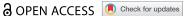


#### RESEARCH ARTICLE



# Residency training experiences of residents with children: A phenomenological study

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#### **ABSTRACT**

Parenthood during postgraduate medical training has become an increasingly relevant topic in recent years. While previous research has attempted to explore the experiences of residents in a parenting role through surveys and limited qualitative studies, an in depth understanding of the postgraduate training experience of these parent residents has not been clearly described. The optimal means of supporting trainees completing residency while parenting remains unclear. The study aim was to develop a rich understanding of the residency training experience of residents in a parenting role. We conducted 15 semistructured telephone interviews. Our study population included postgraduate trainees from 9 different programs from a large research-intensive university who were parents upon entry to residency or who became parents during residency training. Transcendental phenomenology was used as a qualitative research methodology, guided by life course theory. Thematic analysis of residents' training experiences revealed the following themes: 1) challenges of being a parent with residency responsibilities; 2) work-life balance; 3) support systems; 4) impact on patient interactions; 5) impact on other interactions; and 6) unspoken expectations. Participants suggested actionable solutions to improve the training experience for residents in a parenting role, which included: 1) family-inclusive events; 2) scheduling flexibility; 3) support for fathers; and 4) optimizing support for breastfeeding mothers. Residents in a parenting role represent a unique postgraduate trainee population. Despite focus on resident wellness, challenges remain for individuals trying to navigate parenthood and residency. This data may be utilized to inform support and strategies to optimize the training experiences of these residents.

#### **ARTICLE HISTORY**

Received 9 December 2021 Revised 5 April 2022 Accepted 16 May 2022

#### **KEYWORDS**

Parenting; residency; phenomenology; training; experience

#### Introduction

Parenthood during postgraduate medical training has become an increasingly relevant topic in recent years. For many postgraduate trainees, residency training occurs during childbearing or child rearing years [1]. The demographics of medical trainees in Canada has also shifted over the past several decades, with the proportion of female medical trainees and physicians increasing significantly [2].

Residency training is a challenging and demanding period for many physicians. It has been postulated that parenting residents 'may face unique challenges and expectations of their training programs' [3 (p.140)]. There has been a recent cultural shift in postgraduate medical education towards greater emphasis on resident wellbeing [1], including interventions such as limiting on-site continuous work hours, though it is not clear whether significant shifts have been made to accommodate for childbearing or parenting demands. The intersection between gender and parenthood further adds to the complexity of this issue. Prior research has demonstrated that female parents are more likely to spend additional time in residency training as compared to their male counterparts [2]. Women also often spend more time managing childcare and household responsibilities as compared to their male counterparts [2]. Additional responsibilities of parenting may compete or conflict with difficult and relatively inflexible schedules and demands of residency training [3]. Other challenges described have included barriers to breastfeeding and childcare, timing of certifying examinations, lack of mentorship on integrating parenthood and medical practice, guilt over an unequal burden on a spouse, and perceived stigmatization [3–13]. 'Role overload' may be particularly common among female trainees, as mothers traditionally take a primary role in child-rearing [14,15]. Recent work has suggested that parenthood may also influence trainee choice of practice intentions, program completion and attrition following training [2,6,16,17].

Positive effects of experiences as a parent on residency training and clinical practice have also been described. Some positive effects have included a greater sense of empathy or connection with patients, greater enjoyment at work, and reduced depression and cynicism [1,3,5].

The current body of literature on parenting in residency includes data derived mainly from surveys, single-institution and single-training program studies, and has been largely limited to the pregnancy and post-partum period. There is limited qualitative research exploring parenthood in residency. Much research is greater than ten years old and may no longer accurately reflect current resident demographics and the cultural context of training [1]. Moreover, an in depth understanding of the postgraduate training experience of parenting residents has not been clearly described. The optimal means of supporting residents completing residency training while parenting, particularly beyond the pregnancy and post-partum or parental leave periods, remains unclear [3]. This study aimed to develop a rich understanding of the postgraduate training experiences of residents in a parenting role.

#### **Methods**

### Study design

A transcendental phenomenology research approach was used for this study. Moustakas elaborates that this type of phenomenological approach strives to 'obtain comprehensive descriptions [from several individuals] that provide the basis for a reflective structural analysis that portrays the essences of [an] experience' [19 (p.7)]. Moustakas' phenomenological approach involves using the data provided by the individual participants to develop themes describing 'what' and 'how' the participants experienced (referred to as 'textural' and 'structural' descriptions respectively) using 'composite description' (blending 'textural' and 'structural' descriptions) to report the 'essence' of the phenomenon. Through this approach, the ultimate objective of transcendental phenomenology is to 'determine "general or universal meanings" [19 (p.13)] which is what corresponds to the essence of the participant's experiences. Our theoretical orientation was the Life Course Perspective [18] also known as Life course theory. Life Course Perspective focuses on studying peoples' lives, everyday family context, parenthood, and meaning on human development. Life Course Perspective was selected because we wished to study how residents' lives changed as they became parents. The theory provided us with framework within which to conduct our analysis and data interpretation. By applying a life course framework and a phenomenological approach the goal was to address our research question related to parenthood and family life of residents. We hope that through this lens, the findings generated can be used to promote change in the postgraduate medical education programs for parent residents.

### Sampling and recruitment

Our study population included postgraduate medical education trainees at a large research-intensive university in Canada who were already parents upon entry to residency or who became parents during their residency training. Participants were recruited through an information letter distributed by e-mail from the Faculty of Medicine Postgraduate Medical Education (PGME) office and/or by their program director. The research investigators did not have roles as program directors or in the PGME office of this institution. For this project, purposeful sampling was used [19]. Researchers recruited a diverse group of participants which included both mothers and fathers, as well as trainees from a variety of training programs and stages of training. Twenty residents indicated interest in study participation. A total of 15 individuals were interviewed for this study. We started hearing very similar comments as we approached our fifteenth interview; we stopped once thematic saturation was reached.

### **Data collection**

An interview guide was prepared by the research group. We developed our interview guide based on the existing literature and to see what were vital elements of the residents' parental experiences that needed to be probed. Once the guide was developed, it was piloted by a resident parent on our research team (ZZ). Our interview guide played an important role; however, it evolved over time based on the data we collected from our participants and based on the data analysis which occurred on an ongoing basis as interviews were completed. The interview format was semi-structured, permitting participants to expand on certain perspectives and experiences in greater depth. Probing questions were used by the interviewers as necessary to get as much information as we could get from the residents. We did probe participants who became parents during residency training about their transition to parenthood and differences in their residency training experiences as a non-parent resident compared to as a resident in a parenting role. Participants completed consent forms prior to commencing the interviews. Participants were interviewed by telephone for approximately 30 to 60 minutes. Two researchers (EB, MR) conducted the interviews. All interviews were recorded and transcribed verbatim by a professional transcription service.

### Analytical approach

The five researchers involved in the analysis used a framework of a 'three pass' [19 (p.379)] approach to data analysis [19]. The 'first pass' involved each individual researcher 'immersing themselves' in each of the transcripts and generating preliminary codes [19]. Following this the research group met together to discuss preliminary codes as a team. The 'second pass' involved our team coming together to interpret collated codes to identify themes and patterns in the data. In the 'third pass' as data collection continued throughout this iterative process, our research team continued to discuss emerging themes to explore relationships between the themes and patterns as new data was collected [19]. It was at this stage that our research team started reviewing and naming our final themes. We ensured that our themes were presented in a cohesive manner to capture our participants' voices and the essence of their stories accurately. Additionally, the five researchers were involved in the selection of representative quotes from the transcripts.

### **Trustworthiness**

To maintain transparency and enhance the dependability of our results, our analytical approach included all researchers as a team participating in study coding and developing themes [20]. Furthermore, we used member checking by presenting our data to our participants to ensure that our data was represented and echoed what our participants experienced. Once we presented our themes to study participants in member checking, the participants commented that the themes resonated with their experiences; thus, there were no changes to the themes. Additionally, bracketing was used to mitigate researcher biases and predisposed misconception and make sure that it did not impact the data analysis. The researchers acknowledged their position in relation to the research. This involved all researchers examining their own judgments, beliefs and experiences during data collection and the data analysis process. EB and AA were physicians who completed residency training though not in parenting roles. ZZ was a resident trainee who became a parent during her residency training. KM was a medical eduand researcher. co-director MR a qualitative medical education researcher.

### **Ethical approval**

Approval from the local health ethics research board (REB) [Pro00098974], and Trainee Research Access Committee (TRAC) [TRACEB20200731] was received.

Table 1. Demographic characteristics of participating parent residents (n = 15).

Demographic	Number of resident trainees $(n = 15)$
Self-reported parenting identity	
Mother	11
Father	4
Number of children	
1	8
2	5
3	1
4	1
Residency training program	
Internal medicine	2
General pediatrics	2
Neurology	2
Obstetrics and gynecology	1
Neonatology	1
Radiology	1
Dermatology	1
Psychiatry	1
Rural family medicine	1
Pediatric cardiology	1
Emergency medicine	1
Pediatric emergency medicine	1
Stage of training at time of study interview	
Post-graduate training year 1 (PGY1)	1
Post-graduate training year 2 (PGY2)	3
Post-graduate training year 3 (PGY3)	3
Post-graduate training year 4 (PGY4)	5
Post-graduate training year 5 (PGY5)	2
Post-graduate training year 6 (PGY6)	1
Stage of training when first became a parent	
Prior to residency training	6
Post-graduate training year 1 (PGY1)	0
Post-graduate training year 2 (PGY2)	3
Post-graduate training year 3 (PGY3)	4
Post-graduate training year 4 (PGY4)	2

#### Results

Interviews were completed with 15 participants (see Table 1). There were 11 participants who identified as mothers and 4 who identified as fathers. Residents interviewed came from 9 different types of training programs, including internal medicine, neurology, dermatology, pediatrics (including general pediatrics, pediatric cardiology and neonatology), psychiatry, radiology, emergency medicine (including adult emergency medicine and pediatric emergency medicine), rural family medicine, and obstetrics and gynecology. Participants included trainees from a variety of stages of training, ranging from the first post-graduate year (PGY1) to the sixth (PGY6).

Thematic analysis of the data revealed seven themes and 14 sub-themes. These themes were: challenges of being a parent with residency responsibilities, worklife balance, availability of support systems, impact on patient interactions, impact on other interactions, unspoken expectations, and actionable solutions.

# Theme #1: challenges of being a parent with residency responsibilities

### Sub-theme 1- call schedule is challenging

Study participants spoke of aspects of their residency responsibilities which were particularly challenging in light of being a parent. Residents cited experiencing lack of rest and recovery time because of commitments both to their family and to their training programs, often which extended beyond regular work hours. Many residents described having limited post-call rest and feeling that being away from their children while on call was emotionally difficult. The unpredictable nature of life and schedules as a parent, in contrast to often inflexible residency schedules and requirements, was discussed. Managing calls as a parent was highlighted as a specific challenge. As evident in the following quotes:

Even just beyond the whole studying part of residency, there's also just the day-to-day logistics of actually being a resident and having no control of your schedule. As a parent, nothing is predictable. Your kid gets sick, you have to take them to the dentist. Maybe that's predictable. Your child springs on you have to bring cookies the next day. There's all sorts of things that just come up with everyday life that is just more complex. When you have more people in your household, there's just more that you're managing and trying to navigate through day-to-day. I do feel like there was an impact on my residency because there was times I had to take a leave or whatnot so that I could be home with my child, or call schedules . . . There was always that service responsibility that you have as a resident. [Interview # 8]

I think it's a bit of a different sort of a different ballgame when you're learning how to be a parent in residency with that demanding schedule. [Interview # 7]

# Sub-theme 2-need for increased efficiency and time management skills

A majority of participants described the perception that being a resident parent necessitated increased efficiency and time management skills. Participants also described specific challenges in finding time for studying and in preparing for examinations. Residents adapted their clinical and studying behaviors to be efficient and maximize time that they were able to spend with their families. Trying to maximize residency learning while at work and prioritizing family time when away from work was described as a common practice:

I think I've been a lot more efficient with my time and a bit more particular about what I choose to do. So in terms of efficient, when there's a bit of downtime at home or at work, I'm trying to work on research projects, I'm trying to study, things like that. And when I'm about to open up time at home so that I don't have to be on my computer, I don't have to be on my phone. I can just focus and be present with them. So I'm trying to be more efficient ... Being more efficient with time and trying to be more present in both settings and just knowing the value of your time.[Interview # 4]

#### Theme #2: work-life balance

### **Sub-theme 1- competing responsibilities**

Participants spoke about balancing their residency and parenting responsibilities, often which competed with each other. At times this meant having to make choices between competing responsibilities that created tension where their personal responsibilities clashed with their professional obligations. Feeling divided when balancing professional and personal responsibilities was a dilemma faced by many residents. Participants spoke of the internal struggle to separate their personal and professional lives which were constantly intertwined. Residents described thinking about their family while at work, and vice versa. Yet, the joy of parenting was described as a benefit to balance with the demands of residency training. As demonstrated by the following participants:

I can't just pick up and leave and come in for a case. Even just when you're at work you're thinking about what's at home and those responsibilities and you're obviously more tired. You're here when you're a mom at work and your children aren't sleeping. [Interview # 13]

I think that when you don't take breaks and sort of pull your head up, you lose a bit of perspective over what's important. And so I think that that has definitely been an asset. I think that I have a different perspective on learning and life balance than other people do. So I think that that's been a benefit. [Interview # 2]



### Theme #3: support systems

## Sub-theme 1- familial and friends' support

Residents acknowledged that they often relied on a support system to navigate their responsibilities. Partners were identified as important people who supported the resident in their personal and parenting situations. Partners often enacted their support by taking on a greater share of the parenting activities to create an environment for the resident to cope with their professional responsibilities. Practicing a dynamic and ongoing renegotiation of parenting responsibilities appeared to be an effective strategy. Although this paradigm of support was effective, it was often recognized as an increase in the domestic workload for partners. In addition to partners, family and/or friends were identified as important sources of support:

But then that meant my husband was picking up all the extra slack. He was cooking the meals and he was cleaning the house and he was getting the groceries and doing everything that we used to share. And now with me being in residency or back to residency, I would say again, I think we equally have more to do, but they're just different tasks. So while I'm on call, he is taking care of our daughter and he's still cooking dinner and still grocery shopping and still making sure the house is clean. Because I'm like literally not there to do it. [Interview # 15]

My mom is helping us a lot. So that's kind of why we're able to balance doing a residency and being a mom or dad at the same time. So I think my mom is kind of the key, having that support, it's been a really, really big change or a big help. [Interview

# Sub-theme 2- support from their residency programs

Participants also recognized the importance of support from their programs, such as program directors, as impacting their training experience as parents. Some participants reported receiving emotional and practical support from program directors and/or administrators. Others discussed wishing that they had received more proactive support from their programs or acknowledgment that they may have unique challenges and needs as resident parents. As described by the following participants' statements:

I think from the top down the program director and the assistant program director there are incredibly supportive, and I told him this the other day that I would not have a family if it weren't for their support. [Interview # 11]

We were never told or anything like that that, 'We understand that you're a parent and you might need more time off or you might need some extra things,' but I don't think anything like that is there. You're kind of expected to function at the same level as anyone else in the program. So, just recognizing that some of the residents are going through more challenging situations compared to some other single residents who are not actually certain between kids, life and everything. [Interview # 12]

# Theme #4: impact on patient interactions

# Sub-theme 1- positive impact of parenthood on patient interactions

Many participants highlighted the positive impact that parenthood had on their interactions with patients and caregivers. The residents perceived that they felt more easily able to empathize and relate to clinical encounters with parents. A greater sense of understanding of parental anxieties and demands was described. Participants also felt that difficult encounters with sick children were very emotionally challenging now that they had children of their own. As evident in the following quotes:

Sometimes I also can find easier connections with people who are parents, or patients who are parents were. For example, we meet a lot of new moms with postpartum depression, relate to them. I usually connect with them easier and that they appreciate that. They think that I understand probably them at a different level. [Interview # 5]

I think it has also improved my communication with fellow parents. So, though I cannot begin to fathom what a family goes through when they have a sick child because my children are healthy, I know the love that you have for your child and how painful it must be to watch them in pain. And so I think it has certainly made me a better physician in those really difficult moments. [Interview # 6]

# Theme #5: impact on other interactions Sub-theme 1- interactions with peers

Participants also spoke about the impact that being a parent had upon their interactions with peers in their training programs as well as with staff. Being a parent was described as a challenge to engaging in social activities with peers as a result of timing or child care conflicts. Residents also discussed the perception that they did not feel as integrated into their respective residency peer groups as their nonparenting peers:

Well, for me, the majority of my peers in my program were not parents. In their experience, they had a lot more free time to get together, do social things. For most of my residency, I felt really kind of at arm's length from everyone, because I didn't have that flexibility to go out for dinner on Friday night or after call or in the morning. I just didn't have that spontaneous flexibility in my schedule to join my peers. Any time there was, say, retreats or whatnot,



my kids always came with me. Yeah. It was a great experience to have them there, but I just felt like I really missed out on a lot of that social aspect of resident life. I didn't get to have as close relationships as all the other residents did. I felt like they kind of grew into this family and yeah, I was a part of the family, but I just didn't feel completely integrated. [Interview # 8]

## **Sub-theme 2-interactions with staff physicians**

Many participants felt that their position as a parent positively impacted their interactions and relationships with staff physicians who viewed parenting trainees as more mature and/or having shared experiences. Residents described the feeling that being a parent placed them in some ways closer to their staff and somewhat diminished the perceived traineestaff hierarchy:

I found it really wonderful actually, because after having kids, I feel like you have this universal thing in common with staff and with other people that it breaks the traditional rank of, well you're a resident and you're a staff, and that whole pecking order, because once you become a parent that's something that everybody just immediately has in common and can share. It was really surprising the number of people that were so warm and would just ask about the kid and have empathy towards the sleep cycle and everything else that we would have. [Interview # 11]

# Theme #6: unspoken expectations

## Sub-theme 1- expectation of residents to be ideal trainees

When asked about hidden curriculum and unspoken expectations, a majority of our study participants reported that there is constant expectation of residents to be ideal trainees and that asking for time off or leaves could be perceived as inappropriate for a good resident. In addition, most participants also reported fear of asking for accommodations because it was seen as an odd thing to do and accommodations might be viewed by their fellow residents as receipt of special treatment from the program. Hence, many parent residents avoided asking for any accommodations:

That is something like, umm, to be honest, I never actually asked for anything as well, because it looks odd if you kind of ask for more days off, or if we want to leave early to accommodate something for your family. It just doesn't look good on you. You almost kind of you don't want to ask for more time off or you don't want to ask to leave early if you have something. It's just the culture, it's not there. [Interview # 12]

# Sub-theme 2- expectation that medicine is and remains top priority

There was a perceived expectation that medicine is and remains top priority for residents, even after becoming parents. Participants reported that their programs were supportive of them having kids, as long as this did not impact their role as residents:

But everyone was very supportive of me having a baby, as long as my priorities didn't really change. [Interview # 15]

It was due to these expectations that their role as parents was often being compromised and their responsibilities as parents overlooked. It was also reported that often people in their programs did not understand the amount of work it requires to be a parent and they were consistently compared to nonparent resident counterparts. As evident in the following quotes:

I think that a lot of the staff people, they want you to be the perfect resident where you do all the reading and you eat, sleep and dream about your specialty and the things that you're trying to learn, but they forget the fact that ultimately we're human beings and a lot of people have been in school for 10 or 15 years at this point. And how long are you going to put your life on hold for your career? [Interview # 1]

I sometimes feel like people don't always understand or recognize the amount of work that it takes to be a parent and expect you to just be doing exactly the same as all the other residents, which is sometimes just not possible when you are a parent. [Interview # 9]

### Theme #7: actionable solutions

Through the course of interviewing participants, numerous suggestions were offered as to how residency programs could improve the training experience of residents in a parenting role. Multiple participants suggested family-inclusive events, scheduling flexibility, support for fathers, and optimizing breastfeeding support for mothers.

# Sub-theme 1-family-inclusive events

Residents noted that it was often difficult to attend social events organized by the program, particularly if they occurred in the evenings/weekends or involved non-family inclusive activities. Family-inclusive events were suggested as a means of improving the residency training experience and supporting community building within residency in a way that was more feasible to parenting trainees. As evident in the following quote:

I don't know if this makes the residency that much easier, but it creates a bit of a community that in my



residency when we have social events families and children are invited. So when we did a residency program retreat, the daytime portion was seminars, in the evening was a dinner and it was really fun. There was tons of kids before the pandemic of course there was tons of kids around and running around and that was really fun. Or we do a welcome barbecue in the summer and kids are invited, like the Christmas party we bring our kids. So I think that's a really nice way to bring the human aspect into residency training. And our program director brought her kids too, so I enjoyed that aspect. [Interview # 13]

### Sub-theme 2-scheduling flexibility

Many residents suggested that having more flexibility in their schedules may be helpful to support parenting, child care, appointments and allow more time with their families. Some suggestions included flex days, advance notice of schedules and call, or alternative work/training schedules. This is evident by the following participant statement:

I think maybe if I had known a little bit more about actually being able to work on a part time basis, I think that would have made a big difference for me. It really wasn't hard to arrange whatsoever once I realized it was something that I could actually do. Support for kind of alternative ways to actually get your time in. I think that is something that our residency program could do. [Interview # 8]

### **Sub-theme 3- support for fathers**

Generally, the male participants in our study attested that it was their partner who performed the majority of parenting duties. However, they did feel that there were fewer accommodations made for new fathers during residency. Participant fathers described a bias in available parenting supports towards mothers, as it was viewed that fathers required fewer supports. Fathers expressed that there was a need for creating more support and resources directed at resident fathers, whose needs and interests may differ from those of mothers:

There is supports for mothers, which is great, but I actually would advocate for more support to mothers, but I would also advocate for more support to fathers ... Okay, like hey, like there's a group you can get the moms together for example, bring your kids. We know that your interests are a little bit different, than, like fathers do not, would not really fit into a mother's group and would not really fit as well into a regular group because sometimes they have different interests ... So, the reality is we, we have that cultural bias where even though I do believe ... that mother's do a lot more than father's, but we do have the bias of fathers are just well supported by themselves you know? Like you don't need that much support. [Interview # 3]

# Sub-theme 4 -optimizing support for breastfeeding mothers

Provision of adequate support for breastfeeding mothers was discussed at length during the course of the interviews. Many residents had worked at centres where there was no readily available room to pump. Participants described pumping in bathrooms, bringing portable freezer packs, or walking great distances to find an appropriate location for pumping. Participants, including both mothers and fathers, recommended that all facilities have an accessible space for trainees to be able to pump and store breastmilk:

But for residents, many of them come back quite soon after they deliver and have young ones at home and they're pumping, and there's maybe one space in the whole hospital and it's far away. And I was pumping in ... bathrooms ... like trying to wipe it down with CaviWipes before, and that's so degrading. And so I think the biggest thing that they could do is provide spaces all over with refrigerators and with sinks that are for you to pump and store your milk. [Interview # 11]

#### **Discussion**

Our study adds to the body of literature on parenting in residency training as the first phenomenological qualitative study on this topic. We were able to capture a fairly broad range of postgraduate training programs and our study included residents that identified as mothers as well as fathers. As such, our findings are likely reflective of experiences of residents at other, similar-sized, institutions. Through our use of transcendental phenomenology [21], we were able to collect rich descriptions from our resident participants and distill from these descriptions a deep understanding of their collective experiences [21] through seven central themes.

The seven themes identified in our study demonstrate that residents in a parenting role represent a unique postgraduate trainee population, as has been noted in the literature [3]. Compared to their non-parent peers, the residents in our study highlighted that being a parent with residency responsibilities included challenges such as: having limited time for rest and recovery; managing call expectations; and preparing for academic requirements. Work-life balance was also described as being difficult, resulting in residents who were parents feeling 'divided' and requiring these individuals to develop coping strategies. As has been identified in other aspects of medical training and medical culture [22], our study identified that residents who are parents felt subject to unspoken expectations. In particular, our participants cited examples of being reluctant, or fearful, of taking time off or requesting accommodations in light of the perception that their medical training should be prioritized above all else. Additionally, as we had noted earlier, while other studies have primarily emphasized 'negative' aspects of parenthood and residency [8,9], the resident participants in our study indicated there were still numerous 'positives.' Strong support systems, such as their partners and families or within their programs, were beneficial in helping residents who identified as parents fulfill their responsibilities as both parents and residents. Other significant positive impacts residents identified included improved patient interactions, as has been found previously [1,3,5], and enhanced interactions with their staff physicians.

Overall, in the growing movement to improve medical training culture and resident wellness, our study provides a unique perspective in that areas where solutions could be enacted were able to be clearly described in our final theme. Our resident participants expressed that social events should be more familyinclusive and provided tangible examples of how various options for scheduling flexibility could better support them as residents as well as parents. While many of the studies in the published literature focus more on experiences of residents who are mothers [4,7-10,13-16], our study identified the need for increased, and improved, support and resources for residents who are fathers. The other main recommendation identified by our resident participants was the lack of, and need for, better infrastructure at training sites for breastfeeding trainees. Other studies corroborate these findings and have advocated for expansion of acceptable resources for lactating residents, such as dedicated lactation rooms for resident physicians and protected time for lactating residents [23].

Further study, such as across multiple training sites and with a greater number of residents across various training specialties, may yield deeper insights into the realities faced by residents who are parents and help identify additional areas requiring improvement. In the long term, studies evaluating changes implemented as a result of the emerging suggestions, and the effectiveness of these changes, would also be of benefit.

#### Limitations

While we were able to recruit numerous residents from a diverse range of subspecialties and stages of training, our study was based out of a single centre in Canada. Thus, our results are most representative of mid-sized university programs in Canada. The experiences may be different for residents from smaller training centres. In addition, residents from surgical subspecialties were less represented in this study. It is unclear whether this is because they are less likely to participate due to time constraints, cultural aspects of training or whether they are less likely to become parents during the course of their residencies.

### **Conclusions**

It is evident that despite the current focus on improving the culture of residency training and resident wellness, there are still immense challenges for individuals trying to navigate parenthood and residency. Findings from this study may be utilized to inform support and strategies to optimize the training experiences of these residents. The hope is that the recommendations for actionable solutions that have arisen from this study, and addressing the issues facing residents who are parents that were identified in this study, can be implemented within residency programs.

#### Disclosure statement

No potential conflict of interest was reported by the author(s).

### **Funding**

Funding for this project was provided by a grant from the Northern Alberta Academic Family Medicine Fund (NAAFMF).

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