

Motherhood during residency training

Challenges and strategies

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ABSTRACT

OBJECTIVE To determine what factors enable or impede women in a Canadian family medicine residency program from combining motherhood with residency training. To determine how policies can support these women, given that in recent decades the number of female family medicine residents has increased.

DESIGN Qualitative study using in-person interviews.

SETTING McMaster University Family Medicine Residency Program.

PARTICIPANTS Twenty-one of 27 family medicine residents taking maternity leave between 1994 and 1999.

METHOD Semistructured interviews. The research team reviewed transcripts of audiotaped interviews for emerging themes; consensus was reached on content and meaning. NVIVO software was used for data analysis.

MAIN FINDINGS Long hours, unpredictable work demands, guilt because absences from work increase workload for colleagues, and residents' high expectations of themselves cause pregnant residents severe stress. This stress continues upon return to work; finding adequate child care is an added stress. Residents report receiving less support from colleagues and supervisors upon return to work; they associate this with no longer being visibly pregnant. Physically demanding training rotations put additional strain on pregnant residents and those newly returned to work. Flexibility in scheduling rotations can help accommodate needs at home. Providing breaks, privacy, and refrigerators at work can help maintain breastfeeding. Allowing residents to remain involved in academic and clinical work during maternity leave helps maintain clinical skills, build new knowledge, and promote peer support.

CONCLUSION Pregnancy during residency training is common and becoming more common. Training programs can successfully enhance the experience of motherhood during residency by providing flexibility at work to facilitate a healthy balance among the competing demands of family, work, and student life.

EDITOR'S KEY POINTS

- This is the first qualitative study in Canada examining family medicine residents' attitudes and opinions on motherhood during residency.
- Pregnancy and early parenting were made more stressful by the long and unpredictable hours of work, sleep deprivation, guilt due to absence from work, psychological pressure to avoid "giving in" or "asking for help," and occasionally, unsympathetic preceptors.
- Interestingly, there was less support for women postpartum than during pregnancy. Return to work was challenging due to fatigue, breastfeeding difficulties, and caring for sick children.
- Residents found support in generally sympathetic colleagues and preceptors, paid maternity leave, and flexible schedules that allowed a gradual return to work.

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Maternité chez les résidentes

Défis et stratégies

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RÉSUMÉ

OBJECTIF Déterminer les facteurs susceptibles d'encourager ou de décourager les femmes inscrites dans les programmes canadiens de résidence en médecine familiale de mener de front résidence et maternité. Vu le nombre croissant des résidentes en médecine familiale au cours des récentes décennies, déterminer les mesures susceptibles d'apporter un soutien à ces femmes.

TYPE D'ÉTUDE Étude qualitative à l'aide d'entrevues en personne.

CONTEXTE Le programme de résidence en médecine familiale de l'Université McMaster.

PARTICIPANTS Vingt-et-une des 27 résidentes en médecine familiale ayant pris un congé de maternité entre 1984 et 1999.

MÉTHODE Entrevues semi-structurées. Les chercheurs ont examiné les transcriptions des enregistrements sur bande magnétique des entrevues pour en extraire les thèmes récurrents; contenu et signification ont fait l'objet de consensus. Les données ont été analysées à l'aide du logiciel NVIVO.

PRINCIPALES OBSERVATIONS Les longues heures et les exigences imprévisibles du travail, le sentiment de culpabilité à l'idée que la charge de travail des collègues augmente quand elles sont absentes et des attentes personnelles élevées causent un haut niveau de stress chez les résidentes enceintes. Ce stress continue lors du retour au travail; trouver une aide familiale adéquate pour l'enfant ajoute au stress. Les résidentes déclarent recevoir moins de soutien des collègues et des superviseurs à la reprise du travail, ce qu'elles attribuent au fait de n'avoir plus de signes extérieurs de grossesse. Les stages physiquement exigeants sont une autre source de tension durant la grossesse et au retour au travail. Un calendrier de stages flexible permet de mieux répondre aux exigences domestiques. Celles qui allaitent bénéficieront de pauses, d'intimité et de réfrigérateurs au travail. Permettre la poursuite d'activités académiques et cliniques pendant le congé de maternité favorisera le maintien des habiletés cliniques, l'amélioration des connaissances et un meilleur soutien des pairs.

CONCLUSION Les grossesses en cours de résidence sont de plus en plus fréquentes. Des programmes de formation flexibles facilitant un sain équilibre entre les exigences domestiques, professionnelles et académiques permettraient d'améliorer la situation de celles qui vivent une maternité en cours de résidence.

POINTS DE REPÈRE DU RÉDACTEUR

- Cette première étude qualitative au Canada explorait les attitudes et opinions des résidentes en médecine familiale sur la maternité en cours de résidence.
- Durant la grossesse et la période initiale d'éducation, les heures de travail longues et imprévisibles, le manque de sommeil, la culpabilité liée à l'absence du travail, la pression psychologique pour éviter d'abandonner ou de demander de l'aide et, parfois, des superviseurs non sympathiques ajoutaient au stress.
- Curieusement, les femmes recevaient moins de soutien après l'accouchement que durant la grossesse. Le retour au travail était rendu difficile par la fatigue, les problèmes d'allaitement et les maladies infantiles éventuelles.
- Les résidentes ont apprécié le soutien des collègues et superviseurs généralement sympathiques, les horaires flexibles permettant un retour progressif au travail et le fait que le congé de maternité était payé.

Cet article a fait l'objet d'une révision par des pairs.

Le texte intégral est accessible en anglais à www.cfpc.ca/cfp

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Recent decades have seen a marked increase in the number of female medical residents in Canada. Because residency training usually takes place during women's prime childbearing years—the late 20s and early 30s—many residents are likely to become pregnant and bear children during training.

Although there are no Canadian surveys in this area, an American study showed that up to 85% of the female physicians surveyed planned to have children.¹ Since the demands of residency are thought to conflict with motherhood, 70% of American physicians responding to a national survey said the best time for pregnancy would be after residency, although 44% of these respondents had been pregnant during residency.²

Residents who have children during training encounter many difficulties. An extensive review by Finch highlights frequent problems, including sleep deprivation and tiredness, on-call responsibilities with long and unpredictable work hours, difficulties with child care, and breastfeeding problems.³ Lack of support and sometimes hostility from partners, program administrators, teachers, and other residents has also been reported.^{2,4,5} The literature reports that residents struggle with the conflicting identities and roles of mother, student, and physician.⁶ Pregnant residents complain of lack of role models, discrimination against women that is heightened during pregnancy, and feelings of guilt and inadequacy.^{3,7,8} The medical workplace has been slow to adapt to childbearing and parenting.⁹

Many medical institutions have written parental leave policies in an attempt to improve the experience of parenting during residency.¹⁰⁻¹⁴ Residents who are pregnant or planning to become pregnant are encouraged to identify supportive people, develop strategies to deal with hostility, and become proactive in terms of workplace policies.¹⁵ Policy makers could allow flexibility in rotation scheduling,

make part-time residencies available, and provide on-site day care.⁶ No studies, however, have examined the outcomes of such strategies, nor have studies used qualitative methods to examine the experience of residents who have given birth. Our study differs from previous ones in its methods, Canadian content, focus on family medicine residents, and exploration of helpful strategies and supports.

The family medicine residency program at McMaster University in Hamilton, Ont, has had extensive experience with parental leave. In 1998-1999, 25% of current family medicine residents had taken parental leave during their 2-year training. Because this percentage was much higher than in other Canadian family medicine residency programs (as indicated in an informal poll of residency program directors conducted at that time), we postulated that there might be factors and strategies in our program that support residents' taking parental leave.

Ethics approval was granted by the Research Ethics Board of McMaster University.

METHODS

Semistructured personal interviews were conducted with family medicine residents who had taken maternity leave and returned to the residency program between 1994 and 1999. Participants were recruited through a letter sent by the Director of the Postgraduate Program. Because the principal investigator of this study (A.W.) was a former Director of the Postgraduate Program, to ensure confidentiality, only the co-investigator (M.G.) knew the names of prospective subjects and of those who agreed to participate. The project was funded by the Professional Association of Internes and Residents of Ontario (PAIRO) and the Department of Family Medicine at McMaster University.

Of 27 possible participants, one declined to be interviewed. We excluded one person who could not be contacted and four who lived more than 2.5 hours away. The final sample of 21 physicians included 20 biological mothers and one adoptive mother. Interviews were conducted during the winter and spring of 2001.

Dr Walsh teaches in the Department of Family Medicine at McMaster University in Hamilton, Ont. At the time of the study, **Ms Gold** and **Dr Jensen** were members of the Department of Family Medicine and **Ms Jedrzkiewicz** was a research assistant.

Semistructured interviews are a qualitative research method that allowed us to collect comparable data from respondents and to elicit unique experiences. All interviews were conducted by a single interviewer (M.J.) and were audiotaped, transcribed, and analyzed to elicit themes. For data analysis, axial coding was developed from emerging themes through coder comparisons and consensus. NVIVO software was used to process transcripts. Memos and field notes were used to document content and themes arising during interviews. We used an iterative approach to incorporate new understanding in subsequent interviews. Although saturation was reached before completion of all 21 interviews, we thought it was important to provide the opportunity to all those who agreed to be interviewed to share their experiences.

FINDINGS

This was a first pregnancy for more than half the residents. One quarter of them had one child; 15% had two children.

Timing of pregnancy

At the time of our study, self-employed physicians in Ontario were ineligible for parental leave benefits. Residents were eligible, however, and under their employment contract, also had their benefits “topped up” to a total of 70% of their salary. Participants said eligibility for maternity leave benefits was a factor in their decision to become pregnant during residency.

We were salaried employees. We qualified for the maternity benefits as well as parental leave, whereas a self-employed individual at that time didn't qualify for anything.

It was probably one of the reasons why I decided to get pregnant in residency. I knew that there would not be any unemployment if I was working on my own and got pregnant, and went on leave.

Residents also discussed timing their pregnancies to not interfere with specific rotations and examinations.

I think having a pregnancy later in residency is beneficial because then there is more that has already been accomplished, less to worry about getting in the way and interfering with child-care issues or writing exams.

Health of mother and child

Residents described 12-hour days as overly taxing, on-call schedules as demanding, and waking for night call as exceedingly difficult.

It was really exhausting; really even in a non-pregnant state it was exhausting. I remember being on call in the cardiac suite at 4 o'clock in the morning and my belly would be aching, and I would just think, like I cannot go on.

One resident spoke of her battle with hyperemesis, and the need for intravenous fluids while at work.

Once I went down to Emerg, got them to start an IV, give me some fluids and then went back to work. That's just the way it was.

The same resident questioned whether the stress of work played a role in her difficult pregnancy.

I have to wonder if I hadn't tried to take call when I was sick would my pressure had gone up as soon. ... I almost lost the baby at that point.

Psychological aspects

Some residents reported struggling with guilt about their work ethic.

I was able to decrease my call. I felt guilty about that. I felt like I really let everyone down. But I had to leave that morning. I could not physically go on. I had been on call the night before, so this was

hour 30 into my one stint, and I physically could not continue.

More frequent were comments on independence, self-reliance, and not acknowledging or accepting limitations.

Physicians' nature is to push themselves and push themselves. That is how you got to where you were at the time. The nature is not to say "I need help" or to say "I can't do this."

We all have this thing that you pay your dues. You don't expect people to be easier on you, because they did it ... and you worked your way up the ladder.

There was no one saying "obviously you don't feel well; maybe you should go home." It was more just carry on.

Sources of stress and support

As they had in other studies, residents spoke of fatigue and being on call as the main stressors throughout pregnancy. Some identified nausea and vomiting as a special stress in the first trimester and decreased mobility in the third trimester.

I would get into my car at the end of the day and just start throwing up.

It was tough at the beginning, when I was sick and up all night taking pages. That was tough.

You become physically larger and it is hard to sort of haul yourself around.

Some of the hospitals span a whole block; ... you had to run to a cardiac arrest at the other end. That got a bit tricky at the end of pregnancy.

Balancing pregnancy with motherhood and preparing for examinations, having missed rotations during leave, were identified as special stressors.

It's fatiguing. I had two other children, so I also had those demands.

I was falling asleep when I was picking up textbooks to study at night.

I was up through the night and nursing and trying to study for my exams.

When I wrote my exams, I hadn't done a couple of really important rotations, and along with other things going on with sick children in the night, I didn't pass my exams. This, for me, was highly unusual.

Patient care

Few studies address the issue of pregnancy and delivery of care to patients. In our study, the physical demands of pregnancy and balancing personal health needs were addressed in relation to patient care.

There were times when I would be examining a patient in Emerg and I would run to the washroom to throw up and then go back and have to start the interview all over again because I had been concentrating so hard on not throwing up when I was talking to them the first time.

I became diabetic and had to go on insulin. So while interviewing patients, I would have to have my watch set, go and test my blood, and escape and inject insulin.

Reactions of colleagues

Peers were generally seen as supportive. While most faculty supervisors were also supportive, residents recalled those who made negative remarks or denied requests for work-schedule modifications. Internal medicine rotations were most often identified as the service where problems arose.

You were exhausted, didn't think as quickly on your feet, and there were comments made about "are you going to the bathroom again?" or "are you complaining again?"

I had two supervisors, one of whom was very angry with me because this was my second pregnancy, and he felt that I was putting the program at risk by becoming pregnant again.

None of the residents who experienced work-related difficulties, however, sought aid from the postgraduate program director. Negative attitudes were accepted and dismissed with the philosophy: Not everyone is going to be pleased about you being pregnant, even if you are.

Some residents had the opportunity to work and interact with colleagues who were also having children. They found this to be a great source of support and understanding.

There was a bunch of us in our gang. One girl who had a baby before me, her baby was coming in, I was bringing in my son and it was a really, really nice way for us to keep connected, to feel like you haven't left medicine. ... It was also a support group I found, especially when there were other women who had babies,... so it was a good supportive atmosphere.

The medical workplace and reentry

Some of the greatest challenges occurred during reentry. Residents reported receiving more support from colleagues and supervisors while visibly pregnant than after returning to work.

The time demands are pretty overwhelming, especially with call and working weekends and trying to stay up and studying and sort of trying to keep this new family unit together as well. Stressful.

Breastfeeding and child care, especially caring for sick children, were important issues. Many had problems with breast milk supply, which they attributed to heavy workloads and sleep deprivation that led to premature weaning. Half would have liked to have breastfed longer. Success in maintaining breastfeeding appears contingent on being able to express breast milk at work. This requires scheduled breaks, privacy, a good breast pump, and refrigerated storage.

My milk supply basically plummeted when I went back to work. I wasn't able to breastfeed once I started back. ... Some people were but I wasn't able to, I think just because of the stress returning back to work.

There's no place to pump. I ended up sitting on the floor in the washroom, pumping.

For some, breastfeeding was not a problem. One resident said:

As family doctors we promote breastfeeding, so my family medicine supervisor was very supportive and the staff in the office always knew where I was and what I was doing. It was never a problem.

Child care was a challenge in numerous ways: missing the children, finding adequate care, and getting away from work in time to pick them up.

The challenge returning to residency was child care, ... adequate child care.

Parental leave and parental leave policy

In Ontario, at the time we chose the sample, the PAIRO contract provided up to 17 consecutive weeks of pregnancy leave. Residents were not required to return to duties sooner than 6 weeks following delivery and could extend the leave for up to 12 months.

In our study, the average leave was 6 months. Those who took less than 6 months (22%) said it was inadequate. The main reason given for taking a short maternity leave was to avoid extending the residency program.

The policy in this residency program was to individualize the schedules of residents returning to work from parental leave and to offer flexible rotations with a lighter workload initially. Participants spoke directly about the benefit of these policies.

I talked to the program director, ... and we set up a part-time schedule, ... which was awesome.... It really helped me slowly integrate back into it.

They let me actually look ahead and define what order I wanted to do my rotations in.

In our program, residents on maternity leave have the option to participate in clinical or academic work on a part-time basis and then to “bank” these hours for taking time off when they return. Close to 90% of our sample chose to participate in 2 half-days each week. One half-day they joined other residents for a tutorial on behavioural science; the other half-day they did clinical care of patients. It was common for residents to return to both activities within a few weeks of giving birth.

It was nice; it got you out of the house and kept your finger in, and you didn't feel you were losing your skills, but it gave you time at home.

When I came back, after my 6 months, I had those 2 half-days done, so ... I only worked 4 days a week, so that made it a bit easier.

It gave me a bit of extra flexibility and free time.

DISCUSSION

Previous studies have found the main stressors of pregnancy during residency and reentry to work to be long work hours and unpredictable work demands, attitudes of colleagues and supervisors, and finding adequate child care. Our study found that, while most colleagues and supervisors were perceived to be supportive during pregnancy, they appeared less sympathetic toward residents' family responsibilities once they returned to work. This might reflect the fact that, unlike parenting responsibilities, pregnancy is physically apparent and time limited. It is surprising that none of the residents who had difficulty with preceptors' adherence to program policy on pregnancy leave sought the help of the residency program director. This could reflect the independent nature of these residents or a lack of awareness that support was available.

This study identifies a variety of supports that could help facilitate residents' transition back to

work. While previous studies have offered recommendations, our study provides in residents' own words some stories of implementing practical strategies that were successful.^{2,6,8,10,16} Carefully planning and scheduling initial rotations to allow maximum flexibility and predictability of working hours was found to be extremely helpful and could be applicable to any residency program, particularly in family medicine. Breastfeeding was highly valued by many of these residents, yet many were unable to continue upon return to work. Those who did continue were often working in family medicine settings with sympathetic supervisors. They were permitted access to refrigerators and privacy, which enabled them to take breaks to collect breast milk or feed their infants. Traditionally, physicians do not have scheduled breaks in their working day; negotiation is required to ensure that this simple strategy is available to breastfeeding residents.

Finally, the ability of residents in this program to attend academic teaching sessions and to carry on with a small amount of clinical activity during their parental leave had some important benefits. Residents were able to keep in touch with their peer groups, an important source of support. They were able to keep their clinical skills active; an important consideration given that withdrawal from all clinical activity for 6 months during residency training can allow skills to decline. Because residents were able to “bank” their clinical activities, upon return to work they were able to spend the equivalent amount of time at home with their families, and so had, in small part, reduced working hours.

Although residents expressed an interest in part-time residency options, only one sought this opportunity. While part-time residencies are commonly chosen for health issues, this option appears to be little known.

This study was limited to the experience of one cohort of family medicine residents in a single residency program. It would be fruitful to examine other residency programs, both in family medicine and in specialty programs, to determine other successful approaches. The attitudes of other residents and preceptors also appear to be an important

factor, and future work could examine this in more detail.

CONCLUSION

Former residents listed the main stressors of pregnancy during residency and reentry to the program as being long hours and unpredictable work demands, attitudes of colleagues and supervisors, finding adequate child care, and their own high expectations for themselves. While the health care workplace is not fully prepared to accommodate the physical demands of pregnancy or motherhood, residency programs can develop an approach that builds in flexibility to allow for a healthy balance of family, work, and student life. 🌿

Contributors

Dr Walsh conceived the project, co-wrote the research proposal, designed the study, did the initial literature review, and wrote the first and final drafts of the paper. **Ms Gold** co-wrote the research proposal, trained and supervised the research assistant, and was involved in writing the final version of the paper. **Dr Jensen** did the detailed literature review, analyzed and interpreted the data, helped revise the paper, and approved the final version to be published. **Ms Jedrkiewicz** helped create the interview guide and conducted all the interviews, helped revise the paper, and approved the final version to be published.

Competing interests

None declared

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