

## Mères et médecins

### *Habitudes d'allaitement chez les mères médecins à Terre-Neuve et Labrador*

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#### RÉSUMÉ

**OBJECTIF** Déterminer le taux de pratique et la durée de l'allaitement chez les femmes médecins à Terre-Neuve et Labrador et identifier les facteurs démographiques susceptibles d'influencer la durée de l'allaitement dans cette population.

**CONCEPTION** Sondage envoyé par la poste.

**CONTEXTE** Terre-Neuve et Labrador.

**PARTICIPANTES** Quelque 180 femmes médecins détentrices d'un permis d'exercice.

**PRINCIPALES MESURES DES RÉSULTATS** La pratique de l'allaitement signalée par l'intéressée pour chaque enfant né, la durée de l'allaitement en mois et les raisons de mettre un terme à l'allaitement.

**RÉSULTATS** Le taux de réponse se situait à 68%. Le taux d'allaitement pratiqué par les répondantes était de 96,6%. Un plus grand nombre de médecins diplômées en 1980 ou après allaitaient plus longtemps (63,9% par rapport à 33,3%,  $P=0,008$ ). Plus de femmes médecins de famille que de femmes spécialistes allaitaient leur enfant pendant plus longtemps (65,5% par rapport à 33,3%,  $P=0,004$ ). Plus de médecins dont le partenaire travaillait à temps partiel allaitaient plus longtemps que celles dont le partenaire travaillait à temps plein (83,3% par rapport à 50,8%,  $P=0,037$ ). D'autres facteurs comme l'âge, le revenu, les congés de maternité et les avantages sociaux, le travail à temps plein ou à temps partiel, la pratique urbaine ou rurale, n'influençaient pas la durée de l'allaitement. La cessation de l'allaitement était attribuable à des questions d'ordre personnel dans 51% des cas; à des questions reliées au nourrisson dans 38% des cas; à des problèmes entourant la faculté de médecine dans 4% des cas et à des questions sociétales chez 1% des répondantes.

**CONCLUSION** Le taux de pratique de l'allaitement chez les femmes médecins à Terre-Neuve et Labrador se situait à 96,6%; plus de 50% de ces femmes médecins ont allaité pendant plus de 7 mois. Les médecins qui avaient obtenu leur diplôme en 1980 ou plus tard allaitaient plus longtemps leur enfant.

#### POINTS DE REPÈRE DU RÉDACTEUR

- Cette étude explorait les habitudes personnelles des femmes médecins en pratique active en matière d'allaitement à Terre-Neuve et Labrador.
- Les auteures se demandaient si le retour rapide au travail influençait négativement la pratique et la poursuite de l'allaitement, surtout parce qu'il n'y a pas de congé de maternité pour les médecins rémunérées à l'acte à Terre-Neuve et Labrador.
- Presque toutes les répondantes ont commencé à allaiter et la plupart l'ont fait pendant 7 mois et plus. Au nombre des raisons de la cessation de l'allaitement figuraient des questions d'ordre personnel (51%), des questions reliées au nourrisson (38%) et des questions concernant la pratique (33%).

Cet article a fait l'objet d'une révision par des pairs.  
Le texte intégral est aussi accessible en anglais à [www.cfpc.ca/cfp](http://www.cfpc.ca/cfp).  
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## Physicians as mothers

### *Breastfeeding practices of physician-mothers in Newfoundland and Labrador*

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#### ABSTRACT

**OBJECTIVE** To determine the initiation rate and duration of breastfeeding among female physicians in Newfoundland and Labrador, and to identify demographic factors that might influence duration of breastfeeding in this population.

**DESIGN** Mailed survey.

**SETTING** Newfoundland and Labrador.

**PARTICIPANTS** One hundred eighty licensed female physicians.

**MAIN OUTCOME MEASURES** Self-reported initiation of breastfeeding for each baby born, duration of breastfeeding in number of months, and reasons for ending breastfeeding.

**RESULTS** The response rate was 68%. The breastfeeding initiation rate among respondents was 96.6%. More physicians who graduated in 1980 or later breastfed for longer periods (63.9% vs 33.3%,  $P=.008$ ). More family doctors than specialists breastfed their babies for longer periods (65.5% vs 33.3%,  $P=.004$ ). More physicians whose partners were working part-time breastfed for longer periods than physicians whose partners were working full-time (83.3% vs 50.8%,  $P=.037$ ). Other factors, such as age, income, maternity leave and benefits, part-time or full-time work, and urban or rural practice, did not affect duration of breastfeeding. Personal issues accounted for 51% of respondents' ending breastfeeding; baby issues accounted for 38%, practice issues for 33%, medical school issues for 4%, and societal issues for 1%.

**CONCLUSION** The breastfeeding initiation rate among female physician respondents in Newfoundland and Labrador was 96.6%; more than 50% of these physicians breastfed for longer than 7 months. Physicians graduating in 1980 or later breastfed their babies for longer.

#### EDITOR'S KEY POINTS

- This study explored personal breastfeeding practices of physicians in Newfoundland and Labrador.
- The authors wondered whether early return to work adversely affects initiation and continuation of breastfeeding, especially because there are no maternity benefits for fee-for-service physicians in Newfoundland and Labrador.
- Almost all respondents initiated breastfeeding, and most breastfed for 7 months or longer. Reasons for ending breastfeeding included personal issues (51%), baby issues (38%), and practice issues (33%).

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The Canadian Paediatrics Society and the World Health Organization recommend exclusive breastfeeding until at least 6 months of age.<sup>1,2</sup> This is also consistent with recently published recommendations from Health Canada<sup>3</sup> and the American Academy of Pediatrics Section on Breastfeeding.<sup>4</sup>

Canadian women initiated breastfeeding at a rate of 85% in 2003.<sup>5</sup> In Newfoundland and Labrador, the breastfeeding initiation rate was 63% in 2003.<sup>6</sup>

A study published in the *Canadian Journal of Public Health* in 2003 assessed the main social determinants in the general population of Quebec of initiation, duration, and exclusivity of breastfeeding from birth to 4 months.<sup>7</sup> Mother's education level and mother's age were the most important factors for initiation and duration of breastfeeding up to 4 months. Annual family income showed a negative relationship with breastfeeding when mothers' ages and education levels were equal.

Female physicians have some particular challenges in balancing work and family issues, partly owing to workload, call duty, and remuneration issues. Freed et al, in a US study, reported that residents and physicians with personal experiences of breastfeeding were more confident providing support and advice to breastfeeding patients.<sup>8</sup> Miller and colleagues reported a breastfeeding initiation rate of 80% among resident physicians in 1996 in a random selection of American graduates.<sup>9</sup>

Arthur et al found a breastfeeding initiation rate of 93% among physician mothers living in Mississippi, with the mean duration of breastfeeding being 18.8 weeks.<sup>10,11</sup> The most common reasons to wean children were return to work, diminishing milk supply, and lack of time to express milk. Physician mothers were also more likely to wean earlier and took shorter maternity leaves when returning to full-time employment. The authors found no significant relationship between part-time or full-time work, length of maternity leave, and duration of breastfeeding. Only 31.9% of physicians surveyed received training in lactation management during residency or medical school, and only 21.2% considered their medical training adequate to help them breastfeed their own children without difficulty.

Gielen et al have suggested that early return to work adversely affects initiation and continuation of breastfeeding.<sup>12</sup> In Newfoundland and Labrador, approximately two thirds of physicians are fee-for-service and receive

no maternity benefits, whereas the one third who are salaried do receive benefits.

This study was designed to look at personal breastfeeding practices of physicians in Newfoundland and Labrador. What is the breastfeeding initiation rate for female physicians in our province? How long do they breastfeed their children? Are there demographic factors that influence duration of breastfeeding in this population of physicians?

## METHODS

We surveyed all 180 female physicians licensed to practise in Newfoundland and Labrador who were registered with the Newfoundland and Labrador Medical Association.

A questionnaire consisting of 28 multiple-choice questions and space to provide qualitative comments was mailed to participants. The questions were developed by 3 of the authors and tested among some of the physicians in our group practice. The breastfeeding survey was part of a larger survey on parenting practices of physicians. Ethics approval was granted by the Human Investigation Committee of the Faculty of Medicine at Memorial University of Newfoundland.

The survey collected data concerning parental leave, number of children born, timing of births (during medical training or practice), age, place of practice, initiation and duration of breastfeeding, and reasons for discontinuation of breastfeeding. The survey was sent and completed in 2001. Data were analyzed using SPSS software. Qualitative data were collected as part of the mailed questionnaire; respondents were asked for any comments that they would like to add. Three readers developed themes through consensus, and there was agreement on thematic categories.

We used multiple logistic regression to analyze data from the 88 female physicians who had breastfed their babies;  $\chi^2$  tests were used to identify significant ( $P \leq .05$ ) control variables to include in the multiple logistic regression. The dependent variable was length of breastfeeding, coded as 6 months or less and 7 months or more. When analyzing breastfeeding duration, where more than 1 child was breastfed by a mother, data from the child who was breastfed the longest were used. The independent variables were medical specialty (coded as specialist and family physician), graduation year (coded as 1980 or later and 1979 or earlier), and partner's working hours (coded as full-time and part-time).

## RESULTS

Of the 180 surveys mailed, 123 (68%) women responded. Respondents' characteristics are described in **Table 1**.

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**Table 1. Sociodemographic and practice-related characteristics of the study sample (N = 89)\***

VARIABLE	RESPONDENTS N (%)
<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	
Age	
• 40 y or younger	37 (41.6)
• Older than 40 y	52 (58.4)
Decade of graduation	
• 1980 or later	62 (69.7)
• 1979 or earlier	27 (30.3)
Income	
• Less than \$100 000	20 (23.0)
• \$100 000 to \$150 000	38 (43.7)
• More than \$150 000	29 (33.3)
Parental leave taken	
• Yes	84 (95.5)
• No	4 (4.5)
Duration of breastfeeding	
• 6 mo or less <sup>†</sup>	40 (45.5)
• 7 mo or more	48 (54.5)
Partner's hours worked	
• Full-time (≥40 h/wk)	65 (84.4)
• Part-time (<40 h/wk)	12 (15.6)
<b>PRACTICE-RELATED CHARACTERISTICS</b>	
Specialty	
• Specialists	31 (34.8)
• Family doctors	58 (65.2)
Leave benefits	
• No parental leave benefits	58 (65.2)
• Parental leave benefits	31 (34.8)
Hours worked	
• Full-time (≥40 h/wk)	71 (79.8)
• Part-time (<40 h/wk)	18 (20.2)
Location of work	
• Urban practice	63 (70.8)
• Rural practice	26 (29.2)
Type of practice	
• Solo practice	15 (18.8)
• Group practice	65 (81.3)
Type of remuneration	
• Fee-for-service	60 (69.0)
• Salaried	27 (31.0)

\*N does not always equal 89 owing to missing data.

<sup>†</sup>Includes 3 respondents who did not breastfeed any of their children.

Of these 123 women, 89 had 1 or more birth children; 1 had stepchildren. This paper studies the 89 who had birth children. There were a total of 215 children born to these women; 192 were breastfed and 86 women breastfed 1 or more children. The breastfeeding initiation rate was 96.6% among those who responded to the survey. More than half (54.5%) breastfed for 7 months or more, and 45.5% breastfed for 6 months or less or not at all.

**Table 2** details the variables we assessed using bivariate analysis to determine whether they affected duration of breastfeeding. The decade in which physicians graduated played a role in breastfeeding duration, with more physicians who graduated in 1980 or later breastfeeding for longer periods (63.9% vs 33.3%;  $P=.008$ ). There was a significant difference between specialists and family doctors. More family doctors than specialists breastfed for 7 months or

**Table 2. Effect of sociodemographic and practice-related variables on breastfeeding duration (N = 88\*)**

VARIABLE	BREASTFED 6 MO OR LESS N (%)	BREASTFED 7 MO OR MORE N (%)	P VALUE
SOCIODEMOGRAPHIC VARIABLES			
Age			
• 40 y or younger	13 (36.1)	23 (63.9)	NS
• Older than 40 y	27 (51.9)	25 (48.1)	
Decade of graduation			
• 1980 or later	22 (36.1)	39 (63.9)	.008
• 1979 or earlier	18 (66.7)	9 (33.3)	
Income			
• Less than \$100 000	5 (25.0)	15 (75.0)	NS
• \$100 000 to \$150 000	20 (52.6)	18 (47.4)	
• More than \$150 000	14 (50.0)	14 (50.0)	
Parental leave taken			
• Yes	36 (43.4)	47 (56.6)	NS
• No	3 (75.0)	1 (25.0)	
Partner's hours worked			
• Full-time (≥40 h/wk)	32 (49.2)	33 (50.8)	.037
• Part-time (<40 h/wk)	2 (16.7)	10 (83.3)	
PRACTICE-RELATED VARIABLES			
Specialty			
• Specialists	20 (66.7)	10 (33.3)	.004
• Family doctors	20 (34.5)	38 (65.5)	
Leave benefits			
• No parental leave benefits	23 (39.7)	35 (60.3)	NS
• Parental leave benefits	17 (56.7)	13 (43.3)	
Hours worked			
• Full-time (≥40 h/wk)	35 (50.0)	35 (50.0)	NS
• Part-time (<40 h/wk)	5 (27.8)	13 (72.2)	
Location of work			
• Urban practice	32 (51.6)	30 (48.4)	NS
• Rural practice	8 (30.8)	18 (69.2)	
Type of practice			
• Solo practice	8 (53.3)	7 (46.7)	NS
• Group practice	27 (42.2)	37 (57.8)	
Type of remuneration			
• Fee-for-service	25 (41.7)	35 (58.3)	NS
• Salaried	14 (53.8)	12 (46.2)	

NS—non-significant.

\*One respondent was breastfeeding her first child at the time of the survey so was not included in the analysis of duration of breastfeeding.

longer (65.5% vs 33.3%;  $P=.004$ ). Finally, more mothers breastfed for 7 months or longer if their partners worked part-time (83.3% vs 50.8%;  $P=.037$ ). Other factors, such as age, maternity leave length and benefits, type of remuneration, income level, practice setting, solo or group practice, part-time or full-time work, and rural or urban practice, did not significantly affect duration of breastfeeding. Four physicians did not take leave. While year of graduation, being a family doctor or a specialist, and partner's hours of work were all significantly related to length of breastfeeding in the bivariate analysis, when we included these variables in a logistic regression, only year of graduation remained independently predictive of breastfeeding for 7 months or longer. The Nagelkerke  $r^2$  value for this model was 0.214. The odds ratio shows that those who graduated in 1980 or later were 3.28 times more likely to breastfeed for 7 months or longer than those who graduated before 1980 (Table 3).

**Table 3. Multiple logistic regression analysis predicting whether female physicians breastfed their babies for 7 months or more (N = 88)**

VARIABLE	ODDS RATIO	95% CONFIDENCE INTERVAL	P VALUE
Graduation year	3.28	1.08–9.99	.037
• 1979 or earlier (Reference category)			
• 1980 or later			
Specialty	2.23	0.78–6.37	.135
• Specialist (Reference category)			
• Family doctor			
Partner's hours worked	3.49	0.66–18.31	.140
• Full-time ( $\geq 40$ h/wk) (Reference category)			
• Part-time ( $< 40$ h/wk)			

Qualitative comments received from respondents about reasons for ending breastfeeding were grouped into the following 5 categories: personal issues, baby issues, practice issues, medical school and residency issues, and societal issues. The 3 most common reasons to stop breastfeeding were return to work, baby losing interest, and time constraints. These comments are summarized in Table 4.

## DISCUSSION

The breastfeeding initiation rate of female physician respondents (96.6%) is much higher than the initiation rate for women in general in Newfoundland and Labrador (63%)<sup>6</sup>, higher than Canadian women (85%)<sup>5</sup>, and slightly higher than female physicians (93% and 80%) in other studies.<sup>9,10</sup> More than half of the physician

respondents breastfed for 7 months or longer, which is longer than the duration of breastfeeding in other studies of female physicians.<sup>10</sup>

Reasons for discontinuing breastfeeding were similar to other studies. These were returning to work, babies losing interest in breastfeeding, and time constraints at work and home.

Significant factors affecting duration of breastfeeding in our study were that family physicians breastfed longer than specialists, physicians graduating in 1980 or later breastfed for longer periods, and female physicians whose partners worked part-time at the time of the survey breastfed their babies for longer periods. Of these, only decade of graduation remained an independent predictor of length of breastfeeding under logistic regression. Perhaps physicians graduating before 1980 were of the generation when breastfeeding was less encouraged in our culture and were also the pioneers

**Table 4. Reasons for ending breastfeeding**

Personal issues (51%)
• "Maternal health and birth complications"
• "Time constraints"
• "Another pregnancy"
• "Weight loss"
• "Fatigue"
• "Personal choice"
• "Twins"
• "Pressure to stop by parents and in-laws"
• "Sharps injury"
• "Father sharing feeding"
• "Milk supply decreased when back to work"
• "Timing was right to end"
• "On medication not compatible with breastfeeding"
• "Tired of being 'tied up'"
• "Burden of other child care"
Baby issues (38%)
• "Baby losing interest"
• "Feeding problems"
• "Baby biting"
• "Baby ill or hospitalized"
• "Other child starting school"
• "Not enough milk"
• "Baby older"
• "Chronic mastitis"
• "Colicky baby"
Practice issues (33%)
• "Return to work"
• "Heavy call commitments"
• "No flexibility at work to allow breastfeeding"
• "Felt pressure from colleagues and patients to return to work"
Medical school and residency issues (4%)
• "Baby born 6 weeks before [Royal College of Physicians and Surgeons fellowship examination]"
• "Too stressed in medical school"
• "In university full-time"
Societal issues (1%)
• "Societal pressure"



in establishing female presence in the physician work force. The lack of acceptance of breastfeeding in the workplace at that time might have discouraged women from continuing breastfeeding. Since that time, the view of the ideal length of time for breastfeeding has also changed.


It is quite encouraging that physician mothers initiated and continued breastfeeding for such long periods. Frank suggested that practising healthy behaviour oneself as a physician was a powerful predictive factor for counseling patients about prevention issues.<sup>13</sup> This might also apply to breastfeeding. We hope physicians can serve as role models for their breastfeeding patients.

As more women are graduating from medical school, personal breastfeeding issues for physicians will become more important, and factors that affect duration of breastfeeding will have to be addressed in physicians' workplaces. A number of respondents cited practice issues, including pressure from patients and colleagues to return to work, as reasons for ending breastfeeding. Do we need more support in the workplace for breastfeeding physician mothers? These issues must be further explored.

## Limitations

There were some limitations to this study. Fifty-seven physicians (32%) did not respond to the survey. This might have biased the study to some extent, as physicians who breastfed might have responded more readily. Questions about exclusivity of breastfeeding in the first 6 months were not asked. There was no attempt made to control for the number of years since the surveyed physicians had breastfed their children.

## Conclusion

The breastfeeding initiation rate among female physician respondents in Newfoundland and Labrador was 96.6%; more than 50% of these physicians breastfed for 7 months or longer. Physicians graduating in 1980 or later breastfed their babies for longer periods. Other demographic factors, such as age, length of maternity leave, maternity leave benefits, fee-for-service or salaried practice, urban or rural practice, part-time or full-time work, income level, and practice setting or type of practice, did not influence the duration of breastfeeding. Further research is needed to assess whether this translates into better breastfeeding support for our patients. 

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## Contributors

**Drs Duke, Parsons and Snow** conceived the idea for the article and designed and carried out the survey. **Ms Edwards** did the statistical analysis and provided valuable commentary on the research significance. **Dr Duke** wrote and all authors reviewed the article submitted for publication.

## Competing interests

None declared

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