have time for. Before having a child, having a partner in residency, you try to dedicate any time you don't spend to residency tasks, whether that be clinical tasks or administrative or residency tasks, to your partner. Any time I have off, hopefully we would be trying to schedule a meeting up somehow, even if it's long distance. [...] But now that we have a child, I feel like there's less time dedicated directly to our relationship, just me and him, and any time I'm not dedicating to residency tasks, is pretty much dedicated to her, playing with her or putting her to bed” [013, R].

Trainees who had children prior to starting residency described the additional stressors of balancing parenthood (e.g., childcare) with their ongoing professional responsibilities. Non-trainee partners discussed how they had to “solo parent” [031, P] since much of the resident’s time was taken up by their training, and that one unintended consequence was that some children developed a preference for, or stronger attachment to, the non-trainee partner since they had more time to spend with them. On the other hand, one trainee discussed the importance of “engaging [with her] kids” during training and “[letting] them know what [she’s] going through” so “they don’t feel abandoned” [019, R].

Residents also described the stress of balancing parenting with stringent training responsibilities and the hidden curriculum, which conveys the expectation that medicine should be prioritized over parenting. Residents discussed the difficulty of leaving work early to pick up their children and attend to their needs, even when they had completed their residency-related tasks. One resident described the expectation to prioritize their identity as a physician over their family, highlighting how this severely limits their sense of control over their lives, saying,

“Nobody would ever say this, but it's not acceptable to be late or cancel or change a commitment or service obligation because of a kid. Like, you are not a mom. You're not a parent. You're a physician. [...] It seems like there's this hidden curriculum that they need to be mutually exclusive [...] The bar to have to leave unexpectedly in medicine is almost life and death. [...] That's the hidden curriculum; you better be here unless [...] you're in hospital” [011, R].

An additional recurring theme illustrated by multiple trainees and partners was the significant financial hardships associated with residency and the impacts that these financial strains have on their mental health, family planning, and ability to take care of their family:

“It's almost impossible to make ends meet, even with a resident salary. [...] We do both realize that if I do not finish residency, I will go bankrupt. [...] I'm not getting paid anything near what I should be getting paid after 13 years of post-secondary education. [...] We can't even think of having a family at this point” [022, R].

“I'm really worried about the lack of pay. We both are. It hangs over us. We know that because she wants to have kids during residency, [...] you're basically putting your career progression on pause. And frankly, the money that comes with that” [025, P].

“The stipend you are being paid is only enough for you and the rent. [...] Every month, I used to cry. I'm like, ‘Oh my God, how do I make ends meet?’” [019, R].

3.3 Theme 2: The Mental, Physical, and Emotional Toll of Training on the Couple

The inflexible and unforgiving culture of medicine had notable tolls on the mental, physical, and emotional health and well-being of trainees, partners, and their relationship.

3.3.1 Theme 2A: The Notable Toll of Training on Trainee Well-being and Their Capacity to Actively Participate in Relationship

Beginning with the toll of training on the resident specifically, many residents described residency as an exhausting and draining ordeal that stretches residents to their limits, leaving them depleted and unable to tend to their personal relationships. One resident explained,

“Residency [...] drains you. You feel like there's no time for a partner, friends, family. It sucks” [004, R].

Residents’ exhaustion can leave them with little emotional bandwidth and energy to engage with their partners after work. Residents described coming home exhausted and being “very irritable”, which “put a wedge in [their] relationship” [015, R]. Some found it “hard to wind down or relax” with their partner after finishing work and felt like their “capacity to listen [to their partner] after spending the last eight to nine hours in clinic listening to patients” had “dwindled” [002, R]. Residents described that their non-trainee partner was often less exhausted by the events of their day and had significantly more energy to engage in the relationship. One resident described this juxtaposition, saying,

“She's at home waiting for me to be back, and when I'm back, I'm already consumed physically [and] mentally because of the thinking and caring for patients and all that critical stuff you see. And then when you're back, they're

fresh for you to be there, to start conversations, to indulge or to tell stories, and you are tired. My ears don't work” [009, R].

Residents also made the connection that when they were stressed at work and sleep-deprived from call shifts, they felt less understanding at home and had a reduced capacity to contribute to domestic responsibilities. From the partners’ perspective, they expressed feeling unprepared for the extent to which the demands of residency drained their resident partner. One partner described having *“a pretty lonely and isolating experience because of [the resident’s] schedule”* since *“all of his energy goes to residency”* and *“by the time he comes home, he’s already so [exhausted] and has very little energy to invest elsewhere” [026, P].* Partners also expressed not wanting to further drain their resident partner after they return from work, but also acknowledged that they, as partners, *“have [their] own needs” [026, P].*

Residents’ limited bandwidth for their personal life also resulted in limited ability to engage in self-care practices. Residents described sacrificing key hobbies they once enjoyed, having poorer diets, neglecting regular exercise, and withdrawing from their social network. One resident expressed this shift in self-care saying, *“I think I looked after myself better before I was in medicine” [021, R],* and another said that they are now *“just trying to survive” [010, R].* Residents also described the challenges of relaxing during their vacation time with their partner, with one resident saying,

“I would just be exhausted, and I'd be like, ‘I don't understand why I'm on vacation. I just feel so depressed, just exhausted.’ [...] When you get to the end of your vacation, you start to perk up a little bit. That's just the pattern, like you're so wiped out. Even your vacation time together, [...] the intensity of medicine still takes that time away from you” [011, R].

The demands of training also impacted the mental health and well-being of residents, with residents attributing their poorer mental health directly to training.

Residents described how the jarring transition to residency impacted their health and well-being, with one resident saying,

“The first little while was brutal. I developed hyperthyroidism because I was working ridiculous shifts and doing things that I didn't feel comfortable doing, you know, procedures I didn't know how to do, and writing orders that I didn't really know how to write. And you know, being up for 36 hours as a young student feels bizarre, and so it made me physically ill. [...] I became quite depressed” [023, R].

Another resident described their anxiety related to residency, saying,

“I'm definitely a more anxious person than I was prior to residency starting. I never used to have issues going to sleep at night. [...] You just stay awake thinking about your patients” [010, R].

This resident also described feeling *“less emotionally stable than I used to be” [010, R]* prior to residency and watching their mental and emotional well-being decline during residency. Residents also discussed *“feelings of inadequacy”* in training, with one resident describing it as *“the constant feeling of not feeling you're doing enough, being enough, or worth enough just because you're stretched in so many different directions” [004, R]*. Participants also discussed residents' pervasive feelings of imposter syndrome, with one partner sharing that her resident partner *“feels like he doesn't know enough” [028, P]*. Another resident shared their experience of being diagnosed with depression during residency,

“I was one of many of my peers who went on antidepressants in first year. [...] I knew that residency would be a strain on my mental health. [...] I was burning out very hard. And finally, I went to my family doctor, and he formally diagnosed me with depression. [...] That was indicative of how impactful residency was for me, for sure. And I know I'm not the only one who either started therapy, went on antidepressants, contemplated it” [017, R].

Anxiety, depression, and experiences of suicidal ideation were just some of the mental health consequences described by residents. When asked about the impact of training on overall health and well-being, one resident questioned whether the cost of training was worth it, saying,

“Well, definitely, healthwise, it's been very tough. I've gained 25% of my weight, my cholesterol has gone up three times the average, had issues with sleep; I could go on a big list of health impacts that residency has had. Emotionally, I feel a bit less patient with people. I'm a bit more blunt. I guess with my relationship as well. I find [partner name] is a bit less patient because we don't have as much time to discuss and talk about things. [...] At times honestly, she and I have discussed, ‘Is the end goal really worth it?’ When you know, residency is taking my health, is taking our relationship. And no amount of money is going to bring that back” [022, R].

This sentiment was shared by partners of trainees. When partners were asked if they had ever wished that their partner was not a resident, some partners expressed that they wished that *“all the time”* [024, P; 026, P]. One partner expressed their frustration, saying,

“If she could turn back time, she would never, ever, ever even choose that path. [...] She's not fulfilled by her job. She doesn't like it at all. It just causes stress and anxiety and nothing else. [...] It's just hard to see her go through with it and hate her entire career. I wish she hadn't been a resident” [024, P].

The toll of training on the resident was often recognized by both partners; however, the toll on the relationship was at times more insidious. The residents described that they would sometimes refrain from sharing all of their residency experiences to protect their partners, instead keeping struggles to themselves. One resident shared that this avoidance or emotional distancing actually created strain in the relationship, saying,

“Not intentionally so, but I was sort of distancing her from all the stress I was experiencing early on in residency, because she was already stressed that I wasn't around, and I felt very poorly about that just because it was a situation that I

couldn't change. So, I think that was the starting point, me not relying on her, because I didn't want to burden her with my stresses, because our relationship was already somewhat strained” [008, R].

Similarly, partners expressed not wanting to burden their resident partners with their stresses, despite having needs of their own, with one partner saying,

“It's not beneficial to keep sharing what's on my mind [...] a lot of it is just kept from him because it's not going to make a difference” [026, P].

“His social battery is already drained from work. So definitely don't want to drain that further. But then at the same time, like, I have my own needs” [026, P].

Partners expressed needing to give their resident partner space and time on their own to recharge from the stresses of residency, despite wanting to be with them. One partner described this tension, saying,

“I would share with him when I feel that I don't see him enough, but every time I do that, I feel so selfish because he doesn't even see himself, like he can't do anything outside of residency often. [...] They're always pointless disagreements because I know that they're not going to resolve or go away because that's just the nature of what he's going through” [026, P].

Both residents and partners pointed to sharp declines in their intimacy and sexual activity since beginning residency. Residents shared that during periods of high stress on difficult rotations, they would emotionally “*shut down*” and lack a desire for physical closeness, which could “*last for months [...] at a time*” [021, R]. One resident described the impact of residency on their ability to engage in intimacy and the challenges it presents in their relationship, saying,

“It's been the most challenging when we're completely lacking that sort of intimacy side. [...] If I'm on a particularly busy rotation, or it's a busy time, that'll be a month or longer where I'm in my own space, and I don't want any physical intimacy” [021, R].

Residents discussed being “*totally exhausted*” by work and lacking the “*energy to be intimate*” [011, R] and partners also reported this.

“He just doesn't have the energy often. [...] Sometimes [he] comes home and just has to continue charting because he didn't get the chance to. [...] It's hard to be flirty when your mind is so preoccupied with the work that you have to do” [026, P].

Partners also noted that ongoing stressors experienced by residents, including preoccupation with work and sleep deprivation impacted their sex life:

“I wanted to have sex with [him]. He goes, ‘I can't, I'm on call. Someone might call me.’ I'm like, ‘But you're on home call like, why is it?’ ‘Nope. The expectation is that I need to pick up the phone right away and I can't be distracted.’ [...] He's at home call! He's on home call, not at work. So that's one. The second one is when he is stressed about work, we don't have sex. We don't. He's worried about how much sleep he's going to get. He's worried about how present he's going to be at work the next day. He tells me that his physical body is very focused and he's like, ‘I can't’” [030, P].

Despite these challenges, residents identified intimacy as “*an important way for me to feel connected to my partner and for him to feel connected to me*” [011, R]. This sentiment was echoed by partners, with one partner saying,

“Medicine attracts a certain type of personality and person to be able to perform in medicine, and that person needs to be nurtured and loved, intimately. And if we can't love them because they're too busy and they're too stressed, they're also not going to be the best version of themselves because they're not being loved in the way that they need” [030, P].

To cope, some residents described having to remind themselves that “*it's just the nature of my job right now*” [017, R] that will eventually pass. Another resident identified the importance of “*being really conscious and aware [when they] haven't been intimate in a long time*” and communicating with their partner, by saying, “*I'm feeling distant*

from you” [011, R], or intentionally taking action to close that gap through forms of non-sexual intimacy like holding hands and hugging.

Partners described that the lack of intimacy in the relationship led to feeling that their own needs were not being met and to greater emotional distance in the relationship. They discussed not wanting to share their own needs for intimacy because it could make their resident partner feel guilty, inadequate, or more exhausted, with one partner sharing, *“I can't focus on my needs or get fulfillment of my needs from him because that would further drain him” [026, P].*

3.3.2 Theme 2B: The Intimate Partner: The Unseen Witness Who Sees It All

Participants described how the mental, emotional, and physical toll of postgraduate medical training was not always apparent or could be hidden from friends, family, colleagues, supervisors, or others in trainees' personal or professional lives. However, the intimate partners of trainees were often the unseen witnesses, who acutely understood the toll that training takes on their trainee partner, instinctively, out of necessity and in most cases without any formal training or support. One resident described this in her partner, saying,

“He's been with me the whole time. You know, even applying to medical school. So, in some sense, I think he gets it more than anyone else who's not in medicine, he sees the exhaustion and abuse of power that happens within medical education and all the parts that are really challenging. [...] I think he both understands more than any of my friends that are not in medicine or anyone else that I have in my community that's not directly in medicine. And maybe even more so than people that don't have much exposure to the intensity of [surgical program name], even in medicine” [011, R].

Partners described having a front-row seat to the impact of training on their resident partner. They described their resident partners as being “*burnt out*”, “*overwhelmed*”, “*constantly exhausted*”, “*dreading going into work the next day*”, and “*not being able to recharge at any point*” [026, P]. One partner highlighted the relentless anxiety and self-doubt that plagued his resident partner at home, describing how she would wake up in the middle of the night, preoccupied with worries about her quality of patient care or being responsible for a patient death, which created a significant mental burden:

“It's added a toll on her most definitely; there's nights where she can't go to sleep because she's thinking about a patient, and admirable as it is that she cares about people and cares about the patients, [but] it's to her detriment and she's waking up at 3 A.M. and then she's researching about this specific drug, or she's thinking about a scan that she had done, and whether or not she had missed something, but at the time she didn't think she missed something, and making these scenarios in her head, when theoretically, everything that she did was perfect, and by the book, the system allows her to think that she did something wrong, and so as much as she tries to hold it in, I think, it sometimes eats away at her” [034, P].

Partners who had been with their trainee partners throughout medical training also pointed out periods of extreme stress that they witnessed. One partner described the stress at different training stages, including the transition into residency and the transition to practice after training, saying,

“She was a wreck, understandably, too. [...] She wrote all of these applications, a million of them, and was just absolutely exhausted mentally and physically. [...] She was just crying, laying in bed, crying, not talking. It was really bad. That's how exhausted that left her. [...] Due to [...] her huge amount of anxiety and stress, she wasn't able to be positive and look forward to being done because she just felt like it was another burden on her shoulders to find a job. [...] Residency just brought her to this mental state where she was just not able to even consider that there's anything positive happening. [...] The expectations went up in terms

of, 'Okay, you're almost done now, time to feel happy.' And it didn't happen" [024, P].

Partners who were in relationships with their trainee partners prior to residency discussed changes they noticed in residents' behaviour and personality. Residents were described to be more “*anxious*”, “*stressed*”, “*moody*”, and “*negative*” over time as the cumulative pressures of residency added a noticeable “*weight on the shoulders*”. One partner expressed that “*during residency, it felt like [their resident partner] was almost a different person*” [024, P]. Partners expressed their worry about their resident partners' well-being, especially when their resident's mental health deteriorated, with one partner saying,

“I worry about her more, [...] like her work led her to go on anti-depressants. [...] I think she just needed [...] a reduced workload. But given her profession, it became clear that that wasn't going to happen anytime soon, so she needed to do the things she needed to do without crying every night. So, she got the antidepressants. [...] I associate all that directly with her profession. It's like she works all day, she comes home, she does more work to do. [...] She doesn't have time to take care of herself really at all with the current state of residency responsibilities. [...] I'm sad that she doesn't have the time to do the things that are good for [her] health” [031, P].

Another partner pointed out that their resident partner “*didn't even have the time to do therapy*” [024, P] due to the time pressures of residency, with other participants citing financial restraints as barriers to seeking mental health support. Residents were aware that their partners noticed and witnessed changes in them throughout residency, with one resident saying,

“I am not as present as I used to be, and she sees that. [...] I used to have energy and excitement to say, 'Let's go in the car, and we'll find something to do.' I don't do that as much. Usually, I stay at home. She tries to get me out more often to walk, but I just don't want to walk. It's that stuff she sees. She sees me being a bit run down by the system. So, it does affect her” [022, R].

The toll of training on trainees also extended to their partners, who experienced heightened stress as a result. One resident explained this saying, *“I feel like he’s stressed because he sees me stressed”* [010, R]. Partners expressed feeling frustrated, not knowing how to provide meaningful help or support to their resident partner, beyond *“saying, ‘It’ll be all right’, or helping with little things”* [036, P]. Other partners explained that they tried to challenge the unhealthy culture of medicine and encourage their trainee partner to prioritize their time off. One resident described how she perceived her partner’s experience, saying,

“We’ve had conversations where he’s told me he doesn’t know how to help me, and he finds that hard. [...] I think he worries about me. I think he worries about how to support me because he’s lovely like that. And on his own, I think probably he wonders how to fit all of this in, so that we’re both very happy” [021, R].

Some partners described how they found it difficult to *“watch the decline of [their trainee partner’s] mental health over time”* as they were being *“pushed to [their] limits”* and *“beyond [their] limits”* [038, P]. They also described the dual responsibilities they carried—to tend to and protect both their own and their trainee partner’s mental health and well-being during postgraduate medical training. One resident shared that her *“partner becomes too important in supporting [her], and it’s draining for them”* [011, R]. Moreover, the partner of a fellow described experiencing depression, which he linked to having to manage his own overwhelming workload, while simultaneously supporting his trainee partner.

3.4 Theme 3: A Battle of Identities and Responsibilities: Whose Identity Is Prioritized? Who Shoulders the Burden?

The toll of training on the couple can create tension around how the trainee and partner decide to balance their roles and identities within the context of a demanding postgraduate medical program. The implicit and underlying questions that seemed to be asked were: “Whose identity is prioritized?” and “Who shoulders the burden and responsibilities?” in the relationship.

3.4.1 Theme 3A: The Double-Edged Sword of Medicine: The Privilege and Pain of the Resident/Fellow Identity

Residents discussed the privilege of being physicians and being “*invited into an intimate part of someone's life*” [020, R]. Another resident spoke the honour of practicing medicine, emphasizing the opportunity to support patients in their most vulnerable moments:

“I really enjoy that you get to make a difference in people's lives. I've had a lot of meaningful experiences. I feel like this is like what I'm meant to be doing, as jaded as I sound right now, or as [...] sleep deprived. I feel like it's such a privilege to be able to help people when they're so vulnerable and to get their life stories and you're automatically trusted because you have an MD at the end of your name, it's such a unique privilege that a lot of people don't get to experience” [015, R].

Residents described deriving a deep sense of purpose and professional fulfillment from their career in medicine, especially as they developed new skills and formed their professional identity. They also expressed feeling proud when they can meaningfully contribute to patients' lives.

“[Medicine] [...] gives you a sense of purpose. Like you wake up, [and] there's somewhere where you need to be. There are people that you need to help, [...]

someone needs you; you need to be somewhere in the morning, there's a reason for you to be here” [015, R].

“I enjoy having a job as a doctor. [...] I enjoy showing up for people. I enjoy feeling like I make a difference. I enjoy feeling like I can contribute” [021, R].

Some residents discussed how residency has led them to more deeply reflect and focus on what actually matters in their lives—their meaning and purpose within and outside of work. One resident described it this way,

“Residency, in general, made me realize what's important in life because you see so much of death and disease, and what should matter. [...] For me, anyway, [it's] people like family, friends, the things I do outside of work to find meaning. Work is definitely meaningful, but it's tough and it's not my whole life. And anyone that I saw going through death and disease, they were never telling me all about their work. It'd be about what they did and their life and their family. And so, okay, this is what's important. This is the thing I need to focus on; [...] that refocused my life and is why I am where I am now, especially with [partner name] and my friends” [020, R].

“This job is less ‘clock-in, clock-out’. You're having a big impact on, not just the patient's life, but their families, and they're gonna remember this interaction for the rest of their life and their interaction with the health care system. But I can't frame my life just around that aspect of my life. [...] After going through first-year, the way I frame my life now is: you have meaningful work, but [...] my meaning is to hang out with my friends, have lots of life experience, have an amazing partner and share my life with them and do things with them and make sure I can spend as much time with my family in my very busy schedule as it is” [020, R].

Another resident shared how becoming a parent during residency really altered her perspective on her priorities and identity as a physician, mother, and partner:

“[Residency] gave me more perspective on what I value in life, or what I'd like to put my time towards. That falls into how it has impacted me and my relationship and family. I've seen what can happen, if you are giving of yourself all the time, and you're at work two, three hours past when you should be going home, and then I miss out on putting my daughter to sleep when I haven't seen her all day and thinking, ‘Is that really what I want for the next few years? How do I change that situation sort of thing? How has that affected my husband?’ I think he's having a tougher time. He's in [a surgical] residency, so he vents to me daily. [...]

Now I'm deciding to spend more time with my daughter so it's impacting my availability for residency-related things” [013, R].

Residents also noted that some believe that personal sacrifice is an inherent part of practicing medicine. One resident shared an attending physician’s view that a partner’s role should be to support their medical career:

“Certainly, [medical specialty] is one of the more pertinent areas where I see a lot of physicians implying that it's such a noble profession that it's worth the changes in the nuclear family that it causes. Like when I was vocalizing that my pager will wake my partner up, a lot of physicians push back and say this will be a lifelong issue that you need to manage. And when I talk about, ‘Oh, it's challenging to be interested in [medical specialty] and know that that's a field where you have a lot of call even when you're very, very, very senior. How do you manage that?’ And they say, ‘Well, I make enough money to have a second bedroom and a second wife.’ That was a bold statement from an ex-mentor of mine to imply that your partner will prop you up and that your career can be disruptive” [005, R].

Moreover, partners recognized that their relationship with a physician puts them in a position of privilege which can isolate them from accessing support from their friends and family who do not empathize with their struggles. The societal view of the medical profession, namely the wealth and status associated with it, can hinder resident partners’ ability to receive support:

“When you are married to a physician, you understand that you're in a position of privilege, and when you are in a position of privilege, it cuts you off from accessing support from other people because they can't empathize with you. You don't feel comfortable to share that you're struggling. I've gotten lots of responses, like ‘You're going to be rich. Stop complaining.’ Or ‘It doesn't matter, it's only two years or he's going to be a physician, you don't have to work’” [030, P].

3.4.2 Theme 3B: Whose Profession and Identity Matters More?: The Dominance of the Resident/Fellow Role and Medicine in the Relationship

Both trainees and partners noted that society highly values the work of physicians, which influences their relationship. The following quotes are from a couple discussing how the resident's work is valued in relation to the non-resident partner's work:

“He values my work more than his own. I think society does in general. I don't know that it should be that way, but he thinks what I do is more important, though he places great value on his own work, and he loves doing it. To be honest, do I value his work as much as my own? In the practical ways that it presents itself, I don't, because at the end of the day, if it comes down to an event where [we're deciding] who's schedule [we're] going to work around, it's going to be mine. But having said that, I do make an intentional effort to be respectful about the things that he needs to get done. [...] If push came to shove, my work is more valuable if I'm being honest” [016, R].

“I always think that my work is negligible to what she's doing. She's actually saving lives. I am writing papers. Totally different environment. I'm doing research [...] but this is very different than her saving lives. [...] But she's never made it seem like my work is less than hers” [034, P].

For other couples, valuing the resident identity over the non-resident partner's identity creates a power imbalance, contributing to tension in the relationship. One partner shared:

“The second she starts to earn five, ten times her income, there's that power imbalance again. There's this implicit understanding that what she does matters so much more to the world, so much more fundamentally, so much more of an impact in every waking second that she spends. [...] It's not that what I do is not important, but when it comes to managing a household, the understanding is like, '[Participant 025], you can move a meeting around as opposed to me, moving a clinic around right?’” [025, P].

This partner goes on to poignantly explain that since “she's busy saving lives”, he doesn't “get to come to her with [his problems]”, and that he has to refrain from sharing

his own struggles since they would exacerbate the emotional strain on his partner. He goes on to share how he feels his problems are insignificant compared to the tragedies his resident partner has to cope with, leaving him feeling unable to seek emotional support within the relationship:

“She had to watch a couple of people die in a really [awful] way that day, I have to put my [problems] on hold, [...] that’s been the toughest, [...] which you don’t realize until you’re truly in it and realizing, ‘Oh, I really can’t take care of this person who’s just had really awful stuff [happen] and I certainly don’t get to complain’” [025, P].

The partner also emphasized that *“there’s always going to be this imbalance, [...] a ‘who’s [problems] matter more?’ imbalance” [025, P].* Another partner shared their struggles with that imbalance, saying, *“it is a struggle for me to talk about work because I think it’s dumb compared to what she’s doing” [037, P].* Some residents made it explicitly clear through their decisions that they needed to *“prioritize [their] career needs” [011, R]* over their non-resident partner’s needs, with one resident explaining that she needed to choose between her marriage and training at one point, and ultimately *“decided [to] drop [her] relationship and focus on residency” [019, R].*

In addition to the power imbalance, residents highlighted how their resident identity overshadows all other identities in their life:

“[Residency is] not just a job. It is so many different things. You’re a student, you’re an employee, you’re a teacher, you’re so many different things. So that can use a lot of your mental energy. I find that it’s hard sometimes to find the time you want to spend with your partner or your friends or your family. And then, even when you have that time, do you have the mental energy to do things? [...] Whatever time or energy you have left, you spend with them, then you go to sleep, and then you do the whole day again” [020, R].

“The job becomes all-encompassing because you feel like it has to be. [...] That's probably the thing that we've lost along the way is that day-to-day space together” [021, R].

Multiple residents expressed guilt with the seeming necessity to prioritize residency over their relationships and their identity as a partner. They also expressed guilt about the supporting role that their non-resident partner has to take on, feeling powerless to change that:

“There was guilt that I felt like I was the center of the universe, [...] I imagine that maybe he felt like his livelihood wasn't prioritized as much” [015, R]

“I still feel very guilty all the time that being a doctor will always come before being a partner, just because there's patients that I feel a moral obligation to. [...] It also makes me feel like, ‘I hope I'm not taking anything away from him by being a doctor’” [005, R].

“The running theme through all of this is the guilt side of it. Again, I'm very aware of the fact that I am the person being supported through this. I felt very guilty about that pretty much all the way through. And I often check in to be like, ‘Is this okay? Do you need to do your own thing? Do I need to do this or that?’ [...] I'm very aware of how hard it's been on my partner. I feel badly for that, but I also feel like I can't and won't change that” [021, R].

“Mostly I just feel bad for him. It sucks to be a partner of somebody going through medical training. He's my number one support, and just constantly having to [support me through] a surgical training program is really intense. It's unpredictable. It's physically exhausting. It's emotionally exhausting. [...] He gets the brunt of it because you come home just totally depleted. [...] And so, I'm very grateful to have a partner through this. He's exhausted by the process of being a partner of somebody going through medical training. [...] He's sacrificed his career [...] [since] we moved [for residency]. [...] It's always been prioritizing my career over his, which is challenging for him” [011, R].

Some non-resident partners felt that their priorities and identities were being stifled, with one partner expressing her worry for the impact in a striking manner, saying,

“My worry is that I will become an office manager, and I will manage my personal home, and I will manage his professional life. And then my whole life is managing this doctor. And I'll lose my own identity” [030, P].

Another partner expressed feeling like “*an outsider in the medical world*” and how his trainee partner would have residency-related events that he would attend and be “*miserable at them*” since he “[*doesn't*] relate,” [031, P].

3.4.3 Theme 3C: Who Shoulders the Burden?: The Unequal Burden that Falls on the Partner

Trainees reiterated how postgraduate medical training significantly increases their “*cognitive load throughout the day*” [001, R], and depletes them from being able to attend to their partner and any personal responsibilities:

“[Training] depletes you from what you have left, cognitively and mentally for your partner and then definitely physically as well. If you're in specialties where you're standing all day or you're running around all day, you're not going to have anything in you for your partner when you go home” [001, R].

“The days tend to be long. So, you have less time at home, less time for personal stuff in general” [007, R].

Some residents described feeling like they were facing greater work-related burdens than their non-resident partner, resulting in the partner shouldering most of the responsibilities at home and in the relationship. Overtime, some relationship dynamics boiled down to “*getting the tasks done*”, with one resident saying,

“It does become a bit of a one-sided relationship for a while, because no matter how much you wanna say both of our lives are important and both of our jobs are important, one is just more of a strain. No matter what, I always win the battle of ‘Who's more tired?’ And so, the mental load starts to creep [in] because I can't carry it all, he has to carry more of it. I think that unequal balance is hard. [...] In that vein of it affecting our dynamic, [...] it means that we stop being as much of a duo who does everything together and equally supports one another, and [...] there's a shift of him having to do a lot more of those things. You become a little bit more like roommates for a time because you just don't have as much time to

focus on your relationship and it's more about just getting the tasks done and getting through the days” [017, R].

Residents discussed dividing household chores with their partner and not being able to equally contribute “*because of the time [they] spend [in] residency” [004, R]* and noted that their non-resident partner often took “*on a bigger brunt of the housework” [010, R]*, which often became a common source of conflict. The extra load on partners also extended to childcare, with non-resident partners describing their experience “*parenting on [their] own”* and being a “*solo parent” [031, P]* when their resident partner would be away for elective rotations.

Partners recognized the unequal burden of domestic responsibilities that fall on their shoulders and discussed how they adapted to the imbalance, with one partner realizing that it may never end, even after postgraduate medical training:

“If she's extra busy, I'll be the one doing the cooking and the cleaning. If I was newer to it, it might annoy me more, but I got used to it, right? And we've adjusted, right? I'm okay taking the lead on things like cooking, tidying up after a meal, and just even watching our son. I don't mind that stuff, but it can be a lot. [...] I ask myself, when is this all going to end? And I keep telling myself when she's actually staff physician and it'll be different, but I don't even know if that's the case anymore” [031, P].

“I have to be the one to do the majority of the cooking and cleaning. [...] That's just the way it is. He does more of the things that you can handle online, like finances, or the quick and dirty things, like mowing the lawn or taking out the trash, versus the in-depth cleaning and grocery shopping and cooking for the week. Any other household responsibilities fall on me. [...] He's not home enough to do that kind of stuff” [026, P].

One partner discussed that she recognizes she takes on the unequal burden and that it is, in part, how she supports her resident partner, saying,

“I know having that extra support, coming home to a home-cooked meal or having your laundry being done, are all really important things for someone who's working so, so much” [029, P].

However, one resident discussed the anxiety that his non-resident partner experiences regarding the additional domestic responsibilities that she is responsible for, saying,

“I think she is someone who is more anxious [...] I think there's been stress on her with [...] helping me with making meals or with cleaning. I think she was starting to worry that would become an expectation on her, which I really didn't want her to feel that it was, cause it's not, but I think she felt that once she started working like, how is she going to be able to sustain that? [...] Her mental health has sort of had a toll” [002, R].

3.4.4 Theme 3D: The Gendered Aspect of the Work-Life Integration Tension

Women residents discussed how societal and cultural gender norms about gender roles contributed to the work-life integration tensions they faced with their non-resident partners or potential partners when dating. One resident discussed her struggles dating non-resident partners in residency, as they had certain unchecked expectations based on the fact that she's in medicine:

“I found with dating, especially as a woman, [that] sometimes people get intimidated by you being a resident doctor and [...] they want you for your potential future money. [...] I think as a woman, some people are also like, [...] ‘I'll stay at home, and you can work.’ And it's like, ‘No, actually, if we have kids, I also want to stay at home. [...] I don't want to be the one who's going to work all the time. I also want to take time off and be with my kid.’ [...] My need is to also stay home with my kid and watch them grow up, right? So those kinds of struggles definitely come up, as a woman, but also as someone just in medicine” [001, R].

Even within the relationship, one woman resident, who is an IMG, reported an imbalance and tension in her marriage where she would argue with her husband about “whose work is more important?” and she would “have to insist that [his] work is

equally as important as my work”, despite cultural norms dictating that she “could [just] stop working [and] stay home” [019, R].

Relationships in which women residents were taking on the primary financial provider role and their non-resident partner was taking on more domestic responsibilities, had to combat implicit and explicit traditional gender norms perpetuated by society and loved ones:

“I think his parents have worried that career-wise, he's done less [...] We've had long conversations about that, and we kind of joke, like he's very happy where he is. But I don't know that his family are, [they're] a bit more traditional in their gender roles. And so, I don't know that all the work he's doing is quite as appreciated there” [021, R].

“I think he gets judgements about that a lot, especially being a male, and having a partner who is working, and his role is supporting me and supporting our family and that is the priority. And so, people often will be kind of confused about what his role is, but I would never get [that], if he was a doctor and I was supporting the family, people would never look at me twice” [011, R].

Residents in same-sex relationships seemed to have a more egalitarian view of gender roles and responsibilities, which allowed them to more equally take on caregiving roles and household responsibilities. One resident discussed the underlying gender discrimination in relation to taking parental leave in residency, and that women could be perceived as “disruptive” to a residency program, even from an admissions standpoint:

“I genuinely believe that if you're a parent, you need to go on parental leaves. I think there is gender discrimination because women give birth. Unfortunately, biologically it's only us for carrying the baby and having them and birthing them. So, when the program, first of all, just looks at admissions or at applicants, it's like, “Well, who's going to be less disruptive to their residency running?’ It is going to be men who will not have to take it? But I think there's a mandatory mandate, you're becoming a parent so you're going to go on leave, then that will

be an issue. Right? Because every male or female resident is now going to go on leave, at least three months” [012, R].

3.5 Theme 4: The Trainee-Partner Relationship as a Protective ‘Bubble’

Despite the problem of the unforgiving practice and culture of medicine, the tolls of training on the couple, and the tensions that can arise as a result, participants overwhelmingly described that their relationship served to protect and support them in the face of those stressors. One partner used a metaphor to describe their relationship, describing it as a bubble that shields them from the stressors of residency. He described their relationship as a hideaway and a “space” where they feel safe and secure. He also discussed the protective nature of the bubble:

“Our relationship has protected us from the nature of the residency program. [...] Let's say, our relationship is a small little bubble for just her and I, and our feelings, and our thoughts, and our future aspirations, and all that fun stuff. And if residency is this big, bad, scary world out there, [the relationship is] almost like a hideaway that if things are going bad at work you can come to this bubble and feel safe and a little bit more secure about where things are at. At the end of the day, if the residency program is causing the stress and causing nights of losing sleep and the dealings with patients and all that stuff, I feel like our relationship [creates a] space, [where] irrespective of everything else going on in our lives, I will be here at the end of the day to make sure that she's being heard, and that everything that will happen will be done in a manner where we're going to progress this relationship, and irrespective of how the day is outside of our bubble, we're gonna make sure that it isn't effective, or it doesn't pop our bubble” [034, P].

This partner also shared how the couple needed to work at building “*foundations [early in their relationship] to help create that little bubble*” by communicating each other’s needs, which “*really propelled our mutual understanding of what we do to a different level, and it created that bubble*” [034, P], preparing them for future challenging situations they faced. His family medicine resident partner, who was also included in this

study, recalled a situation when the bubble came into effect when she was experiencing significant distress after work:

“There was one time I had a really, really rough long call weekend in a rural hospital. It was a long weekend. It was me and one other doctor and 60 inpatients, and he told me we need to get through all 60 inpatients every day that weekend, and I wasn't even supposed to be working that weekend, and I wasn't staying over at the hospital. I remember crying at 11 P.M. on the way home because the doctor was like, ‘I still need you to come in at 6 A.M. tomorrow’, and it was 11 P.M. Everything was closed because it was a long weekend, I didn't have food. And he brought me food and tucked me in and left the house, and that was it, but it made a world of difference. [...] I was like, ‘Okay, I can go on.’” [016, R].

Her partner recalled the same situation from his perspective and how he learned how to best support the resident as they experienced stress throughout residency together, saying:

“She had a mental breakdown on the way home and she called me, bawled her eyes out. I dropped everything. I went to go pick up burritos and quesadillas for her to eat and for her to take as lunch the next morning. I tucked her into bed [and] handled the situation so much differently [compared to earlier in the relationship], because I was in that bubble, where I wouldn't let anything impact our relationship. And one of my duties as a partner, as a partner in any relationship, is to make sure that you're there for the other person, no matter what. [...] [In the past] instance, I wasn't there, and we learned from that. And this second instance is when we created this bubble and made sure that nothing really would penetrate the bubble, and I dropped everything and made sure that she was taken care of. [...] It took the stresses of residency to help create that bubble” [034, P].

This metaphor of the bubble was a prominent theme reinforced by other participants as they discussed the sense of stability and support that their relationship provided them, as well as the protective aspects of their relationship from the turmoil of training.

3.5.1 Theme 4A: Stability and Support Provided by the Relationship ‘Bubble’

Residents discussed how their partners “ground” [010, R] them when they are sleep deprived, and that since “residency is not really a great time, [...] having someone who is there for you and is solid has been definitely a net positive” [007, R]. Another family medicine resident discussed how stabilizing her relationship with her partner has been throughout the inherent turbulence and uncertainty of residency, and how her romantic relationship is more of a source of stability than her other social supports:

“He’s been a very stabilizing factor in all of this. I don’t know that I would have tolerated the ups and downs of residency as well as I did, if it wasn’t for having him around. It’s not to say that I don’t have good friends and family, but that’s that one person that you’re talking to at least every day, and they try to understand what’s going on. [...] I think it was important for both of us that we had each other, not in a dependence kind of way, but just knowing there was some stability amongst all of the change, especially for me, because so much of the time in residency [...] is just back and forth from one city to another city to another city to a different rotation, to a different place with new coworkers, and that’s a lot of change that most people don’t have to do in their day-to-day” [016, R].

Another resident expressed feeling stable and secure in residency because of the strong sense of commitment in her relationship:

“It has absolutely not made anything more challenging. It’s been the best coping thing. It’s lovely to live with your best friend and to know that that’s a stable, secure thing in your life, especially with all of the unknowns that we were dealing with for the past year. To have that security that we know we’re going to be in the same city and even if we both don’t have time, at the end of the day, we might still make it into the same bed [...] I feel pretty stable with our relationship and knowing that we’ve already chosen each other over a career has been very stabilizing. [...] I’m more concerned about her being able to physically get through a residency than our relationship getting through residency” [006, R].

Residents also discussed that they enjoyed having “someone to come home to,” [010, R] and “someone that you can go to, to decompress” [023, R] in response to the day’s stresses. Another resident in a well-founded, stable relationship, reiterated that her

relationship provides *“a constant in [her] life that doesn’t change”* and that she *“[doesn’t] have to sit there and think, ‘Oh, are we going to talk today? [...] Is he going to message me back?’ Or all that uncertainty that comes with new relationships or crappy relationships”* [016, R].

On the other hand, one resident described her struggles with dating during residency and navigating an early, unstable relationship and the sacrifices that new relationships require:

“[If] you're just starting to get to know each other or you've dated only for a couple of months, I think that becomes really tricky because it's a little bit more unstable. You have to walk on eggshells. You have to finish work earlier, try to get stuff done or try to take less call to adjust to flourishing that relationship and making it more stable” [001, R].

Residents also discussed how their partner helps remind the resident of their purpose, identity, and overarching goals, one resident described his partner’s support, saying,

“I feel [she] seriously reminds me of who I am because [...] it’s very easy to get lost and then she just reminds me [...] to just have a life and it’s okay to have a life” [022, R].

Other residents discussed how they *“don't know how people could do it without a partner”* and that *“it's very nice to have the support from someone who's so close to you, who knows you and who motivates you to keep going”* [004, R]. Another resident discussed how their relationship makes them feel less isolated since they have *“someone there who knows what your skills are, what your positive characteristics are, and they can remind you that you are smart and talented, and that you are performing well enough”* [002, R].

Some residents highlighted that they preferred a non-resident partner since they help them “*get away from medicine*” [010, R]. One resident emphasized that “*it’s nice [that] he’s not in medicine because he actually really doesn’t care what I do and that gives some really good perspective. Having that sounding board is super valuable, especially when you’ve had a rough day*” [021, R]. Another resident reiterated this point saying, “*the fact that he’s not in medicine forces me to take breaks [...] and you need that space*” [017, R]. Another resident talked about the benefits of not having to discuss medicine with their non-resident partner when they come home. They acknowledged that while their partner may not fully grasp the realities of residency, this brings the benefit of them being “*a clean state and they’re not jaded*”, which “*encouraged me to progress my relationship*” [016, R].

On the other hand, some residents discussed the benefits of having a partner in an equally demanding career, with one resident explaining that they “*have less energy to do things outside of work, with days ending late or starting very early [...], which can be a struggle, depending on who you’re with*” and that “*it helps when the person has other things in their lives to keep them busy*” [020, R]. A surgical resident in a relationship with another resident shared how she appreciates that her partner understands the nuances of residency very well and that they have realistic expectations of each other as a result, saying:

“It’s different for people who are both partners and in medicine. [...] I think it’s actually better when two people are in medicine because you can understand each other a lot better. There are nuances to the residency that really outside of people in medicine, it’s really hard to grasp. No matter how much you explain it, it’s just not the same and it’s not the same as saying, ‘Oh, we’re just busy all the time.’ It’s

not really just being all busy, it's just that you have very little control over your schedule. [...] When your partner is in medicine going through the same thing, it's much easier for them to understand. [...] I know that when he's working, I don't expect an immediate reply about certain things that I need immediate replies about, [...] because I'm a resident, I understand he's working and he cannot get back to me on those things, and I'm not expecting him to" [012, R].

Regardless of whether or not the partner is a resident, both residents and partners emphasized the importance of having mutual respect of each other's goals outside of the relationship, in order to feel like equals in the relationship. One resident described this saying,

"We're both very independent and motivated people. We both have our individual goals, so we don't have a sense of one person being more important in terms of their job or their career. We both are very different in what we're interested in, but we're both very motivated to put all of ourselves into what we like. [...] I'm not expecting him to pick up the slack, and we just both do, because we both know that we can have one-track minds. And so when I finally have more time to myself, he's been getting a lot more responsibility at work and I've tried to actively step in and take on some of the roles that for the past couple of years I have not been, because I know exactly what that's like, to want to have all your energy in something that you're really devoted to. I think it's just that mutual understanding and respect of each other's goals outside of the relationship" [017, R].

One non-resident partner emphasized her feeling of being valued and equal to her resident partner, saying, *"just because he's a resident doesn't mean that I'm anything less to him" [027, P].* Another non-resident partner reinforced this saying,

"He always reminds like, 'You're doing as much as me. [...] You're still doing a Master's; you're still doing school. Your work is as important as mine.' That's something that he's really big on reinforcing. He never had the mentality of, 'Oh, I'm a medical student or I'm a resident. I'm going to be a doctor and you're going to be this.' He never, never had that mentality. He's always saying, 'We're equal.' He always, always says that" [029, P].

3.5.2 Theme 4B: Protection Provided by the ‘Bubble’ for Individuals and the Relationship

Trainees and partners emphasized the protective nature of their relationship. Residents shared how they are “*better shielded from stress and burnout, despite everything [they’ve] been through because of [their partner]*” [021, R]. Some residents went as far as to say that their partner knows how to take care of them better than they can take care of themselves, saying,

“He’s really good at telling me when I’m not okay. [...] He knows how to look after me better than I do, which is a statement of how much he’s paying attention and how much I rely on him for that” [021, R].

When this resident was asked whether their partner was able to sense their needs, even if they were not fully aware of them, she agreed, saying:

“Oh, absolutely! And again, I think that’s one of the downsides in the sense that he’s had to learn that. I almost wish he wasn’t so good at it because it just means that that’s something that he’s taken on as well” [021, R].

When asked about how the couple coped through residency-related stressors, partners discussed that they strived to protect the resident’s mental health, demonstrating the protective nature of the bubble. One partner discussed the importance of talking through the hard times, including encouraging his resident partner to take a sick day if needed, saying,

“Things do get bad every now and then, so we just have to really talk it out and I can’t necessarily make the plan myself every time. I always say when it’s really bad, we have to talk about it. There’s not really much you can do because the one thing you want is time. And then sometimes I tell her, ‘Do you need to take a few days off to recover? Do you need to take a sick day?’ If things get really, really bad, we find the way we cope is we just talk and find a solution. And those solutions can be anything from just discussing, making a plan that works for

everybody, convincing her that she should take a sick day, or revisiting her vacation schedule” [031, P].

Trainees and partners also discussed the importance of strictly separating work from home life to maintain and protect their bubble. Some residents highlighted their efforts to keep work stress from encroaching on their relationship, saying, *“whatever happens at work is at work” [009, R]*, acknowledging the difficulty of doing so but stressing the necessity of maintaining those boundaries to protect their relationship. One resident discussed his philosophy, saying that *“there’s nothing that stops me from doing what I want to do in my life. Residency is just work. [...] It’s not going to stop me from having fun with my kids. [...] I’ll do as much as possible to keep residency away from impacting my relationship with my wife and kids” [009, R]*. Another resident discussed the importance of tending to the relationship’s needs in order to protect the bubble, saying,

“It’s a very necessary prophylactic measure to make sure that the stressors that a relationship goes through normally, let alone throughout medical training, can be talked about, addressed, and solved on an ongoing basis rather than when things get to a point where you become distant and there’s deeper problems that start to fester” [008, R].

Residents and partners also emphasized the value of their five weeks of vacation together. One partner described vacation as *“so essential to our relationship because they give uninterrupted space where we can plan really important, valuable time together” [030, P]*. The partner also described vacation time as *“the lifeline”* of the relationship and that her resident partner *“books them during the most intense electives so that he can be away less and be present more for me” [030, P]*.

3.5.2.1 Vitality of the Relationship ‘Bubble’

Residents regularly shared the sentiment that they would not be able to get through the stress of residency without their partner and the supportive, stable relationship they share with them. One surgical resident described the necessity of her intimate partnership, saying,

“I don't know how I'd do it without my partner. I don't know how people do it when they're single or not in a stable relationship, because you can be in a relationship, but if it's not a supportive one, then might as well not be in one or [it's] maybe even worse than being single. [...] I think that's horrible because residency is so challenging. It requires a lot of understanding and a lot of patience. You have to [...] let things flow off your back and you don't emote over small things. You can't get tripped over small things, which don't become small anymore when they happen over and over again. Residency is super tough. I feel like if you don't have anyone to vent out with or have anyone who can be there for you, emotionally, when you need them, [...] I feel like that'll be really tough. It's a big protective factor” [012, R].

Another surgical resident emphasized her partner's importance in her life by saying, *“I don't think I would have completed medicine or be where I am at without my partner” [011, R].* In light of such appreciation for their partners, it was clear that some residents did a great job of communicating that appreciation to their partner, with one partner sharing that her resident partner expressed his appreciation to her often:

“He says it all the time. He's very, very grateful. I know. [...] It's only been a few days that I left when he started his rotation in [another city], and he's like, ‘Oh my God, it's so hard coming home and [...] not having a person there to talk to when you get home.’ He's very, very appreciative of me coming. He knows it's not easy for me to just leave everything here behind because I have a whole life here, right?” [029, P].

Another surgical resident spoke to the critical importance of his wife, going as far as to say that he would not have survived residency without her:

“It's actually essential to have a partner because without that, I would have already committed suicide or killed myself because, you need someone. You need to have someone to go back [to] after you're done with a tough day of work or a busy overnight call or whatever stress you had [during] your day of work. [...] You're a mature guy but then, you know, if you mess up something, you're being punished or you get these words that are not great, and then you go home, [and] you're the big man, you take care of your wife and your kids” [009, R].

3.5.3 Theme 4C: Maintaining and Strengthening the 'Bubble' During Postgraduate Medical Training

Residents emphasized that the quality of the relationship contributes to the degree of protection it offers from the stress of residency, with one resident saying,

“It really comes down to the relationship. I think [residency is] more likely to impact relationships that are weaker and less likely to impact relationships that are stronger. [If] you already have a strong relationship, it's not going to be impacted by a stressor like a residency. What's a more important factor is how strong your relationship is rather than how demanding the residency is” [012, R].

In fact, some residents pointed out that the turmoil of residency made their relationship stronger as they learned to cope with uncertainty together:

“[Residency] overall had the impact of making us super strong, because [...] it has sort of allowed us to decide, ‘What's acceptable to me? What do I really need as a partner? Where am I willing to take a step back and let you do your thing?’ She quit her job in the middle of our relationship and was unemployed and wrote a book, and now has a new job. So, there's been a lot of change for her. And so, learning how to support each other when there's uncertainty, and when to take a step back, I think has been really hard, but empowering too” [023, R].

Postgraduate medical trainees and partners identified a number of ways to maintain and strengthen their relationship throughout training including prioritizing each other, intentionally spending time together, and engaging in healthy and regular communication.

3.5.3.1 Prioritizing Each Other and the Relationship

When asked about what strengthens their relationship and helps shield them from the stress of residency, one surgical resident spoke about the deep trust she shared with her partner, and how they make it a priority to support each other:

“Trust is the most important. [...] We already decided [that] this is it, like, ‘You're my person for the rest of my life’, [...] Trusting that you are staying who you are, and you are putting your partner above everything else I think is very important. I feel really secure in my relationship because I know my partner and his number one priority is me in his life. Even in residency, [...] knowing that you are your partner’s priority and that no matter what happens, your partner will be there for you. Everything else can fall through, but you'll always have that. I think that's most key. [...] Just believe that ultimately, you're their number one, and you're also putting them as your number one. That's where the strength of the relationship is” [012, R].

Another resident discussed that she declines non-mandatory residency-related commitments to prioritize her relationship, saying, *“pretty early on in residency, I identified places where there's actually not a role for me, and I just didn't go to a lot of residency social events. I didn't find it helpful. [...] Any time I didn't need to be at work, I was at home, connecting with my partner really trying to create [space for the relationship]” [011, R].* Other residents discussed the difficulty of prioritizing their relationship, and *“feel[ing] inadequate in the ways that I’m able to show up just because of constraints, like being on call or needing to do charting” [023, R].*

Partners felt particularly appreciated when their resident partner made the intentional effort to prioritize them over residency. One non-resident partner expressed these feelings, saying, *“I don’t know how she does it, [...] I don’t know how she still has a way of making me feel like I’m first. [...] She’s got a way of pushing it all over and*

making me feel like I'm the only one [that matters]" [037, P]. Another partner shared that, despite his demanding schedule, her resident partner is very intentional about prioritizing her and her needs:

"He's very good at [understanding my perspective]. Even if he wakes up at 5:30 A.M. to go to work, had a long day, he'll come home and he won't just sit down and sleep and rest because he knows I've been home alone all day, and he tells me that. He's like, 'Oh, I don't want you to feel alone and feel like you're not doing anything all day. Do you want to go outside? Do you want to go play a game? Do you want to do things?' He's pretty good at keeping me in mind" [029, P].

Trainees and partners also emphasized the critical role of deliberately nurturing their relationship by ensuring that they spend adequate quality time with each other, use words of affirmation to encourage each other, and have difficult, yet needed conversations with each other. One partner described the importance of not just having "time together" but ensuring that in their time together, the couple's "really connecting and being with each other" and "making a point of it, [saying] 'We're due for this'" [037, P].

When asked about what makes their relationship dynamic go well, one resident responded saying,

"Meeting each other where you're at and being understanding that this is a person that's not you, this person is outside yourself and they're willing to be here, but you can't treat them the way you treat yourself. You have to be intentional. [...] We go in together with all this stuff as a team, and not in opposition to each other, and I think that's what makes all the difference" [016, R].

This resident's partner added to these attributes saying that the couple maximizes their opportunities to connect and spend time together:

"We just managed to stay involved in each other's lives. That was probably the biggest thing. Whether it be playing board games, going out to dinner, going out

to get ice cream, we just managed to be in the presence of our respective selves, and just make sure that the [stress] that is around us, stays around us. And that's been working out well. [...] But of course, the stresses of my work and her work typically do end up coming to the conversations, and we don't get fussed about it. We're there for each other. We're like, 'If you wanna spend 10 hours talking about one patient and how they pissed you off? [...] Then we'll spend 10 hours. If you wanna spend 10 hours talking about why, I love batman so much, we'll do that.' [...] I come back to this foundation that we built, because we have this trust for each other, this love for each other; anything that we do talk about is fruitful to our relationship" [034, P].

Another resident also shared how her relationship has allowed her to take a step back from an over-commitment to work:

"I think that before I was with my partner, I was much more work-focused and my culture was driven for others, and she's really helped me step back and realize that I also matter and my time matters, and there are things that are more important to me than work. So, I've really actively disengaged from this kind of overcommitment and feeling guilty for not doing more for my program and for my patients and for my special population interests" [006, R].

Participants talked about the importance of engaging in fun activities together to get their mind off of the stressors of residency. One partner emphasized the importance of intentionally dedicating time and energy to create new experiences together in their relationship, saying,

"Though he's in residency, we're still trying to look back on that big poster [and ask ourselves], 'What date idea can we hit next to diversify what we do when we do spend time together?' Because it's great to be in each other's presence, but I think it's good to experience new things together. There's something unique about that and really emotionally fulfilling" [028, P].

3.5.3.2 Healthy Communication and Trust

Many trainees and partners highlighted that open, honest, and regular communication has been essential to sustaining their relationship. They indicated the importance of addressing miscommunications promptly to prevent issues from festering

and “popping” the relationship bubble. One partner described his approach to communication in the context of the relationship bubble, saying,

“The way I see the bubble not popping is being open with our feelings. [...] We've actually created something called ‘The Mood and Annoyance Checker’, where [...] the first thing that we say in our phone call is, ‘Hey, what's your mood? And what's your annoyance?’ Based on that, we re-gauge our conversation. If the mood is amazing, we'll talk about our day. If our annoyance is low, we talk about our day. In the event that our mood is not good, or, if our annoyance is not low, we will spend as much time needed to talk about what the stressors are that have made us feel this way. Right off the gate, we nip the idea or the prospect of the bubble popping, right away. And we say, ‘This is how I'm feeling. This is what has happened at work. This is what has happened in my life today.’ Whether it's her dealing with her family or me dealing with my family, whether it's anything in general, we make sure that we talk about it first thing. Whether it's at 8 P.M., or if it's over text, we'll make sure to talk about it and that way it eliminates the chance of it festering up and potentially popping up that bubble. Because if we don't talk about it, we'll fester in our own selves, [...] and it'll just fester into something that could have been avoided with a simple conversation. [...] It's helped us maintain our bubble and it's actually helped progress our relationship” [034, P].

Other partners also emphasized the importance of regular communication, explaining that it ensures that the couple is always “*on the same page*” and “*on that same wavelength*”, avoiding miscommunications or situations where a problem “*builds*” while the couple “*sit [beside each other] in silence*” [037, P]. One resident shared how she intentionally checks in with her partner to ensure that they are both on the same page, which prevents many conflicts from arising in their relationship:

“We make it a point every couple of months [...] to sit down and have a talk about where we are at in our relationship, where we are at in our goals of a couple, whether that's moving in together, sharing finances, travelling, seeing each other's family, and we do intentional check-ins. [...] A lot of things can fall through the cracks if you're not intentional about it, [...] if you check-in with each other and you're on the same page, you prevent a lot of conflict” [016, R].

One partner highlighted how open communication developed trust and understanding in her relationship over time, saying,

“I've known him for years. I know how he texts, and I know how he talks, and I know when he's being sarcastic or when he's being serious, and I know when he's being mean, and I know when he's just joking around. I know him enough to know what he's feeling when he's saying something and vice versa. [...] I like to think that we're very good at having open communication and trust. Trust can be so easily broken, but trust can also be really strengthened. [...] It's just that communication, that respect, and that trust between us. And to know that he's doing what he loves, I'm striving to do what I love” [027, P].

The importance of trust and relying on each other was mentioned by many participants as they discussed the strengths of their relationships. One resident described his trust in his partner saying, *“There's just a level of trust with her that doesn't exist with most other people I know. So, no, I can't imagine anything that I wouldn't tell her about” [014, R].* Residents and partners also discussed the importance of coping through stress together by *“confid[ing] in each other” [014, R]* and *“really leaning on each other for support” [029, P].* One partner reiterated the importance of trust and interdependence in his relationship, saying,

“Everything fell in place because we were our go-to persons from the start. I felt like if I had to tell anybody something, I'd go to her, and if she had to tell me something, she'd go to me. The first 6 months were the critical phases where we identified a problem, and we had issues, [...] and we resolved it within 6 months of us dating. After that, we've just managed to grow, [...] and things have just been progressing upwards” [034, P].

Residents reinforced the importance of regular communication and provided examples, such as letting their partner know when they had a particularly busy clinic day which impacted their mood on coming home. One resident highlighted the necessity of communicating with his partner about her preferences and expectations around his schedule, and discovered that she preferred having him return home earlier even if he still

needed to complete work remotely at home, versus his staying late to complete his work at the hospital.

Residents also talked about the benefits of having someone to “*rant to*” when they “*have a frustrating experience*” and how they found it harmful “*to internalize those negative emotions*” [014, R]. Partners discussed the benefits of debriefing with each other as well, with some likening it to a “*safety cushion; someone to help you get through a bad day or to celebrate your highs*” [027, P]. Another partner described how she emotionally supports her resident partner when he debriefs with her after a challenging experience at work that day:

“I feel for him. Sometimes he just wants to vent, and he just needs to let it out of his system. Sometimes he'll be working with a doctor that's maybe not as understanding or has very high expectations and he comes home like, ‘Man, today I felt very useless. I feel like they had expectations of me as if I was a PGY-5 or something, you know? Like you wanted me to do all these things alone.’ And I'm honestly just a listening ear for him. I just listen and I'm like, ‘Okay, well, honestly, if they throw you in the situation, maybe it's because he thought you had something in you and maybe they trusted you and you got to learn more.’ [...] So it's really just like listening and trying to reason with him” [029, P].

Another partner indicated that they established a standard of communication in their relationship to “*have long chats whenever needed*” [034, P], especially when either partner is overwhelmed by work.

Residents and partners also discussed the value of having an “*honest, forthright relationship [dynamic]*” [014, R], where they can confide in each other. One partner highlighted the importance of kindly communicating and “*respecting each other's boundaries*” [027, P] when it came to attending to work-related responsibilities. Another

partner discussed the importance of communicating her perspective about her resident partner's behaviour when it affected her or the relationship, giving an example about his transition into residency:

“I think at the beginning, we definitely saw a change in his behaviour and then his behaviour kind of changed my behavior. We're pretty good at communicating, which is a great thing to fix those things. [...] But I definitely saw a change in his behavior just by being tired or being frustrated with things going on at the hospital. So, it definitely does change your relationship; compared to the summer [prior to residency], where we were free, doing anything we want, when we want, going to bed whenever we want, waking up whenever we want” [029, P].

3.6 Theme 5: Threats, Fractures, and Repairs to the Relationship ‘Bubble’

Trainees and partners identified key threats that could compromise the relationship ‘bubble’, the first of them being the challenges that residency imposed on the relationship. Residents shared how difficult it is to cope with the stress of being in residency and in a relationship since much is beyond their control, with one saying, *“[Residency] generally had a negative impact; my relationship could have been different in so many different ways. [...] I don't have the power to change any of these things” [004, R].* Other residents added that residency has *“negatively affected”* their relationship since *“finding time for ourselves is challenging and oftentimes we just don't have the energy to engage in those activities that will make us better”* and since residency *“takes a lot of emotional energy, sometimes you don't have that energy to spend on your partner” [006, R].* Another resident expressed this by saying, *“I feel like I don't have enough time for [my partner] and she wants a partner that's present” [022, R].* When partners were asked about the impact of residency on them and their relationship, they mentioned the significant stress it created:

“It was more so the relationship that declined for me and it was a constant pressure to support the relationship and stress about the relationship. [...] In terms of the relationship, [it] felt more like a struggle to go through than a positive experience. It was always like, ‘When is this struggle going to be over?’” [024, P].

Residents also shared that there are certain periods of residency that are especially challenging for their relationship, with one resident explaining,

“Within residency, there are certain blocks that are harder than others where you have, let's say, more on call. Those are definitely more difficult because you spend less time with them. They don't necessarily feel appreciated. You don't necessarily feel appreciated as well because you don't spend time with each other” [004, R].

Another resident explained that during those challenging periods of time in training, the relationship was more strained since the resident was an *“irritable, under slept person and took it out on [her partner]”* and as a result, the couple had *“a number of conversations about how it's not appropriate to take your work stress out on each other, which reinforced our beliefs about career freedom and collaborative decisions,”* [005, R]. Residents also discussed other external pressures that posed threats to their relationship such as being apart during long-distance blocks or periods, financial stressors, the CaRMS Match, and examinations.

Another identified threat to the relationship bubble related to the intersection of residency, the relationship, and the mental health struggles experienced by residents. One partner described how strenuous residency had been on his family medicine resident partner's mental health and that this affected him and the relationship, saying,

“It was really hard for me and for her. I have basically tried to be there for her through the entire process, of course, but she was really pushed to her limits, and I would say, in part, beyond her limits, mental health-wise and also in terms of physical labour, it was extremely hard. It was hard for me also to be there for her

the entire time because there was just so much, watching the decline of her mental health over time and not being able to change much because all I could do was talk and try to give advice, it was really hard. It also challenged our relationship because with a decline in mental health comes stress and anxiety and of course that has a negative impact on a relationship. So, it added additional stress for me and additional anxiety for me and we had to try to work through it together. And this entire time, we kept the end of residency as a big goal on the horizon to work towards, but every single day it felt harder to reach that goal together. It's the light at the end of the tunnel, but it felt like it stopped shining the closer we came because it just became hotter and hotter. [...] As a partner of someone going through [residency], it was extremely hard and challenging to deal with it, to try and live with it, to help out, to give them support the entire time” [024, P].

“The stress manifested the most on her. [...] It was just very hard for her to bounce back, to shut her brain off from work and be ‘Okay, now I'm home’, because she had to study most of the time, or she had to do other work-related things. [...] And then it accumulated over time until we reached a peak where we had to have a discussion about negative emotions, how they affect our relationship, [and] mental health therapy” [024, P].

3.6.1 Theme 5A: Addressing Key Relationship Tensions that Can Threaten the ‘Bubble’

Participants discussed the importance of negotiating tensions, such as navigating their identities and responsibilities, to ensure the growth and quality of their relationship throughout postgraduate medical training. One resident discussed this in the context of her decision of whether or not to have a child during residency, saying,

“I'm starting to have to parse out, ‘Where am I in my career path? Do I feel okay with taking a bit of a break? How would we do that? How would we share the roles and responsibilities? Who would go back to work first? How would we prioritize those things?’” [017, R].

Another resident discussed how *“it's been hard to always stay connected with all the competing demands”* but that residency *“forced us to really think a lot about what our roles are and what we want [...] and who we are, and be very confident in that” [021, R]* and they ensured to have those conversations early in residency training.

When asked about how residency impacted her relationship, one surgical resident discussed how she and her resident partner have developed identities external to medicine that helped stabilize them throughout the turbulence of residency and strengthened their bond:

“How did residency impact my relationship? It didn't really, because both of us, we're pretty well-rounded. We have a lot of beliefs and identities founded outside of medicine. So, for us, residency was just another stage in life that we're going through together. [...] I think a lot of people in medicine put their identity on being a doctor and if that's taken away, if that's over, everything is gone. [...] Quite frankly, we don't give two hoots about what each other does. [...] We happen to have met in medical school. If we met elsewhere, it would be the same” [012, R].

3.6.2 Theme 5B: Breakdowns in Communication Can Threaten the ‘Bubble’

Another one of the threats identified is a build-up of negative emotions when communication breaks down. One partner described her frustration saying that she started to resent the healthcare system, got upset with her resident partner’s patients, decreased the value of her husband’s work, and ultimately became a poor partner at the beginning of his residency:

“He didn't even have the skills to share [his stress] with me. I was so emotionally upset and felt so alone that he was doing everything he could to just be nice to me when he could talk to me. And so that's what led to us actually going to counselling was just this breakdown of, ‘I don't know what's going on with you.’ And also, I started to resent the healthcare system. I started to get really upset with his patients. I don't know them. I started to decrease the value of his work to him, which was very difficult for him to listen to. I became a really poor partner at the beginning of PGY-1 because I wasn't prepared. I didn't understand the expectation on him, and I didn't understand how difficult it would be for him to also transition into the role. So then in PGY-2, it got easier because I knew what to expect and I set us up for success with the Apple Watch and the counselling. And now we have much better communication” [030, P].

Residents shared that a difficulty in their relationship dynamic was the challenge of communicating the expectations of residency training to a non-resident partner. One resident explained, *“I tried to explain things, but you need to go through it to really understand”* [004, R] and another resident explained that since her partner is *“not in medicine, there are certain things that he can never fully understand, but I think he also is aware of that fact. [...] So he lets me pick and choose when I talk about things”* [017, R]. One non-resident partner reaffirmed this, saying that they need to have regular discussions about medicine and residency *“because often I can't understand completely what it's like. I've never had someone's life in my hands in the way that she has”* [032, P]. Another non-resident partner shared that despite not understanding the nuances of residency, he developed a more nuanced approach to helping his resident partner unpack her emotions, learning to say:

“Hey, I don't understand what's going on, but I can empathize with the feelings component of it. I understand how you're feeling, but I don't understand the situation, because there's a disconnect for me, because I don't know how the medical world is. I don't know how residency is. [...] So I can't really say that I agree with you, but I can say that I agree with your feelings and the feelings are valid, and the things that you're saying make sense, and the struggles that you've had at work, whether it be patients or doctors or admin staff, [...] I understand it can be frustrating” [034, P].

In response to these threats, almost all residents and partners discussed the importance of intentionally repairing fractures in the relationship with healthy communication. Residents and partners talked about taking the time to unpack disagreements once they both had the time to collect their thoughts and discuss: *“How can we avoid it in the future and obviously apologize to one another, and not just apologize for the sake of apologizing, but acknowledging how that hurt each other”* [028,

P]. Another partner shared that she and her resident partner have been “really good” at addressing conflict immediately, saying,

“Any time we've had a little argument, right away, we discuss it and then we just flip the page, and then we take each other's feedback. We understand how we feel, and we find the solution to it, or we just discuss it and then we're able to just flip the page. It's been a really, really healthy and good relationship” [029, P].

Another partner explained that if he did not communicate his feelings to his partners then he “would have probably been feeling worse than I am right now. I would have been feeling less about myself” [034, P]. He stressed the importance of not letting problems quietly fester in the relationship, saying,

“If I didn't convey [my stresses] to her, I would have held that in, [...] and it would have been something bad, and it would have exploded into something worse. I genuinely think me talking about how I felt during certain situations has helped me mature emotionally and has helped me deal with some of the things that could have impacted us had we not talked about how we were feeling about certain situations during the whole residency program. [...] I genuinely, genuinely do think that our talking and being communicative and being informed about our lives at every step of the way has really laid the foundations for our relationship and actually fostered the growth that both she and I see today” [034, P].

At the same time, this partner discussed how this type of healthy and consistent communication took a while to learn and develop:

“I needed to work on myself because I'm not a very big talker about anything, my feelings or anything like that. [...] I never really grew up with expressing feelings in my household. So now expressing feelings to an individual, about how I felt about this situation, and how I felt about not seeing you for two weeks, or how I felt that we're not talking periodically over the phone, or whatever the case may be, was an adjustment for me because I've never really done that. [...] I wanted to take [this relationship] seriously and I wanted to exhaust all options on myself and on the relationship to make sure that it was gonna work” [034, P].

Another partner shared his advice about addressing threats that arise during residency based on his experience of being with his wife throughout the past six years of her postgraduate medical training:

“In terms of strengthening your relationship, don't sit on problems. If you have something that you're not happy about, their schedule, the way their residency is affecting them, their availability, their stress levels, sit down and talk to them right away. Don't just be like, 'Oh, it'll sort itself out' or it won't. [...] Bring the problems or your concerns to light via conversation and make the time to talk about it and come up with a solution and try not to have that discussion at 11:00 P.M. at night because then you'll be talking till 2 A.M. in the morning” [031, P].

Lastly, when asked, “When things are going well in your relationship, what made them go well during residency?”, one resident shared that when she started focusing on taking care of her mental health by seeing a psychiatrist and taking appropriate medications, ensuring she got adequate sleep and avoided obsessing over mistakes, she *“finally [had] some space to start to give back to the relationship again and stop being the one who's just taking constantly” [017, R].*

3.7 Theme 6: Expanding the ‘Bubble’: The Importance of Other Personal and Peer Relationships for Trainee and Partner Well-being

Trainees and partners highlighted the importance of other relationships, beyond their intimate partnership, in supporting their mental health and well-being during residency and protecting against burnout. However, residents shared the difficulties they experienced due to their residency program’s demanding schedule in maintaining their social support networks, engaging in self-care activities, and running errands. One resident put it bluntly, saying, *“You don't have time to socialize, connect, build a network and community outside of medicine” [011, R].* Other residents described how residency

forces them to perform essential life tasks like seeing their family physician and getting groceries during limited post-call hours, leaving little time for social interactions. These challenges were compounded by trying to balance social activities with their friends, whose schedules were more flexible, leading to multiple instances where they attended social events “*running on no sleep*” [010, R]. One partner reflected on how his resident partner’s “*social activities drastically died down because she didn’t have the time*” and how she was usually “*working on weekends, and if she wasn’t working weekend, then she had to recharge from her work during the weekend*” [024, P]. He also mentioned that her exhaustion “*negatively affected the relationship because I’m a very social person, so I was always pushing to [...] go out or do some sort of activity. And she was like, ‘No, I just don’t have it in me.’*” [024, P].

Residents mentioned the importance of their workplace relationships with co-residents and staff, especially how those relationships significantly impacted their mental health, negatively or positively. One resident vividly described feelings of isolation and loneliness due to the lack of supportive colleagues and preceptors within the residency program, saying,

“It does not feel like a family or like a team between the staff and residents. So that’s tough because that fosters loneliness, especially for someone like me, who doesn’t have time to go out here in Hamilton and make new friends, and I cannot rely on getting my social needs met from people around me at work” [022, R].

Another resident shared how her residency cohort has created such a welcoming and positive working environment which positively impacted her mental health:

“I’m around such a lovely group of people, thankfully through residency, especially my residency cohort. My cohort I started with; we have become close

friends. [...] Any time we're stressed out about deadlines coming up for certain things or we have complaints about call schedules, we can just vent together, and it feels better” [013, R].

Partners also discussed the importance of having a robust support system, including coworkers, friends, and family, who provided them with a sense of connection and distraction, and helped protect their mental health. Some partners highlighted this, saying,

“I have a really great support system. I love my co-workers. [...] They were super supportive. All my friends are super supportive” [026, P].

“We live in this awesome age of technology. I can talk to my family any time, [...] [which] is really, really helpful. And when he doesn't do the dishes and I'm at my last straw, I can call my mom. [...] They're really supportive, all of my friends and my family” [027, P].

One resident shared how her family supports her relationship with her partner, saying,

“The other pro is that I have another support system here. My mom is here, and she is a very good bridge between us, and really likes him, and he really likes her, and so, I haven't had to take all the burden on of walking someone else through it, and she can step in and be like, ‘No, [partner name], it's okay, you're trying, but that's enough.’ Or also telling me when I've reached the limits of wallowing and being able to bridge that gap a little bit. So, I think having an extra person in the mix is really helpful” [017, R].

Residents who live with their parents also discussed how they have supported them and made them “*more mentally available for residency*”, with one resident sharing,

“I don't have that additional pressure of having to think about paying bills. [...] If there's something going wrong with the house, [...] I know my dad would be managing that. I wouldn't have to personally manage that. My home life has made me more mentally available for residency. If food is ready or something, then I don't have to spend that mental capacity thinking about it. I can work on whatever I need to work on” [013, R].

This resident goes on to share that her parents help her cope with the stress of residency as *“there's usually food ready in the fridge that I can just get out. I don't need to spend time cooking. So that's a small thing that helps me cope with any stress. If I have work to do at home, once I get home, I can spend some time with my daughter, then they will help put her to bed, so I can go in and finish whatever I have to do”* [013, R]. She also discussed the benefits of having her parents help *“[look] after her [daughter] during the day, so I don't feel the stress of needing to go pick her up at daycare after a long day of work”* [013, R].

On the other hand, residents and partners talked about their struggles with maintaining relationships with immediate family members due to the time constraints of residency, which can lead to limited visits and strained relationships. An IMG trainee revealed that they avoid sharing their residency struggles with their family to shield them from becoming too worried, especially since they live at such a distance, on a different continent. This trainee expressed the unique challenges of being an IMG, leaving her entire family and social support network back home, whom she is actually supporting financially, saying,

“Especially for [an] IMG, when you're leaving, [...] you are leaving your parents somewhat ailing. You are supporting them. Sometimes you call your parents, [and] they don't have food, they don't have this. [...] My sister, [...] she's undergoing dialysis right now. Two days later, my father had a stroke. [...] So it's tough because [...] you left your family. It's a sad reality that you may not even see some of them [again], [...] like there's a friend who died during COVID. [...] It's really socially draining to know some of these things. Sadly, you are leaving your family and leaving your parents who depend on you. [...] I'm the only, sole dependent in that family. Everyone depends on you” [019, R].

Another major source of support identified by residents is their children. When asking a resident how she and her resident husband coped with the stress of their residencies, she said,

“[We’re coping by] focusing on our daughter [...] she’s 13 months, so every day she’s doing something new and she’s getting so much better at walking now. [...] After a long day or a stressful day, I come through the door and she’s walking and saying, ‘Mama, mama.’ And that just makes my day. So, focusing on her helps me cope with stress. [...] That’s not even a coping mechanism, [...] it helps me just not think about it [and] put it aside. I’m not actually dealing through it. I’m pushing it aside” [013, R].

An IMG trainee also shared how her children are her “*source of strength,*” [019, R] and how they supported her mental health and well-being throughout the challenges of training. Another IMG trainee, in a surgical residency program, explained how having children shifted his perspective from wanting to be the best surgeon, to wanting his children “*to be the best*” [009, R] by prioritizing them. This resident explained that his “*main stress reliever is them being in my life. [...] Because if they’re not there, I would have had a lot of stress, and I don’t know how I would [...] cope. I would go back home after that stressful day and just sit there by myself. [...] This is my stress reliever; my family being beside me during residency*” [009, R].

On the other hand, it is important to note that some residents felt that the support they received from their partner could not be replaced by other types of social support.

3.8 Theme 7: Need for Advocacy: A Call to Change the Culture of Medicine

The final key theme described by participants was the wish for and felt need to advocate for systemic change within the current culture and practice of medicine to better support the well-being of postgraduate medical trainees and their partners.

3.8.1 Theme 7A: Red Flags in the Culture of Medicine: Learner Mistreatment and Discrimination

Postgraduate medical trainees and partners repeatedly raised the issue of learner mistreatment and discrimination in postgraduate medical education and the impact on trainee well-being. Trainees shared instances of bullying and lack of support within their residency programs, with one trainee sharing how another resident's poor performance led to the entire cohort being unfairly targeted by senior residents. This bullying created a toxic environment that *"wasn't coming from the program director or the supervisor, it was coming from residents"* [011, R]. IMG trainees and partners described the discrimination trainees faced, with one partner describing the stark disparities between the treatment of IMGs and Canadian Medical Graduates:

"She is an IMG [...] and she mentioned that she felt [that she was] treated worse than non-IMGs. And she said that her peers, who also were IMGs, were experiencing the same thing. It almost felt like, [...] there was a group-specific treatment that they received that others didn't receive. [...] Immediately, right at the start, there was discrimination, and she didn't feel great at the start. [...] It didn't give a good start into the residency, and it just went downhill from there" [024, P].

Another IMG trainee, a member of a racialized community, shared her experiences of mistreatment, microaggressions, and racism throughout her postgraduate medical training. The trainee shared instances where colleagues have made her feel that

“my rights had been violated over and over and over and over again” [019, R]. She recounted how the chief residents, who were meant to be trusted leaders, were mean and dismissive towards her. She also described an incident where her clinical judgement was questioned, and references were made about her race:

“I saw a patient and there was something wrong [...] [so I] ordered an investigation. I am at home, post-call sleeping, and the staff calls me and was mad, and was like, ‘This is not [African country] where you just order results. You should have sent the patient back to the family physician, tell them what you think and let them order.’ I was like, ‘I asked the [patient’s relative], and she’s like, ‘Oh I want this test done today. Can you please call so that they do it when I’m going to the family physician?’ I called and they did it.’ [...] Yeah, so it was really just those comments people make like, ‘This is not [African country].’ [It] may be subconscious, but it means a lot to me, like it means everything, are you telling me I’m substandard? [...] There is a nice way to do that” [019, R].

The trainee goes on to discuss other experiences of microaggression she faced in residency:

“There’s a lot of battles, [...] there was a lot of microaggression, a lot, a lot, a lot. People do all sorts of things. At some point, you just will cry. You’re like, ‘Why?’. I remember my first call on my own, I was not even allowed to examine the patient. They asked me, ‘Have you ever even examined [a patient]? Can you?’ I’m like, ‘Just let me do my [examination].’ They totally refused, [...] it was that bad. But after the Black Lives Matter thing, and there was a lot of activism. [...] Things had at least changed a bit. [...]

“There’s a time where at 3 A.M. I went in to see a patient, I talked to a patient for 30 minutes, then the nurse asked me, ‘Is there someone else to talk to the patient?’ I’m like, ‘What do you mean?’ [...] I thought I [had] done my best. I explained to [the patient], being compassionate for 30 minutes. [...] [The nurse is] like, ‘Is there someone else with better English who can talk to her?’ I asked her, ‘Do you understand me?’ She was like, ‘Yeah, I can understand you.’ [...] Then she just went, and she was point blank, ‘Is there a Canadian in your program? Is there somebody Canadian to come talk to the patient?’ So, they called the resident to come and talk to the [patient] and this is a resident, and I’m a fellow, and they called the resident who’s Canadian. [...] And I just left. So, you live with such things and [...] you go, you cry. You want to cry to someone. I’m calling my husband. He’s not picking the phone. You’re just all alone. And just like, ‘What the hell is all this?’ There was no good support structure, there was no one you could

ever tell, 'This is what is going on'. It was a lot. A lot, a lot. It was too much” [019, R].

The trainee vividly describes the mistreatment and challenges she faced, not related to the academic rigour of her fellowship, but rather to the mistreatment she endured, and its impact, which overshadowed her residency experience:

“For me, when I look back, it's not that the fellowship was hard, it's the treatment I got [which] is what I resented more. It's just what was the hardest part in my life” [019, R].

3.8.2 Theme 7B: The Partners: The Unseen, Crucial Advocates

Partners served as unseen advocates, witnessing the behind-the-scenes aspects of residents' training experiences, often hidden from the program and other social supports. Partners' frustration with the medical system was palpable as they described observing and hearing about residents' experiences, including the mistreatment they endured. One partner described how “*devastating*” it was to witness such mistreatment and not be able to help:

“It's devastating to see how [terrible] the program is and how all the residents get treated and the fact that I can't do anything about it. And like, just hearing the experiences and knowing that there's labour laws in place for all jobs but it doesn't apply to residents is pathetic. [...] I feel like he's constantly being kicked and shoved and spit on and there's nothing I can do about it. So, I guess, the hardest part is just internalizing his experience and knowing there's nothing I can do about it” [026, P].

Another partner expressed a poignant wish for change, lamenting and saying, “*I do sometimes wish that her job wouldn't make her feel like garbage all the time*” [031, P]. Another partner discussed his anger with the program structure, the inhumane working conditions that residents face, and his sense that residents are not treated as human beings, saying,

“The expectations of the residents are inhumane. The conditions they are working in are inhumane, and the expectations are completely beyond anything a human is capable of. [...] I am very upset at how the program is structured and how poorly they treat the residents and that they disregard that they’re humans” [024, P].

Another non-resident partner expressed his built-up anger with residency and the medical system as a whole, highlighting his perception of the inhumane demands on residents and the lack of genuine concern and action to address resident well-being. The partner underscored the significant toll the environment took on his resident wife’s mental health, saying:

“I remember being like, ‘You can quit, you can leave. We don't have that much debt yet, like you can just quit.’ [I had] tons of anger, I still have it. You could probably sense my anger. [...] It's hard to talk about because I feel like it's so crappy, because she gives, gives, gives, gives, gives, gives, gives, and the system takes and takes and takes, without any — very little, very little concern for her. And these wellness initiatives, I don't know who they're trying to trick into thinking it's helping people. The whole system needs to change. There needs to be less demand. There needs to be more communication up and down the chain. They need to treat adults like adults. It's completely messed up and I think it's taken a huge toll on her health. And it's not a stretch to say, if things had gone slightly different, if she wasn't in a really good and happy relationship and family, you know, like people's mental health gets so bad. People are killing themselves, and it's not a stretch to put her in that category, in my opinion” [038, P].

This partner, Participant 038, explicitly described instances where his resident wife was mistreated either by staff, senior residents, or the program, and the emotional impacts of witnessing his wife being treated poorly, all while seeing her work so hard in residency:

“There's this other part that for me is honestly the most traumatic and painful, is that not only is she dedicating all this time and energy and stress to this field, [but] there's been tons of times where people are treating her [horribly]. She'll spend the whole time at [the] hospital on one of those call shifts and just missing out [on things] like crazy. And then she's being treated [horribly] by everyone and it's unbelievable” [038, P].

“She was really busy, and she was basically being bullied in her program by the more senior residents. That was a hard year. [...] The culture of feedback and communication is so absurdly messed up, like I cannot understand it. [...] [At one point,] I don't know exactly what was happening, but she was just in tears, like, ‘I need to go home. I can't even be here.’ So, I remember driving [...], like traffic all the way, to pick her up to get her out of that environment, and that persisted through the whole year” [038, P].

He also shared his perception that there are no effective reporting mechanisms that he can access to make meaningful change:

“There are no reporting mechanisms. I feel like there's zero reporting mechanisms that I've ever seen that do anything, like flat out. There's nothing useful in the system” [038, P].

The same partner also expressed concerns about the risks of medical training, referencing higher rates of suicide among physicians compared to the general population, which he connects to the nature of the medical environment:

“[Residency] is unsafe. [...] Doctors have a higher, really much higher, rate of suicide than regular people and it's because they're in a very unsafe environment” [038, P].

3.8.3 Theme 7C: Calls from Trainees and Partners to Change the Culture of Medicine

Residents stressed that these issues cannot be solved solely at the individual or program level, and that the entire culture of medicine and workplace environment needs to change:

“It's hard to change the culture of a place. If you're not happy at work because people are mean to you, and they hate their lives or they hate their jobs, [...] that's just a whole culture thing or workplace thing” [007, R].

One resident poignantly described the barriers residents can face in considering whether to speak up about the hardships or injustices they experience, given the culture of silence and fear of repercussions and retaliation within some training programs:

“Most residents are taught to just keep your head down, just work through it, if you experience injustice or you experience hardship. People don't speak up very much. And when they do, I feel like it's more penalized than respected, even though all the official channels always talk about wellness. [...] But the culture is: you don't speak up about those things. People are afraid because they don't want to be blacklisted by their program director, or their program in general, because I'm in a small enough field where word gets around and if you want to get a job afterwards at an academic center or anywhere around, their opinion of you really matters. So, there's all these toxic systems in place to ensure that the residents don't complain and just live through whatever happens, you know. Even to the degree of lying about how things run in the program when it's just untrue. Come time for the accreditation or whatever, the residents have to lie about it because it's not meeting standards, and [...] it's just accepted and encouraged. No one says it, no one speaks it, but it's like an oath that everyone binds into” [012, R].

An IMG trainee shared her fears around advocating for her own well-being, noting that despite recent emphasis on wellness and equity, diversity, and inclusion, practical mechanisms for addressing resident mistreatment remain inadequate with little to no follow-up on any reporting she has provided in the past. She expressed a deep fear of potential career-threatening repercussions when reporting mistreatment, asking herself, *“Will people believe me? Will they judge me? [...] How will it impact my growth?” [019, R].* She noted that the experiences she has shared in this interview have never been voiced to anyone else, feeling like she *“couldn't even advocate for [herself]” [019, R].* She also stressed the urgent need for systemic reforms in residency and fellowship programs, so trainees can have a *“safe [way to] talk about [concerns]” [019, R].* She also highlighted the gap between wellness programs' intentions and their actual impact, emphasizing the need for actionable change that goes beyond mere rhetoric, saying,

“We should make the environment safe, not on paper only. Let's see action. I think [in] most of those wellness programs, there is more talk and talk and talk, but action wise, it doesn't really trickle down, especially if you're the victim. [...] By engaging people, they will actually learn more and look at strategies on how to go about it” [019, R].

One resident's wife shared her frustrations with the culture of medicine and how she has not been given the opportunity to advocate for her resident partner. She described wanting to voice her concerns by writing to the program, but her resident partner was too concerned about the professional repercussions. She stated:

“I want to advocate for him, [and] I have nowhere to advocate for him. I have no email to send a letter to. I have no anonymous forum to be like, ‘My partner is really struggling’. I have nowhere to give any feedback. I have nowhere to give any feedback at all. Sometimes I say to him, ‘Could I write a letter? And then you could sign it, and you could give it to your person and then that's how you're feeling right now.’ And he'll say, ‘No, [Participant 030], they can't know it came from me. I can't have them knowing.’ So, if I want to say something anonymously to tell them, I can't because he's worried it will affect [him], especially being [...] in such a small program. So that's what I want to share, that regardless of how hard we're trying, there's still a cultural medicine experience that as the resident, you are lesser. You are in the learner role and regardless of how much we're going to push you, you must adapt and we're not taking any feedback” [030, P].

Another partner reiterated the need for adequate channels for reporting workplace harassment and bullying, likening the medical training environment to one more unforgiving than the military. He added that the stigma around mental health within medical culture worsens these issues, and that residents should be able to take mental health days when needed:

“[If there] was really a clear line of communication when there's workplace harassment and bullying happening, [that] would have been good. It's unbelievable that it doesn't exist. There's no whistleblower program, or protection like it. Like, it is more dogmatic than the military. [...] It's that extreme. [...] It's, more than anywhere else, so stigmatized, like mental health. Everyone should have some mental health days to take off, and call them mental health days, and [say], ‘I'm going to take them.’ Like, come on” [038, P].

This partner acknowledged that “*changing a culture is extremely hard*” but suggested that one way to begin would be to grant “*every trainee two weeks of mental*

health days that they can take whenever they want” since residents will “feel better [when they can have] a break from this environment” [038, P].

One resident shared that there is little attention paid to standards of well-being in residency programs, and in the culture of medicine as a whole, reiterating how the wellness initiatives do not “*make a dent in real life*” and that programs need to be more concerned about “*what’s happening on the ground*” [012, R]. This resident goes on to share that individualized interviews with residents, like this study’s interview, is the way to garner a more truthful and realistic understanding of their residency experiences, especially in the accreditation process:

“I think the biggest issue is the residency programs themselves. [The] program, culture, what's acceptable and what's not acceptable, and how little oversight there really is and whether or not things get done. And all this talk about wellness modules, retreats. Like everything on paper, it doesn't make a dent in real life. In real life, it's like, ‘What's happening on the ground?’ And only if you have very isolated, in-person interviews with people in the program is when you get to find out the real issues with a problem. And even the promise of anonymity doesn't make any sense because people get pieced together for who said what because it's such a small program. And [residents have] this fear of getting a job afterwards, and what they might think about you, [and] what they might say really impacts residents a lot more than you think. I don't claim to have the answer to how to solve this, but one thing is for sure: accreditation. When things happen during accreditation, people should not be talking to people in the room together. People should be individualized and have individual discussions, like this [interview]. When you put people together in a room, you're not going to get an honest answer” [012, R].

Partners reinforced trainees’ perspectives on the ineffectiveness of training programs’ current wellness strategies, with one partner explaining that these well-being exercises often burden residents’ already busy and stressful schedules. He adds that other

well-being strategies, like therapy, would likely be far more effective than any additional training modules:

“I will say this upfront, and she agrees with me: the current wellness strategies that most residency programs employ right now are kind of a joke. Like they tell them to practice wellness, or they give them these wellness days and then she'll spend it working [...] or a lot of times it's like, 'Oh, you're supposed to do mindfulness training.' And it's like, 'I don't need mindfulness training, I need therapy because I'm crying myself to sleep every night because I have so much work to do.' [...] Everyone just jokes around [about] how useless any type of wellness initiatives by any of the schools have been” [031, P].

3.8.4 Theme 7D: Partners are Key Allies Who Can Help Change the Culture of Medicine

Participants made clear, implicitly and explicitly, the critical role that partners play as advocates for change within the culture of postgraduate medical training, at all levels. One partner underscored that many residents are unlikely to self-disclose their severe mental health struggles and suicidal ideation, and made the point that partners are uniquely positioned so closely to the resident to be able to detect any signs of concerning distress. This partner suggested a straightforward, yet impactful solution: a resource guide sent to residents, designed for their partners, with crucial resources and supports to bridge the gap between PGME resources and residents' support systems:

“Even just knowing what resources were available to her, addressed to me. Not every resident is going to come to their program and say, 'Hey, I'm gonna self-declare that I wanna kill myself.' Chances are the partners are gonna have to deal with that and not see all the clues either, because guess where they spend the majority of their time? Simple as that. I mean, literally a PDF. A 4–5-page PDF that gets emailed out to residents, and you say, 'Send it to your partner', would have been worlds better than the nothing that we got during that period” [025, P].

Another partner expressed relief that their resident partner's program was not successful during accreditation, feeling this was necessary to reform the program and ensure residents' sense of safety and well-being:

“[It] allowed them to actually make changes that make the residents feel a lot more safe and just function better within their role. The biggest difference between [last year] and [this year] is that he definitely feels more supported just by the nature of the program needing to change to keep their accreditation status. [...] He's happy with the changes that were made in order to function safely as a resident” [026, P].

This partner also shared that although she is relieved that the program was not successful during accreditation, it was disappointing that it needed to get this far for residents' long-standing concerns to be taken seriously. She also asserted that residents' wellness initiatives should not be mandatory, and that giving residents the time off to attend to their basic needs, like eating lunch, would be much more beneficial to their well-being:

“It sucks that [it took] accreditation for them to actually take the concerns seriously of the residents who have been complaining about these ongoing issues for the past five years. That's not how a well-known program should act. The mandatory mental health or wellness sessions that they have; you can't put wellness and mandatory together. Just give the residents the time off instead of needing them to go to a lecture on how to take care of their mental health. I'm sure that they would all value a one-hour lunch break way more than that; to actually be able to eat food, because he only eats protein bars on shift because every time he brought food, it would come home. [...] He doesn't have anywhere to store it; he doesn't even have the time to eat it. If he is told to go eat it, he gets called right back, and he doesn't get the time to eat it” [026, P].

This partner, among others, described ways to improve the training experience for residents. She suggested holding academic half days online, removing 26-hour call shifts, getting “rid of mandatory wellness and allow them to actually care for their wellness” by providing “a PDF of the different resources”, and providing opportunities for residents to

engage in “*actual fun experiences*” [026, P]. Another partner echoed the sentiment that the current wellness initiatives are falling short, sharing his suggestions to attend to residents’ basic needs, saying,

“The whole system is really dysfunctional and unhealthy, and the wellness programs are not even a Band-Aid to the problem. Like, allow people enough time to take care of at least their physical bodies, at least to get sleep, at least to eat well. Why isn't there healthy food for people working overnight shifts? It's not rocket science. They talk all about social determinants of health, so just fix it for your residents, it's not hard. The money's there, I think, to provide some good food for people, a nice place to sleep if they're working overnight, and limiting how much overnight work they do” [038, P].

In addition to the actionable solutions that partners suggested, they also provided insight into addressing some of the more underlying issues in medical culture, like the inflexible demands placed on residents. One partner suggested that the problem may be a lack of transparent communication around staff’s expectations of residents and their supervisory relationship dynamic, many of which are assumed by residents. He shares some potential solutions to the current culture of medicine, saying:

“I wonder if a lot of the problem is that staff never talk about their expectations on their residents. And so, they just go, ‘Okay, I'm the staff and there's this relationship and the rules for this relationship are written somewhere.’ No one ever talks about them, right? [...] There's just a lack of transparency or communication between the residents and their staff or the organization. And so instead they're like, ‘Oh, [...] we're going to talk about how important it is to practice mindfulness.’ And they don't have time to practice mindfulness, they don't have time, that's the problem. They don't have anything. [...] That's the biggest thing for me; find [residents] more time to decompress [...] to avoid burnout and exceedingly stressful stress levels and make sure that [...] this culture [of] keener mentality does not serve any negative purposes, like over-stressing. [...] I think there is a greater culture problem that's not being addressed” [031, P].

The partner of an internal medicine resident provided insight into the jarring transition into residency from medical school for her partner, recounting his assignment

to the clinical teaching unit on his first day as a resident. She described the overwhelming stress that he faced and suggested programs consider starting PGY-1 residents in less demanding rotations to help them adjust to their new environment and role, and to help them build their confidence:

“Definitely not starting him on the clinical teaching unit at McMaster on his first day as a resident. The guy didn't know what was going on. He was so stressed. He's trying to perform at a [high] level. So, on the first day of residency, he's not home. So, he had no support for weeks. He's all alone. [...] He's financially stressed. He's not eating the food that he's used to. So, I wish they would have done that differently, I wish they would choose to start [residents] in something that's a little bit easier for them to at least get confident for the first couple of weeks, recognizing that they just need support” [030, P].

Lastly, one partner emphasized the excessive difficulty of his resident partner's program, and that the immense workload placed on residents is infeasible for any human. This highlights a need for a fundamental reframing of how residency programs are designed and structured, as well as the expectations of residents in those programs, considering that they are humans, too.

“I want to reiterate [that] the structure of the entire program was just too hard. And even if there were [resident wellness] events that could have been helpful, I think it would have always been a short-term relief and not a long-term relief because the amount of workload was just not feasible for any human, essentially” [024, P].

3.8.5 Theme 7E: Viewing Trainees Holistically: The Humanistic Approach

Both trainees and partners stressed the need for the educational and health systems to view trainees holistically, recognize their humanity beyond their professional roles, and consider trainee and partner well-being as interconnected. One partner explained this, saying,

“I think that if they were to consider partners, that really shows them looking at doctors holistically, the same way that they train doctors to look at patients holistically. And a good doctor isn't defined just by the knowledge that they receive through the program. It's also by how they're able to insert themselves, and their battery level, in order to do their job. So, if you're making them function at 100% all the time in order to just get to the end, how are you making sure that they're at 100% when they do get to the end? How do you make sure that [...] they're actually going to do a good job with the patients? [...] I think that starts within the home. [...] In terms of taking care of the partners, [...] if you're taking care of [him] well, then you're taking care of me well, but they're not taking care of [him]” [026, P].

The notion that taking care of residents' well-being would also improve partners' well-being was echoed by multiple participants, as enhancing residents' lives naturally provides them with greater capacity for their intimate relationships. One partner explained this, saying,

“I think the biggest thing is actually to make [residents'] lives more manageable so that they can be better partners at home, and they can show up. That, to me, is more [important] than anything, more than any sort of specific programming. It's making their lives more reasonable, so then they have more patience, they have more capabilities of dealing with things that come up at home. I think that is the biggest and the best way of dealing with these things and to make my life better, personally” [033, P].

A resident echoed this sentiment and suggested that programs should consider “acknowledging [to residents] that [residency] is hard, because sometimes it feels very isolating” and “recognizing that it's really hard and not normal, [the] kinds of things that we're doing, and that it's hard on our partners and our families” [023, R]. For instance, a major impact of residency training on residents' home life is the transition to training as some families had “to uproot their life to follow one family member who is training here” [028, P].

Both residents and partners shared the importance of creating a supportive community within programs and integrating residents' partners in that community. One resident described the absence of a supportive community in his program and hoped that this study can spark change so that partners would be more involved, saying:

“Creating a community is so important for people. It's one of the three major things for good health that is non-existent in our program. [...] When people do bring reasonable things up, like the death of a parent, an upcoming pregnancy, difficulty with a partner, or, straight up, you're sick, [we shouldn't] be like, ‘Okay, let's see, you're gonna get punished with this, with this, with this, because you're missing this time off, and this time off, and this time off.’ Just be human, just like, ‘Oh, that is tough! Let me hear you out.’ [...] And the other thing would have been having more opportunities between staff and residents to socialize, [...] more frequent times where the staff and the residents get together with the partners as well, just to feel like we are in the same community. We live on the same planet. [...] My [wish] would be to just build community, which is why I wanted to be involved in this study because I hope programs that involve partners in the residency community would happen. There are so many times that she would be like, ‘Oh, there's this thing happening, are partners allowed to come?’” [022, R].

Other participants highlighted their need for community in residency, especially one that integrates partners into residents' social network. One trainee described frustration about a lack of social opportunities that included partners and a lack of clarity around whether partners were invited to certain residency events. She also expressed feeling that the program only sees her as a service provider, and “*not as a whole person*”, despite how much she has given to medicine:

“It's really painful that it's not even clear if partners are invited to social events. [...] Personally, I feel like they should be invited to more things, like they should be invited to the residents' retreat. They can all hang out and support each other while we do our residency learning and we can all hang out in the evening. The reason I stopped going to wellness events and social events was because that's not supporting me at all. I get barely any time with my partner or my family. As soon as there's something that's optional, that's where I'm going, you know? But I would love to be like, ‘Hey, there's a barbecue on the beach. We're all invited.’ You know? Great. But if you're going to make me choose again between medicine

and my family, I'm choosing my family. And it's painful that despite how much I've given of myself to medicine, to this training program, that my family isn't included, because I think that reflects really how you see me, which is not as a whole person, but as a resident or a physician. Yeah, a service provider” [011, R].

This resident shared how the lack of clarity regarding partner invitations and her unsupportive working environment led to her opting out of residency social events:

“It wasn't very clear if partners were invited. [...] At some point, he was like, [...] ‘You know what? I just don't want to go, partly [because] I meet these people that have been so rude to you and unkind.’ He's like, ‘I just don't even want to see them.’ [...] And then shortly after that, I was like, ‘I think I'm just not going to go to them, because I would rather just spend the time with my partner’” [011, R].

She emphasized the crucial need for cultural shift within residency programs to better include and consider residents' intimate partners and their families:

“There needs to be a cultural change of inviting partners and family members to events, and making things have a kid-friendly option. [...] Really explicitly inviting family members in and to be part and to share in the space in the community” [011, R].

When partners were asked if they would want communication from the residency program, one partner suggested minimal, yet impactful gestures that he would appreciate, saying:

“Even just something to acknowledge like, ‘Hi, we understand that you are part of this process as well, and we very much would like to offer you a barbecue in April.’ Something to delineate that, ‘We acknowledge that you exist.’ First of all. Secondly, acknowledge that we are going to be a support person for this person who's going to absolutely go through the ringer, because she did” [025, P].

One resident described moving to Hamilton with his partner and the transition being particularly difficult for his partner since she “*didn't know anyone*”, whereas he was able to make friends with other residents. He shared that it was difficult for her to “*get integrated into a social circle*” at first, and that it would have been helpful to have

“some specific events just for the partner to go to, or aimed for the partner and they could bring their residents if they want to” [004, R]. Other residents and partners shared similar ideas, saying:

“It would be cool if there could be support groups for partners or if there was a dedicated program for get-togethers for these people, especially for non-clinicians. [...] There's no other way for them to connect with each other unless we intentionally [connect them]” [016, R].

“I think it would be really nice if you had an event that's focused on the partners, just to recognize that side of things. And I've never seen resources for partners either, never seen anything where you help that other half. It's been very focused on the person in [residency]. [...] I think acknowledging partners and making them a valuable part of that experience would be some of [the solution]” [021, R].

“To be honest with you, I do think that there is a very important pivotal space that can be made for partners of residents if they wish to opt into something that resembles a [social network] group. [...] Something to connect people who have a very niche concern, who would relate to each other incredibly well” [025, P].

One resident suggested including partners in PGME-related events for residents, such as orientation sessions, either in person or online. This resident also expressed the importance of making partners feel welcomed into the world of residency, saying,

“It would be nice to show my partner where I work, in a reasonable way, show her the residency room and my colleagues, having more frequent activities where partners are involved, it would be good because once you're in a pretty committed relationship, you cannot really separate the people from social events” [022, R].

This resident emphasized that if those measures were taken, *“my partner would have felt welcomed and part of the community and not just this is my life that she is not a part of” [022, R].* He also discussed the importance of having mental health supports covered for both residents and partners and shared that *“it would be nice if it was as easy for her to reach out to someone to talk to as it is for me to reach out to a therapist at PGME” [022, R].* He goes on to *“wish [mental health support] was [...] as available for*

her as it is for me because the whole process of finding a therapist, in the first place, is a barrier itself. [...] I just wish she was able to just talk to the PGME therapist, but that's not an option" [022, R].

One partner shared a similar need for mental health support from the program and how he feels unseen in the world of residency, saying, *"Her union benefits are decent. I'm really happy to see that they [include] psychotherapy. That's huge, because for me, I needed it more than ever, and I got less of it than ever. I was pretty much just [feeling], 'Yeah, I'm spare parts', even though I'm fundamental to it. I'm not even a consideration in their mind" [025, P].*

Near the end of her interview, one partner had a critical message: a call to cultivate a more humane and supportive culture within medicine. She advocated for the elimination of the excessively long 26-hour call shift and the re-evaluation of the current postgraduate medical training environment as it compromises resident well-being:

"Well, since this is going to be published, I think it's important to note that my suggestion is that everyone just remains kind, whether you're a resident or already a staff or you're a fellow or whoever you are. There is no reason to be rude to the residents, especially when they are already going through so much. Like, why did you even become a doctor if you're going to be rude to your fellow colleagues? [...] That's not the attitude of a doctor. And it's just so pathetic to hear that these actual people who are supposed to be treating others create the poor mental health of these residents. And whoever is responsible or has the ability to change the on-call schedule, [...] how is someone supposed to be responsible for lives after 12 hours? These 26-hour shifts I know have been a constant battle to get rid of, but I have final words. Those are the final words that I need that gone and I don't who I have to write a letter to, but I will" [026, P].

Moreover, when asking partners about what changes they suggest to better support residents, one partner emphasized the importance of programs explicitly recognizing

mental health as a legitimate reason for taking sick days, which would foster better resident well-being and residents' learning capacity:

“Please ensure they understand that their sick days are for their mental health. I can't explain how many times I have needed my partner to take a sick day for his mental wellness and he feels that it is only for if he's projectile vomiting or has COVID. [...] I think they would be much better physicians and they'd be much better learners if they weren't worried and super stressed about being worried and super stressed” [030, P].

Lastly, trainees and partners expressed the importance of engaging directly with them to gain a comprehensive and accurate understanding of their experiences and identify effective strategies to address any issues identified. A surgical resident emphasized the value of this study, where individual interviews were conducted to explore their unique experiences, saying,

“I think these studies are really great. I think when you talk to individual, take time and have the resources to talk to individuals, is when you actually get real answers. Any group setting, you're not [getting] real answer[s]. So, I think when it comes to stepping in the right direction for wellness and helping the residents, I think this is the best way forward. Not any more modules, not any more yoga classes, not any more things on your to-do, residents have enough to do. It's like, ‘How can we actually mandate policies that will actually provide wellness? [...] Having these individualized interviews with different residents from different programs I think is really helpful. Yeah. Thank you” [012, R].

Another trainee shared that she participated in this study to shed light on the unique challenges that IMGs encounter, which can be overlooked in broader discussions:

“The reason why I decided to request if I could also participate in this discussion is because I am an international medical graduate [...] and our problems are also unique to ourselves. [...] Our problems are totally unique in different ways” [019, R].

One partner shared that they joined this study to share insights into the challenges he and his resident partner faced, hoping to help other residents and partners cope with those challenges:

“I went through the entire process with her, essentially the entire time of the residency. And I would like to talk here today with you because I think it's important to share what both her and I went through during this time. It was extremely hard, actually. I thought it [could] help people in the future if I shared this now, so that people in the future don't have to go through the same stuff that her and I went through” [024, P].

Residents and partners also shared feelings of catharsis that they experienced during the interviews and how they felt understood by the interviewers through specific questions being asked:

“I'm really glad that you guys are doing this. [...] There's quite a lot of voices out there that are unheard, like partners like myself. [...] Having this avenue, [...] even if it's just a sounding box, like what we're doing now, just a place to share your thoughts, it can be awfully cathartic for people” [031, P].

“I think a lot of challenge comes from working with people who don't understand. So, it's a breath of fresh air to talk to you. You're asking all the questions that we ask ourselves a lot. But oftentimes, when you're working particularly off service, staff who don't really care, or you know, it's their lives to be doing the work that you find really hard. And so, there's not a ton of empathy, for the fact that you find it hard, and so that was a unique stress. I think there's the systemic stuff that's harder to shift, but then there's the individual level when you meet a person who cares and gets it, it's so wonderful and makes your life a lot better” [023, R].

CHAPTER 4: DISCUSSION

This qualitative, interpretive descriptive study explored the shared and unique experiences of postgraduate medical trainees and their intimate partners, as well as the intersections between training, intimate partner relationships, and mental health and well-being. Through the reflexive thematic analysis of approximately one-hour, semi-structured interviews with 38 participants, we developed seven overarching themes. These include: (1) The inflexible and unforgiving nature of postgraduate medical training, medical culture, and practice: The inhumanity of it all, (2) The mental, physical, and emotional toll of training on the couple, (3) A battle of identities and responsibilities: Whose identity is prioritized? Who shoulders the burden?, (4) The trainee-partner relationship as a protective ‘bubble’, (5) Threats, fractures, and repairs to the relationship ‘bubble’, (6) Expanding the ‘bubble’: The importance of other personal and peer relationships for trainee and partner well-being, and (7) Need for advocacy: A call to change the culture of medicine.

Beginning with the first theme, interviewing postgraduate medical trainees and partners allowed us to gain insight into how the practice and culture of medicine have considerably influenced their lives given the extremely high expectations, long hours, and intense demands of training, which frequently required trainees to work beyond their limits. This aligns with existing literature on the high degree of fatigue experienced by postgraduate medical trainees due to their heavy workloads, which can increase trainees’ risk of accidental workplace injuries and traffic accidents (Ulmer et al., 2009; Ayas et al., 2006; Barger et al., 2005). In addition to the high demands of postgraduate medical

training, we found that the inherent inflexibility of medical training created a sense of diminished control and autonomy for trainees and their partners. This often led to anger and frustration with the profession, as well as feelings of guilt and resentment. Their limited sense of control brought upon by postgraduate medical training and the lack of accommodation for caregiving also hindered some couples' relationship and family dynamics, including their future and family planning. This is consistent with the literature on family planning, pregnancy, and parental leaves during postgraduate medical training, across various specialties (Peters et al., 2024; Kemp et al., 2023). A recent survey sent out to all Canadian surgical residents on perceptions of pregnancy, parental leave, and parenthood during training found that 34% of men and 44% of women reported delaying their family planning due to their training (Peters et al., 2024). The most prevalent reason for delaying parenthood among all residents was concerns about the limited time they would have to spend with their family, followed by worries about missing portions of their training (Peters et al., 2024). Another survey by Augustine et al. (2020) found that 72% of Canadian plastic surgery residents did not want to have children during training, with the most common reason being an unwillingness to extend their training. Another study of U.S. female residents across 25 medical specialties found that 61% of those in relationships were delaying childbearing (Stack et al., 2020). The reasons they reported included demanding work schedules, not wanting to extend their training, lack of childcare access, financial concerns, and fear of burdening their co-residents (Stack et al., 2020). It is important to consider the policy differences between Canada and the U.S. regarding parental leave and other supports, as these factors may influence trainees'

experiences of pregnancy and parental leave. Additionally, our study found that women residents experienced particular challenges around becoming and being a parent while also being a resident physician, sharing the lack of support they experienced from the program and colleagues. This aligns with existing literature, such as a Canada-wide survey of surgical residents which found that 29.9% of residents indicated they would have had a child or additional children if they felt more supported by their residency program (Peters et al., 2024). Moreover, this survey found that women were more likely to face negative experiences related to pregnancy, parental leave, and parenthood, with 43.5% of women reporting bias due to their parental status and 58.5% encountering negative comments related to pregnancy (Peters et al., 2024). The CMA's 2021 survey of residents also reported that residents who are parents are significantly more likely to experience burnout, depression, and anxiety compared to residents who are not parents (CMA, 2022). These findings highlight the challenges faced by residents who are considering having children or are already parents, emphasizing the pressing need for residency programs to provide better support.

It is important to note that residency training's inflexibility and high demands are not unique to the medical profession. The literature reveals parallels in the challenges of maintaining an intimate partnership among other demanding professions such as the military, first responders, and academia. Much like postgraduate medical trainees, military couples must constantly balance the rigid requirements of the military with their relationship needs (Najera et al., 2017). Similar to some of the challenges of residency couples, military couples face strains on their relationship as they must deal with

extended geographical separations, financial crises, problems with addiction, and finding adequate childcare. Another study by Thandi et al. (2017) found six themes to describe the experiences of spouses of UK military personnel, many of which align with our study's findings, including the importance of healthy communication within the couple, changes in physical and emotional intimacy, and partners taking on the caregiving role. This study also highlighted how military personnel's mental health concerns, such as PTSD, depression, and anxiety, contributed to relationship distress and interfered with intimacy (Thandi et al., 2017). Similarly, first responders (e.g., firefighters, police officers, and corrections officers) face immense pressure balancing work-related trauma with the needs of their partners (Dacey, 2019). One study exploring the relationship between work-family conflict, job burnout, and couple burnout, found that first responders' emotional exhaustion scores were a significant predictor of couple burnout (Dacey, 2019). In academia, occupational burnout syndrome has been shown to negatively impact romantic relationships, with one study finding a negative association between burnout and romantic relationship satisfaction (Khoshkar et al., 2020). These parallels emphasize the challenges within other high-stress occupations to preserve healthy intimate relationship dynamics, suggesting that the struggle to maintain a work-life balance in a demanding profession is universal to an extent. Perhaps what sets the culture and practice of medicine apart, in particular, is its strong inherent emphasis on altruism, which may contribute to increased compassion fatigue and burnout among physicians and medical trainees, as they may have the proclivity to prioritize the needs of others over their own well-being (Bailey, 2020; Shanafelt et al., 2019).

In our study, the impact of the demanding and rigid postgraduate medical training environment was evident as trainees and partners shared poignant experiences that underscored the profound tolls that training had taken on the mental, physical, and emotional well-being of trainees, and how that impacted their partner and their relationship. These findings are consistent with the abundance of literature on burnout in residency training, with a systematic review by Najji et al. (2021) reporting the global prevalence of burnout to be 47.3% among postgraduate medical trainees. Other mental health impacts of postgraduate medical training described in the literature include an increased risk of depressive symptoms or depression, anxiety symptoms or anxiety, suicidal ideation, work-related trauma exposure, and possible PTSD, among others (Dyrbye et al., 2014; Vance et al., 2021; Zhang et al., 2023). The literature also acknowledges the strain that postgraduate medical training places on trainees' personal relationships, citing training-specific challenges such as work-scheduling demands and geographic separation (Law et al., 2017; Ulmer et al., 2009). A qualitative study interviewing the support persons of surgical trainees found detrimental effects of training on their well-being, including having to make personal sacrifices, delaying key life events, and feeling a sense of disconnection from the training program (Evans et al., 2021).

In addition to the toll of postgraduate medical training on the trainee, partner, and relationship, we found a bidirectional tension between trainees' personal and professional identities and demands. In our study, trainees emphasized the conflicting nature of their personal and professional roles, highlighting the privilege of saving patient lives while

also needing to make personal and psychological sacrifices due to their identity as a resident or fellow. Both trainees and partners highlighted how these role conflicts create tension within their relationship dynamic, requiring the couple to decide which of their identities will be prioritized and who will bear the burden associated with that decision. The role conflict between postgraduate medical trainees' personal and professional identities is well-described in the literature and has been associated with burnout (Dyrbye et al., 2011; Dyrbye et al., 2011; Kocalevent et al., 2020; Law et al., 2017). A Canadian qualitative study found that trainees' high workload contributed to their personal relationship difficulties as well as their burnout (Law et al., 2017). Our study's findings also align with Leiter and Maslach's (1999) Areas of Worklife model, in which greater role conflict is strongly and positively correlated with high emotional exhaustion because contradictory demands can interfere with one's capacity to fully commit oneself to the task at hand. Overall, our findings highlight the underlying, yet notable role conflict between trainees' personal and professional identities, as well as the tension between the individual identities in a relationship. Our study also revealed that the resident or fellow's professional role was often prioritized in relationships, leaving their partner to shoulder the burden of domestic responsibilities, which could ultimately stifle the partner's unique identity. The interviews highlighted various implications of such prioritization, depending on the overall power dynamics, cultural norms, and gender roles within the relationship. Participants in relationships with more egalitarian approaches, where expectations of household and child-rearing responsibilities were shared equally between partners, often reported satisfaction with their relationship dynamic. This aligns with the literature on

how couples' egalitarian approach to work-family decisions is key to achieving each partner's autonomy in regard to their career and family engagement (Radcliffe et al., 2023). This is in contrast to couples with more traditional work-family arrangements who experienced tensions around who should shoulder the burden of work-related versus family-related responsibilities (Radcliffe et al., 2023). Moreover, some participants shared how they addressed tensions created by role conflicts and competing demands in their relationship by negotiating the couple's identities, roles, and responsibilities as a unit, which allowed for a high-quality dynamic.

In addition to role conflict in the relationship dynamic, which pertains to tensions related to the resident/fellow identity, our third theme highlights the disproportionate burden of responsibilities that fall on the partner due to the high demands of postgraduate medical training. Our findings align well with the Job Demands-Resources (JD-R) model, which is a theoretical framework describing how the combination of job demands and resources can influence job-related well-being, including burnout (Bakker & Demerouti, 2007; Demerouti et al., 2001). According to the JD-R model, job demands refer to elements of a job that require continuous physical and/or mental effort, often leading to costs to well-being (Bakker et al., 2011). In contrast, job resources are job characteristics that help individuals achieve their occupational goals (Bakker et al., 2011). The JD-R model suggests that employees are at risk of experiencing job stress or burnout when job demands (such as work overload) are high, and job resources (such as a sense of autonomy) are low (Bakker et al., 2011; Demerouti et al., 2001). The model proposes that improving job resources may buffer the harmful effects of high job demands on

employees' well-being (Bakker & Demerouti, 2008). Notably, a study by Bakker et al. (2011) explored the relationship between the JD-R model with the concept of work-home interference among medical residents and their intimate partners, acknowledging the substantial impact of domestic demands alongside residents' already high work demands. Similarly, our findings highlight the common struggle among trainees to balance their work-related demands with their home responsibilities, which further strained their relationship. The study by Bakker et al. (2011) found that the combination of high job demands and low job resources resulted in the highest work-home interference among medical residents, as rated by residents' partners. This study's findings also highlighted that residents' work overload is a significant predictor of work-home interference (Bakker et al., 2011). Another study of medical residents found significant associations between higher scores on the JD-R questionnaire related to the home-work interface and a 25.5% higher risk of burnout among residents (Zis et al., 2014). These studies are consistent with our findings, as both trainees and partners indicated that periods of increased workloads, extended work hours, and more frequent call duties depleted residents' ability to manage domestic responsibilities, attend to their well-being, and meet relationship needs.

In response to the pervasive nature of the postgraduate medical training environment and the overall practice and culture of medicine, our study highlights the relationship's potential role as a protective bubble, emphasizing the stability, support, and protection it can provide for both trainees and partners when it is functioning effectively. These findings are supported by the literature on the mental health benefits of being in a healthy intimate partner relationship and its potential protective function against stress,

anxiety, and depression (Floyd & Riforgiate, 2008; Braithwaite & Holt-Lunstad, 2017; Till & Niederkrotenthaler, 2022). At the same time, our study sheds light on the various threats to the vital “bubble” of trainees’ relationships at various stages of postgraduate medical training, as well as preservation strategies employed by couples to preserve the bubble’s integrity amidst the stress of training. In the context of postgraduate medical training, the existing research, although relatively sparse, has explored the impacts of training on residents’ personal relationships (Law et al., 2017; Guldner, 2001). Aligning with our study’s findings, a Canadian qualitative study found that residents’ professional identity formation was influenced by their personal relationships and that the erosion of these relationships could lead to burnout (Law et al., 2017). Although our study’s findings align with the existing literature, our study contributes further by emphasizing the importance of healthy intimate partner relationships in shielding residents and fellows from the stresses of their postgraduate medical learning and working environment. Our study also unpacks the mechanisms through which these relationship dynamics provide support and protection, including the roles of trust and interdependence, prioritizing the relationship, intentional time spent together, and maintaining healthy and regular communication.

In addition to underscoring the importance of healthy intimate partner relationships, our study acknowledges the importance of residents' and fellows' broader support networks, in which their intimate partner relationship is situated, in promoting and enhancing trainee and partner well-being. Participants described relying on other personal and peer relationships such as parents, friends, and colleagues. These findings

are consistent with the robust evidence on the protective and mediating effects of social support against burnout, anxiety, and depression among residents and other healthcare professionals (Moisoglou et al., 2024; Hu et al., 2020; Huang et al., 2020; Jain et al., 2022; Shahwan et al., 2024).

The final theme we developed based on our interviews with postgraduate medical trainees and partners highlights the urgent need for advocacy mechanisms to give trainees and partners a voice to more directly shift the culture and practice of medicine. Participants discussed concerning aspects of the current culture of medicine, including learner mistreatment and discrimination, revealing that partners are often unseen and silenced, yet could be crucial advocates for sparking needed change. Participants also discussed the need to create effective channels for residents, fellows, and partners to report their concerns and mistreatment. These findings align with the literature on the prevalence of mistreatment and microaggressions among postgraduate medical trainees (Finn et al., 2022; Hu et al., 2019; Schlick et al., 2021; Torres et al., 2019). Moreover, our study's finding about the pivotal role that intimate partners can play in advocating for change is supported by a qualitative study that interviewed the support persons of surgical trainees and found that their perspectives can provide essential insights into the well-being needs of trainees (Kemp et al., 2022). Lastly, this theme makes the argument that partners play a crucial role in transforming the entrenched culture of medicine. It calls for training programs to adopt a humanistic approach to viewing trainees, considering social determinants of health and mirroring the ways in which trainees are often taught to view their patients. This finding is supported by calls to change the culture of medicine to

improve resident well-being (Gradick et al., 2022; Parsons et al., 2020; Stansfield et al., 2021). Further aligning with our study's findings, the Royal College of Physicians and Surgeons of Canada's latest iteration of the CanMEDS physician competency framework, CanMEDS 2025, identified ten emerging concepts, one of them being physician humanism (Thoma et al., 2023). Physician humanism has been defined as both a physician's relationship with themselves, as well as a physician's role in delivering holistic and humanistic care to patients (Waters et al., 2023). This emerging concept recognizes the importance of physician well-being and acknowledges the inherent humanity of physicians and their physical, social, and existential needs (Waters et al., 2023). The revised CanMEDS framework has important parallels with our work, specifically that the path forward to improving the well-being of residents cannot be done solely through interventions that focus exclusively on the resident or fellow but should view physicians in training through a holistic lens by involving and amplifying the perspectives of those who help to support them in their lives and their careers.

4.1 Implications

Our study has implications for the well-being of residents, fellows, and their intimate partners, as well as for the design and administration of postgraduate medical training programs, as well as educational and health systems more broadly. It is important to note that our study highlights various types of relationships, including marriage, cohabitation, long-distance, same-sex, and trainee-trainee couples, as well as different relationship stages, such as new relationships and those with past relationships during training. We also included the experiences of Canadian graduates and IMGs, who are

often overlooked in the literature. Additionally, our study captured the perspectives and experiences of postgraduate medical trainees from multiple programs, including family medicine, surgical, and medical programs, at various stages, including the transition into and out of training.

The first implication of our study is that it highlights how intimate partners are the silent witnesses to the tolls of postgraduate medical training on their trainee partners and can offer more insight into the personal and mental health impacts of residency, fellowship, and the culture of medicine than the training program can identify. Through our interviews, we found that residents often do not speak up, report, or attempt to address the challenges they experience for several reasons, including: (1) they may not recognize the extent to which they are struggling, in part because they are entrenched in the medical culture, with its hidden curriculum, (2) they may struggle with imposter syndrome, self-blame, shame, and guilt, which act as barriers to disclosure, (3) they wish to protect their professional identity at all costs, even at the expense of their relationships and personal life, and (4) they are not aware of, trusting of, or confident that the mechanisms in place to support them will be effective. Our study found that intimate partners are uniquely situated to support trainees despite these challenges and that their insights about trainees' experiences are critical to better understanding trainee well-being and creating conditions for them to thrive, personally and professionally. We found intimate partners to be deeply invested in and highly knowledgeable about the well-being of trainees, caring for them in ways programs cannot, which makes them trustworthy advocates for resident well-being. However, despite their commitment to supporting their

resident partners, many partners expressed frustration and feelings of helplessness in trying to support their partners within the prevailing training and medical culture and a lack of channels for effective advocacy. Therefore, at a systemic level, our study calls for the acknowledgement of intimate partners' role in understanding and supporting the holistic needs of postgraduate medical trainees. It also calls for increased engagement of intimate partners and the development of channels and mechanisms to hear and apply their perspectives.

Moreover, a unique aspect of our work is that it explores a variety of factors influencing the intimate relationship dynamics between trainees and their partners, exploring how these complex dynamics connect to each person's well-being and experience of postgraduate medical training. Our study not only identified the importance of intimate partner support but also unpacked the crucial aspects of healthy intimate relationship dynamics between residents and their partners, framed as the protective and supportive relationship "bubble". Our study explored the implicit and explicit dynamics of healthy intimate relationships, the well-being and professional impacts of having a healthy intimate relationship, potential threats to and fractures within such relationships, and possible preservation strategies. This comprehensive exploration has allowed us to gain a deeper understanding of the relationship dynamics between trainees and partners, which is key to informing the development of dyadic-level interventions to better support their relationships. Moreover, this study has shed light on how trainees and their intimate partners are impacted by training—an area of research that has not been sufficiently explored. A prior, qualitative study by Evans et al. (2021) examined the impact of

surgical training on support persons' well-being; however, our study advanced this understanding by focusing specifically on intimate partners, who are often the closest to residents, seeking specifically to understand how training has impacted them. It is crucial to address and safeguard the well-being needs of both trainees and their partners to help them sustain a healthy relationship dynamic during training and beyond. In other words, the couple needs to function both individually and as a unit. Our study reaffirmed the notion that taking care of intimate partners will, in turn, support residents, and vice versa, supporting resident well-being will inherently benefit intimate partners.

The cathartic nature of our study's interviews was also evident as residents, fellows, and partners expressed a high level of interest and excitement about having the opportunity to share their experiences by participating in this research. Participants also expressed a strong sense of relief, emotional release, and validation of their often-overlooked, emotionally challenging experiences. At the conclusion of their interview, participants often shared that participating in this study helped them feel seen and less alone in their struggles. They also expressed their appreciation for the depth and precision of the questions being asked, which allowed for a meaningful exploration of their experiences. The overwhelming sense of relief and gratitude participants reported from being interviewed highlights participants' clear need and desire for safe spaces where similar experiences can be shared and validated. The cathartic nature of these interviews pointed to suggestions for individual-level interventions, for both trainees and partners, to better support their well-being. For instance, the interviews revealed the potential benefit of providing direct support for trainees' intimate partners as well as the desire for more

opportunities to directly access PGME mental health counselling and peer support opportunities. Intimate partners shared how having direct access to PGME resources could help them achieve more immediate support and feel more included, acknowledged, and supported by the educational system. This suggestion made by partners is a tangible area of intervention that could be used to better support the well-being of trainees by providing more direct support for their intimate partners.

Lastly, our study underscored the importance of adopting a humanistic approach to postgraduate medical trainee well-being by recognizing the importance of relationships to trainees and the valuable role that intimate partners can play in developing well-being interventions for trainees. Our study highlights how intimate partners are uniquely well-positioned to support trainees as they can more pragmatically identify the impacts and challenges of the medical culture, given that they are not as fully immersed in it as residents or fellows. Many partners in our interviews challenged the norms of the culture of medicine and were able to clearly point out the hidden curriculum's impact on their trainee partners. Their more neutral stance and outside perspective make them ideal advocates for providing insights that could change a long-standing and complex medical culture that might not be apparent to those more immersed in the medical field. Uniquely, partners have a vested interest in their trainee partner's success, but not at the expense of their well-being, because they intimately care for their trainee partner and see the toll of training on them. Our study found that intimate partners often exhibit dual characteristics: they are invested in both the improvement of the healthcare system as well as the well-being of their resident partner. This makes partners ideal advocates for postgraduate

medical trainees, as they want residents to have both a successful professional life and a thriving personal life, enabling them to naturally develop balanced and holistic solutions. Therefore, our study underscores that involving partners in the next steps of developing well-being interventions for postgraduate medical trainees is crucial. Their unique perspectives and vested interest in residents' success and well-being make them indispensable allies in advocating for and developing solutions that can powerfully change the long-standing culture of medicine in a way other perspectives cannot. Adopting a humanistic approach to resident and fellow well-being, by prioritizing the partner perspective concerning trainee and partner wellness needs, will enrich the development of interventions at all levels— individually, dyadically, and systemically.

4.2 Limitations

The first limitation of our study is its cross-sectional design, which captured participant perspectives at one point in time. Our study participants have only directly or indirectly experienced the postgraduate medical training environment as it currently exists, and in the year of postgraduate training they (or their partner) are in. It is important to acknowledge that the postgraduate medical training environment has evolved significantly over the years, with changes in policies and benefits provided by organizations, like PARO, that have shaped the expectations and experiences of current trainees and partners. As a result, participants' perspectives reflected their recent and current experiences but could not speak to the residency experience outside their training period. Moreover, since participants were not yet practicing physicians, we are unable to compare whether their experiences during residency training differed or aligned with the

experiences of attending physicians. Selection bias is another limitation of this study, with certain groups potentially being overrepresented or underrepresented in our sample.

Trainees and their partners who were more interested in this topic and/or had strong opinions or experiences related to relationships and well-being during residency might be overrepresented. Additionally, residents, fellows, and partners in toxic, abusive, or highly conflictual relationships, or who are less reflective about their experiences, are likely underrepresented. As a result, the experiences and perspectives of residents and partners who were less willing or able to participate, or wished to keep their relationship issues private, may not be captured. Additionally, the experiences of participants who were either extremely burnt out or very satisfied with their training experience may not have been fully captured. The participant sample also included fewer intimate partners compared to postgraduate medical trainees as partners were primarily recruited with the help of residents and fellows. Lastly, the findings of this study are based on a single institution and portions of the experiences described in this study may not be shared across other institutions. The extent to which our findings apply to other institutions remains uncertain as differences in program structures, institution-specific cultures, and support systems may limit the transferability of our findings to those contexts.

4.3 Future Directions

Our study lends support to the idea that intimate partners of postgraduate medical trainees and intimate partner relationships warrant further exploration. This work can help to solve the puzzle of burnout in postgraduate medical training and in medicine more broadly. The next step of our work will be to involve postgraduate medical trainees,

intimate partners, educational leaders, and other community partners in the development, implementation, and evaluation of individual, dyadic, and systemic interventions to support trainee and partner well-being and their relationships. Involving intimate partners in the co-creation of these interventions will be key, as we have learned that the experiences of postgraduate medical trainees and their partners can bidirectionally impact each other. Such next steps are currently beginning within a follow-up study titled, “The Co-WRaP Study: Co-Creating Solutions to Enhance the Well-being of Residents and Partners.” In this study, co-design sessions including virtual focus groups, and a Co-Design Cafe will be facilitated with residents, fellows, partners, and residency education leaders with the aim of co-creating solutions that enhance the well-being of postgraduate medical trainees, partners and relationships. The present thesis has provided the groundwork for the Co-WRaP Study by providing us with a more fulsome and nuanced understanding of trainees’ and partners’ experiences and has also offered some potential individual, dyadic, and systemic solutions that could be considered.

At the systemic level, the ideas mentioned by participants revolved around creating additional opportunities for partners to be included in the training program, including explicitly inviting them to orientation and resident social events. Another possible systemic intervention mentioned by participants included providing residents with more control and autonomy over their schedule with ideas such as providing call schedules to residents and partners well in advance. Moreover, our study highlights the supportive function of healthy intimate relationships; therefore, ideas to support residents and partners at the relationship or dyadic level would be to encourage them to be

intentional about their relationship, make communication a priority, and to turn to each other during stressful periods. Examples of individual-level interventions that arose in our work include encouraging both residents and their partners to seek mental health support when they need it and offering PGME counselling and support to partners in addition to trainees.

CHAPTER 5: CONCLUSION

In this thesis, we explored the intricate intersections among the experiences of postgraduate medical training, the well-being of trainees and their intimate partners, and the dynamics of trainees' intimate partnerships. We used an interpretive descriptive approach to explore both trainees' and partners' perspectives on the connections between their training experience, intimate partner relationship, and well-being.

Our findings highlight the immense challenges associated with the current, demanding and frequently inflexible postgraduate medical training environment and medical culture, emphasizing the strain of training on participants' sense of autonomy in their personal lives, especially in their intimate partner relationships. Our findings revealed that these strains, exacerbated by the long-standing, unforgiving culture and practice of medicine, have significant impacts on both trainees' and partners' mental, physical, and emotional well-being, as well as on their relationship. We discovered that trainees struggled with internal role conflicts as they attempted to balance their personal and professional identities and lives. Our study also revealed tensions within the relationship as partners' respective identities were negotiated, given competing demands, responsibilities and priorities in their personal and professional lives.

Notably, our study's findings underscore the invaluable role that postgraduate medical trainees' intimate relationships can play in supporting and protecting them from the stressors of the training environment and the broader culture of medicine. Participants likened their intimate partner relationship's role to one of protection, stability, and support, with one participant describing it as a "bubble" that needs to be preserved amidst

the stress of training. Interviewing a diverse group of residents, fellows, and partners with varying relationship dynamics offered insights into forming a healthy relationship “bubble” during residency training. This exploration highlighted the benefits of that relationship bubble, common threats, and specific preservation strategies that couples found effective. Our study also affirmed the importance of other supportive relationships for sustaining trainee well-being, acknowledging that the intimate partner’s support is situated within broader social support networks. Lastly, our study’s findings call for the transformation of the current culture and practice of medicine by advancing a more humanistic approach to supporting postgraduate medical trainees.

Our work reveals that intimate partners are typically unseen, yet perfectly positioned witnesses during training, who often serve as passionate and committed advocates for resident and fellow well-being. Partners should be meaningfully included in both the creation and implementation of interventions designed to enhance trainee well-being. Further, the needs of partners and the potential risks to their well-being during training must also be considered and mitigated. Our study highlights that the wellness needs of trainees and their partners are highly interconnected and synergistic. By empowering partners and creating interventions that focus on the intimate partner relationship, we can potentially enhance partners’ capacity to support and protect postgraduate medical trainees from the stress of training. This is a call for the voices of partners to be heard and amplified.

Our findings will inform the co-creation of actionable individual, dyadic, and systemic strategies, alongside trainees, intimate partners, and residency education leaders,

with the aim of enhancing trainee and partner well-being, as well as sustaining their relationships.

TABLES AND FIGURES

Table 1: Participant characteristics.

Participant Characteristic	Number (%) N = 38
<i>Gender</i>	
Woman	23 (60.5)
Man	14 (39.5)
Agender	1 (2.6)
<i>Sexual Orientation</i>	
Heterosexual	28 (73.7)
2SLGBTQ+	11 (28.9)
<i>Children</i>	
Have children	10 (26.3)
Do not have children	28 (73.7)
<i>Relationship Dynamic</i>	
Trainee-Trainee Dyad	5 (13.2)
Trainee & Non-Trainee Dyad	33 (86.8)
<i>Postgraduate Medical Speciality</i>	
Internal Medicine & Subspecialties	11 (28.9)
Family Medicine & Subspecialties	9 (23.7)
Other Specialities	8 (21.1)
Surgery & Subspecialties	5 (13.2)
Pediatrics & Subspecialties	5 (13.2)



Figure 1: Visual representation of seven themes.

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