Family physicians in maternity care Still in the game?

Report from the CFPC's Janus Project

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abstract

OBJECTIVE To describe family doctors' contribution to maternity care in Canada and to observe the influence of age, sex, region of the country, and practice population on provision of maternity care.

DESIGN Survey: College of Family Physicians of Canada's Janus Project national family physician survey.

SETTING All 10 provinces and two territories.

PARTICIPANTS Random sample of family physicians and general practitioners, both members and non-members of the College.

MAIN OUTCOME MEASURES Proportion of family doctors participating in prenatal, intrapartum, postpartum, and newborn care, and proportion of doctors involved in intrapartum care by age, sex, location in Canada, and practice population.

RESULTS Overall response rate was 58%. Just over 50% of all family doctors in Canada are involved in some aspect of maternity care; 19% do intrapartum care; and 33% are involved in prenatal (shared) care. Similar proportions of men and women still do intrapartum care, but women care for more pregnancies than men. More family doctors serving rural areas are doing intrapartum care compared with doctors in urban areas, although those in urban areas tend to do more deliveries. The western provinces have the highest percentages of intrapartum caregivers. A gradual decline in percentage of intrapartum caregivers by age group increases among the 55- to 64-year-old cohort. Almost a quarter of women doctors younger than 35 years are doing intrapartum care. Most physicians doing prenatal (shared) care look after women until the third trimester.

CONCLUSIONS Family doctors are still providing a large proportion of maternity care in Canada. This contribution must be nurtured by the College through its Maternity and Newborn Care Committee and other contacts to encourage family doctors to continue offering this essential service to childbearing women in Canada.

résumé

OBJECTIF Décrire la contribution des médecins de famille aux soins maternels au Canada et observer l'influence de l'âge, du sexe, de la région du pays et de la population desservie sur la prestation des soins maternels.

CONCEPTION Un sondage: le sondage national des médecins de famille du Projet Janus du Collège des médecins de famille du Canada.

CONTEXTE Les dix provinces et deux territoires.

PARTICIPANTS Un échantillon aléatoire de médecins de famille et d'omnipraticiens, membres et non membres du Collège. PRINCIPALES MESURES DES RÉSULTATS La proportion de médecins de famille qui participent aux soins prénataux, intra-partum, périnatals et aux nouveau-nés, et la proportion de médecins qui dispensent des soins intra-partum selon l'âge, le sexe, la région du Canada et la population desservie.

RÉSULTATS Le taux de réponse dans l'ensemble se situait à 58%. Un peu plus de 50% de tous les médecins de famille au Canada participent à certains aspects des soins maternels; 19% dispensent des soins intra-partum; et 33% participent aux soins prénataux (partagés). Des proportions semblables d'hommes et de femmes dispensent encore des soins prénatals, mais les femmes s'occupent davantage des soins durant la grossesse que les hommes. Plus de médecins de famille desservant des régions rurales procèdent aux soins intra-partum que les médecins des régions urbaines, même si les médecins des régions urbaines ont tendance à faire plus d'accouchements. Les provinces de l'Ouest comptent les plus hauts pourcentages de dispensateurs de soins intra-partum. Un fléchissement graduel dans le pourcentage des dispensateurs de soins intra-partum selon le groupe d'âge se fait plus marquant chez les médecins de 55 à 64 ans. Près du quart des femmes médecins de moins de 35 ans prodiguent des soins intra-partum. La majorité des médecins qui offrent des soins prénatals (partagés) s'occupent des femmes jusqu'au troisième trimestre.

CONCLUSIONS Les médecins de famille continuent toujours à dispenser une grande proportion des soins de maternité au Canada. Cette contribution doit être encouragée par le Collège par l'entremise de son Comité des soins de maternité et de périnatalité ainsi que d'autres ressources pour inciter les médecins de famille à continuer à offrir ce service essentiel aux femmes du Canada en âge de concevoir.

This article has been peer reviewed. Cet article a fait l'objet d'une évaluation externe. Can Fam Physician 2000;46:601-611.

RESEARCH

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or almost 20 years, numerous studies have described Canadian family doctors' gradual and steady withdrawal from intrapartum care. ¹⁻⁴ The pattern is similar in

other developed countries, including the United States and United Kingdom,⁵⁻⁸ and is consistent across Canada, with some regional variation.¹ In British Columbia, some of the Atlantic Provinces, and rural areas, a larger proportion of family physicians have remained involved in intrapartum care than in Ontario, Quebec, and more urban areas.¹ This is reflected in the description by Klein et al of an inverse relationship between numbers of obstetricians in a region and family doctors providing intrapartum care.¹

In 1983, 68% of family doctors attended births, but by 1995 this figure had dropped to 32%. With this substantial decline, the threat of a crisis in maternity care grew more serious. Simply put, will there be enough caregivers to look after women giving birth in Canada in the future? Currently, there are approximately 360 000 births each year in Canada¹⁰ and about 1300 practising obstetricians. The numbers of midwives entering practice (mostly in Ontario, British Columbia, and Quebec) is very small, so their contribution will not be felt for many years. Thus, the maternity care provided by Canada's more than 27 000 family doctors is crucial to the health of childbearing women across the country.

The situation poses some questions. What contribution to maternity care do Canada's family doctors currently make? Will the decline in maternity care involvement continue until family doctors become merely fringe players? What are the differences by region and practice location? How does the increasing proportion of women family doctors affect provision of maternity care? What adjustments have taken place in the system to compensate for the decline in family doctors' attendance at births?

Previous studies of family doctors' maternity care have been limited in time and scope and have tended to focus on billing information, such as that obtained from the Canadian Institute of Health Information (CIHI).⁴ This underestimates family

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doctors' contribution. For instance, in births where an obstetrician's intervention is required to perform a cesarean section or forceps delivery, the delivery is often attributed to the obstetrician only, ignoring the care of the family doctor who requested the consultation. As well, it does not measure family physicians' large contribution to maternity care in providing prenatal and shared care.

In 1997-1998, the College of Family Physicians of Canada (CFPC) conducted the Janus Project's national family physician survey to obtain an accurate picture of the workload of family doctors all across the country. This provided a chance to get a new perspective on provision of maternity care services by asking family doctors themselves about their involvement in antenatal, intrapartum, postpartum, and newborn care. This paper reports on a subanalysis of the Janus maternity care data.

The purpose of this study was to describe family doctors' contribution to maternity care in Canada and to observe the influence of age, sex, region of the country, and practice population on that contribution.

METHOD

The 1997-1998 survey was conducted on a stratified random sample of family physicians and general practitioners (FP/GPs) drawn from all 10 provinces and the two territories at the time. Sampling frames were selected from two databases: the membership database of the CFPC and Southam's Canadian Medical Directory, which captures all nonspecialist physicians who are not College members. In each case, the sample included only physicians in active practice and excluded those registered with the Royal College of Physicians and Surgeons as specialists, those who had not finished their medical education, and those who were retired or who practised abroad.

Sampling was stratified into nine regions of Canada: British Columbia, Alberta, the Prairies (Saskatchewan and Manitoba), Ontario, Quebec, the Atlantic Provinces (NS, NB, PEI, Nfld), two territories (NWT, YT), and the urban areas of greater Toronto (postal codes L and M) and Montreal (postal code H). For each region except the territories, 275 physicians were randomly selected from the College membership database and 375 from the Southam database. More were chosen from Southam to compensate for the lower response rate expected from non-College physicians as has been the case in previous studies. In the territories, all physicians were included. This made a sample of 5283. The sampling strategy

ensured that the sample was representative of all FP/GPs in Canada and permitted meaningful comparisons by region.

To compensate for response rates differing by region and by CFPC members or non-members, a system of weighting responses was used. 13 This ensured that the proportions of responses within regions and among CFPC and non-CFPC members were the same as the actual proportions of the Canadian FP/GP population at the time of the study.

The questionnaire was developed by the CFPC's Janus Project Coordinating Committee through a Database Working Group. This group worked with the Centre for Rural and Northern Health Research in Sudbury, Ont, which was contracted to conduct the survey. The questionnaire examined many aspects of care, such as demographics, practice environment, professional activities, and practice profile. Questions specifically relating to maternity care were developed by the authors of this study. The survey was provided in French and English and was pilot tested in community and academic centres, rural and urban areas, and in both languages several times.

Survey process followed a modified Dillman Total Design Method, and responses were returned anonymously. As per Dillman, there were three mailings, with a second and third mailing to those not responding to the previous mailing(s).

Statistical analysis consisted of several tests, depending on comparisons. Non-parametric tests were used to compare differences in cell proportions as well as numbers of births attended each year by various FP/GP populations. Pearson's χ^2 was used to compare differences in group proportions. Mann-Whitney U, a non-parametric equivalent to the t test, was used when comparing a dichotomous independent variable to the number of births each year. The Kruskal-Wallis test, a non-parametric equivalent to ANOVA (analysis of variance), was used when the independent variable contained more than two categories. Non-parametric methods were used because the number of births each year was a skewed distribution.

For the same reason, the median was used for statistical analysis as a more accurate measure of central tendency. Because there were multiple comparisons, $P \alpha$ was set at <.01. For this report, estimates of precision at national and regional levels were calculated by using $1/\sqrt{n}$, where n was the size of the sample contributing to the estimated proportion. The final data set of 3004 produces 95% confidence limits of ±1.8%. For regional analyses, 95% confidence limits range from $\pm 4.8\%$ to 6.1%.

The CFPC national family physician survey received approval from the Laurentian University Ethics Review Committee. Full details regarding methods are available in the report on the Janus Project found on the College's website (www.cfpc.ca).

RESULTS

Overall response rate was 58.4% (**Table 1**), and there was a marked difference in response rate between College members (82.4%) and non-members (39.7%). Before analysis, survey responses were statistically weighted to compensate for the effects of the different response rates. Table 2 shows unweighted and weighted distribution of College members and nonmembers by region. Results in this study are reported using a weighted n of 3000 (**Tables 3-6**).

Table 1. Response rate

SAMPLE	CFPC MEMBERS* N = 2240	NON-MEMBERS † N = 3043	TOTAL N = 5283
Returned, wrong address	28	57	85
Effective sample size	2206	2992	5198
Replied, but not in practice or not an FP/GP	‡	‡	32
Usable responses received	1817	1187	3004
Response rate	82.4%	39.7%	58.4%§

^{*}From CFPC membership database.

At the time of the study, according to the 1997 Southam's Canadian Medical Directory, there were approximately 27 300 family doctors in Canada; 66.8% were male, and 31.9% were female (1.2% did not indicate sex). Overall, 47.5% stated that they provided some form of maternity care.

Table 3 shows the types of maternity care provided by family doctors. Approximately 19% provided intrapartum (and prenatal) care, and an additional 33% provided prenatal care only. The same proportion of women and men provided intrapartum care, but a higher percentage of women were involved in prenatal, postpartum, and newborn care. A small proportion of family doctors provided high-risk care, including cesarean sections.

Overall, 19.3% of family doctors reported providing intrapartum care. They attended a mean of 38.4 births each year (median 30). There was a

[†]From Southam Communications Co database.

[‡]Impossible to determine due to anonymity.

[§]Sum of usable and nonusable responses divided by effective sample size.

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substantial difference between the numbers of births attended by women and men: women attended a mean of 55.4 births per year (median 45); men attended 30.0 (median 24) (Mann-Whitney *U, P*<.01).

Table 4 shows the percentages of family doctors providing intrapartum care, by primary community served. Although a smaller proportion of urban FP/GPs were attending births, they appeared to attend more deliveries than their rural colleagues.

Table 5 shows the percentages of family doctors providing intrapartum care by region as well as the mean number of FP/GP-attended births per year.

The western provinces had the highest percentage of intrapartum caregivers. In Quebec, FP/GPs practising intrapartum care were each attending very large numbers of births, but in Montreal only a small percentage of FP/GPs attended births.

Table 6 shows the percentages of family doctors providing intrapartum care and mean number of births attended, by physician age group. The percentage was highest at 23% of physicians younger than 35; it gradually decreased with age. Peak mean number of births attended was seen among physicians 35 to 44 years old.

Table 2. Comparison of weighted and unweighted samples with estimated proportions of Canadian family physicians

REGION	UNWEIGHTED SAMPLE N (%)	WEIGHTED SAMPLE N (%)	NATIONAL ESTIMATES N (%)
BRITISH COLUMBIA			
• CFPC	216 (7.2)	163 (5.4)	1490 (5.5)
• Non-CFPC	180 (6.0)	286 (9.5)	2609 (9.6)
ALBERTA			
• CFPC	227 (7.6)	139 (4.6)	1272 (4.7)
• Non-CFPC	136 (4.5)	118 (3.9)	1082 (4.0)
PRAIRIE PROVINCES			
• CFPC	204 (6.8)	85 (2.8)	779 (2.9)
Non-CFPC	139 (4.6)	118 (3.9)	1078 (4.0)
ONTARIO			
Toronto and area			
• CFPC	242 (8.1)	279 (9.3)	2546 (9.3)
• Non-CFPC	162 (5.4)	303 (10.1)	2773 (10.2)
OTHER			
• CFPC	275 (9.2)	236 (7.9)	2155 (7.9)
Non-CFPC	164 (5.5)	196 (6.5)	1792 (6.6)
QUEBEC			
Metropolitan Montreal			
• CFPC	178 (6.0)	77 (2.6)	699 (2.6)
• Non-CFPC	94 (3.1)	185 (6.2)	1690 (6.2)
OTHER			
• CFPC	200 (6.7)	141 (4.7)	1284 (4.7)
• Non-CFPC	127 (4.2)	408 (13.6)	3738 (13.7)
ATLANTIC PROVINCES			
• CFPC	232 (7.8)	103 (3.4)	938 (3.4)
• Non-CFPC	153 (5.1)	145 (4.8)	1305 (4.8)
TERRITORIES			
• CFPC	35 (1.2)	5 (0.2)	43 (0.2)
• Non-CFPC	26 (0.9)	4 (0.1)	40 (0.2)
REGIONAL INFORMATION MISSING			
• CFPC	8 (0.3)	7 (0.3)	
• Non-CFPC	6 (0.2)	6 (0.2)	
TOTAL			
• CFPC	1817 (60.5)	1235 (41.1)	11 206 (41.0)
• Non-CFPC	1187 (39.5)	1769 (58.9)	16 107 (59.0)
GRAND TOTAL	3004 (100)	3004 (100)	27 313 (100)

Note—In doing this analysis, two survey respondents were identified as extreme outliers with respect to number of annual obstetric deliveries they reported. Both were male and did more than 250 deliveries yearly. These cases were excluded from our analyses. Removing them actually reduced the sample size from 3004 to 3000: reduction by four, rather than two, is due to the fact that records are weighted in the database.

Table 3. Types of obstetric care provided by Canadian family doctors: Responses are analyzed by sex.

CARE PROVIDED	MALE DOCTORS* N (% OF RESPONDENTS)	FEMALE DOCTORS [†] N)(% of respondents	TOTAL [‡] N)(% of respondents)	COMPARISON P VALUE [§]
Some maternity	990 (49.5)	563 (58.6)	1572 (52.5)	<.000
Prenatal only	620 (31.0)	366 (38.1)	997 (33.2)	<.000
Intrapartum	370 (18.5)	197 (20.5)	580 (19.3)	NS
Postpartum	647 (32.4)	407 (42.4)	1074 (35.8)	<.000
Newborn	751 (37.6)	438 (45.6)	1209 (40.3)	<.000
High-risk	82 (4.1)	46 (4.8)	130 (4.3)	NS

NS—Not statistically significant at P<.01.

Table 4. Percentage of family doctors providing intrapartum care and number of births attended: Responses are analyzed by community served.

71/07 05	FP/GPS WHO PROVIDE INTRAPARTUM	NUMBER OF BIRTHS ATTENDED			
TYPE OF COMMUNITY SERVED	CARE* N (% OF RESPONDENTS)	MEAN	STANDARD DEVIATION	MEDIAN	
Inner-city	37 (13.2)	41.6	25.8	35.0	
Urban	134 (13.5)	46.6	34.3	35.1	
Suburban	94 (17.5)	44.5	37.1	30.0	
Small town	150 (29.6)	37.7	35.4	30.0	
Rural	74 (25.6)	28.1	30.7	20.0	
Remote/ isolated	39 (43.3)	27.0	22.8	18.5	
Other	3 (5.7)	†	†	†	

^{*} Weighted n = 580. Of the 580 providing intrapartum care, 49 (8.4%) did not indicate type of community served or indicated more than one type. These cases are not included in this table. †Insufficient numbers to calculate statistic.

We analyzed the group younger than 35 separately by sex and number of births because they could be the cohort providing obstetric care in the future. Among FP/GPs younger than 35, 23.5% of women and 22.4% of men provided intrapartum care. Women attended a mean of 46.7 births (median 40) and men attended 27.4 (median 20) (Mann Whitney U, P < .01)

Figure 1 shows referral patterns of FP/GPs doing prenatal care only as a cumulative percentage. For example, by 20 weeks, 25% of FP/GPs had referred; by 28 weeks, half had referred; and by 32 weeks, almost 75% had referred. This demonstrates that these doctors provided a substantial amount of prenatal care before referral.

DISCUSSION

This is the first national survey by the CFPC describing family doctors' involvement in maternity care. That involvement appears to be substantial, with almost half of all FP/GPs in the country providing some form of maternity care.

Attendance at births

Approximately 19% of both male and female family doctors still attend births; they attend an average of 38 each per year. This figure compares favourably with results of the most recent Canadian Medical Association (CMA) Annual Survey (1998, 44% response rate), in which 19% of family doctors reported providing intrapartum care and attending a mean of 36 births per year.¹⁴

A recent study by Lofsky¹² in Ontario demonstrated a steady increase over time in the actual number of deliveries attended by both family physicians and obstetricians. If this pattern is similar across the country, it implies that, while the number of family doctors attending births has dropped, those still involved attend more births per year. It might also reflect a trend of those doing just a few births a year to withdraw from intrapartum care.

Lofsky also showed how maternity care estimates, if derived from CIHI statistics, underestimate the contribution made by family doctors.¹² In 1996-1997, CIHI attributed 22% of births to family doctors in Ontario. If cases where family doctors referred to obstetricians for instrumental deliveries or cesarean sections were included, however, the percentage rose to 26% overall. This difference represents an increase of 18% over what would have been estimated from CIHI data.

^{*} Weighted n = 1999.

[†]Weighted n = 960.

[‡]Total is greater than sum of male and female because some respondents did not indicate their sex but did indicate their obstetric practice.

[§]Based on Pearson's χ^2 .

Table 5. Percentage of family doctors providing intrapartum care and number of births attended: Responses are analyzed by region.

	FP/GPS WHO PROVIDE INTRAPARTUM	NO. OF BIRTHS ATTENDED		
REGION	CARE* N (% OF RESPONDENTS)	MEAN	STANDARD MEAN DEVIATION	
British Columbia	151 (33.6)	31.6	13.3	25.0
Alberta	79 (30.7)	39.5	35.8	30.0
Saskatchewan, Manitoba	64 (31.5)	32.6	29.4	25.0
Ontario [†] (excluding Toronto area)	95 (22.0)	31.7	24.9	25.0
Toronto area [‡]	59 (10.2)	38.0	23.3	30.0
Quebec [§] (excluding Montreal area)	53 (9.6)	74.4	59.6	80.4
Montreal area¶	6 (2.3)	41.1	33.9	38.3
Atlantic Provinces	52 (25.0)	38.5	24.9	35.0
Northwest and Yukon Territories	7 (77.8)	34.9	23.0	35.7

^{*}Weighted n = 580. Of the 580 providing intrapartum care, four (0.7%) did not indicate regional setting. These cases are not included in this table.

Data from CIHI for 1994-1995 suggest that 45% of all babies were delivered by family doctors. If an 18% increase is assumed, as per Lofsky's study, we speculate that family doctors were actually involved in delivering close to 53% of Canada's babies. Comparing this figure with Janus Project data, where 19% of family doctors (5258) attended an average of 38 births per year, these doctors would have attended about 200 000 (55%) of the 365 000 births in Canada in 1995. These different estimates suggest that about half of all births in Canada in 1995 were attended by family doctors, a substantial contribution.

Prenatal care

In addition to the 19% of family doctors who attend births, another 33% provide prenatal care only (shared care). Some FP/GPs provide this care until

Table 6. Percentage of family doctors providing intrapartum care and number of births attended: Responses are analyzed by age group.

INT	FP/GPS WHO PROVIDE INTRAPARTUM	NO. OF BIRTHS ATTENDED			
	CARE* N (% OF RESPONDENTS)	MEAN	STANDARD DEVIATION	MEDIAN	
≤34	94 (23.2)	38.2	29.7	30.0	
35-44	218 (20.9)	46.7	35.7	36.0	
45-54	187 (19.1)	30.9	24.4	24.0	
55-64	55 (13.5)	37.2	49.6	21.1	
65+	10 (7.9)	17.0	12.0	13.3	

^{*}Of the 580 providing intrapartum care, 16 (2.8%) did not indicate their age. These cases are not included in this table.

the third trimester, which represents a large proportion of all maternity care in Canada. We suggest that, by providing this prenatal care, family doctors reduce the workload for obstetricians. Obstetricians might be doing more deliveries, but much of the prenatal care for these women is offered by FP/GPs.

Contribution of women family doctors

Women family doctors' contribution to maternity care is particularly striking. In recent years, more women than men have graduated from family medicine training programs in Canada. At one time, it was thought that fewer women than men would choose to attend births, ¹⁵ but this study shows that this is not the case and that women who do intrapartum obstetrics care for more pregnancies than their male counterparts. This holds true for women younger than 35, an encouraging trend for the future.

Regional differences

Size and location of community served appear to be associated with involvement in intrapartum care. A smaller percentage of urban FP/GPs attend births than their rural colleagues, but they appear to attend more deliveries per year.

This study confirms that regional differences previously described¹ still exist. In the western and Atlantic Provinces, a larger percentage of FP/GPs continue intrapartum care than in Ontario and Quebec. Quebec, clearly, is a distinct society, with a small percentage of family doctors still attending

[†]All of Ontario excluding postal codes L and M.

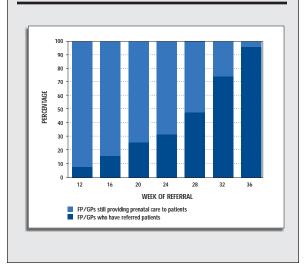
[‡]Postal codes L and M.

[§]All of Quebec excluding postal code H.

[¶]Postal code H.

Includes New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland.

Figure 1. Timing of referral for delivery by family doctors doing prenatal care only: Of the 997 physicians who said they provided prenatal care only, only 741 gave their week of referral.



births, but those doctors are extraordinarily active. In Montreal, only a tiny proportion are still active. A more in-depth study of the Quebec situation appears warranted.

Potential crisis

The picture that emerges from this study is that, while the percentage of family doctors providing intrapartum care has dropped to about 19%, those still attending deliveries attend more, and this is particularly true for women family physicians. Another 33% of family doctors provide a substantial amount of antenatal care, reducing obstetricians' workload. We suggest that these two trends have forestalled development of a true crisis in maternity care in Canada, 16 so far. This change in practice pattern has compensated for the withdrawal of family doctors from attending births and has allowed obstetricians, who continue intrapartum care, to close the gap.

While the crisis has been delayed, there is no guarantee it will not develop in the future, since it is clear that existing resources are strained, and that these compensatory mechanisms might not continue to function to the same degree in the future. The contribution of midwives will not have a substantial effect for many years, even if some provinces, such as British Columbia, Alberta, and Quebec, move toward training and licensing them.

Implications for education

The fact that 50% of family physicians are still involved in some level of maternity care has important implications for medical education. Both family medicine residency training programs and continuing medical education courses must continue to include maternity care. They must particularly emphasize good prenatal care, given changing standards, such as routinely offering human immunodeficiency virus testing; new genetic screening tests, such as maternal serum screening¹⁷; and the long-neglected area of assessing the psychosocial health of mothers and their families.¹⁸

New initiatives

This study emphasizes that family physicians continue to play a large and crucial role in maternity care in Canada and that this contribution must be supported and nurtured, otherwise childbearing women will certainly suffer. Some encouraging initiatives are already in place. Research during the past 15 years has shown that family physicians provide high-quality care, with fewer interventions than obstetricians, to low-risk women. 19,20 Other research by family physicians has contributed to changes in obstetric practices, such as reducing routine episiotomy, 21-23 indicating that family physician researchers can influence standards of care for all maternity caregivers. New models of delivering care, through group maternity practices, where care is shared by family physicians with similar philosophies, provides continuity of care to childbearing women and allows decent lifestyles for the caregivers. 24-27

Strong support for family practice obstetrics has developed through the CFPC's Maternity and Newborn Care Committee, which works actively with the Society of Obstetricians and Gynaecologists of Canada and Society of Rural Physicians of Canada to promote high-quality maternity care for all women.²⁸ Establishing refresher courses, such as ALSO (Advanced Life Support in Obstetrics)²⁹ and ALARM (Advances in Labour and Risk Management) permits family physicians to maintain up-to-date, evidencebased skills. And, most important, it seems that a core of family physicians are still strongly committed to remaining firmly in the obstetrics game.

All these signs are encouraging for the future, but must not be taken for granted. The CFPC will have to continue to work with other organizations to prevent the potential obstetrical crisis from becoming a reality.

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Key points

- · This survey describes results for maternity care from a national survey conducted by the College of Family Physicians of Canada's Janus Project.
- Half of Canada's family doctors provide some form of maternity care; about one fifth attend births; and one third provide prenatal (shared) care. Family doctors attend about half of all deliveries in Canada.
- · Female family doctors attend more births and are involved in more prenatal, postpartum, and newborn care than male doctors are.
- · Higher proportions of family doctors provide intrapartum care in the western provinces and rural areas of Canada.

Points de repère

- · La présente étude décrit les résultats d'un sondage national réalisé dans le contexte du Projet Janus du Collège des médecins de famille du Canada.
- · La moitié des médecins de famille au Canada dispensent une forme ou une autre de soins de maternité; environ le cinquième d'entre eux procèdent à des accouchements; un tiers prodiguent des soins prénataux (partagés). Les médecins de famille assistent à environ la moitié de tous les accouchements au Canada.
- · Les femmes médecins de famille assistent à un plus grand nombre d'accouchements et participent davantage aux soins prénatals, périnatals et aux nouveau-nés que leurs collègues masculins.
- · Des proportions plus élevées de médecins de famille dispensent des soins intra-partum dans les provinces de l'Ouest et dans les régions rurales du Canada.

Since this study was part of a much larger survey of family doctors' practices, some interesting aspects of maternity care could not be explored in detail. Future studies should look at the shared-care contribution of family physicians; it has not been studied in depth and clearly represents a substantial contribution. As well, ongoing monitoring of all aspects of maternity care involvement is warranted to keep abreast of trends that could precipitate the crisis in caregivers.

Limitations

There are recognized limitations to this survey. Although the response rate was reasonably good (58% is high for this type of survey), 40% of family doctors did not reply, and they might be less likely to be involved in maternity care than the physicians who responded. As well, there was a large difference between response rates of College members and nonmembers. This was addressed, in part, by weighting the sample. The large sample size and the effort to have large enough numbers from each region strengthen the validity of the study. Because the results are self-reported, some outcomes, such as number of deliveries, might be overestimated, but because the numbers are relatively close to those in the CMA survey, they have some support. The CIHI data are certainly much more accurate for measuring who is responsible for each delivery, but some family physician involvement is lost by considering only CIHI data.

Conclusion

Despite predictions to the contrary, family doctors have not become fringe players in maternity care in Canada. About 50% are still involved, with 19% providing intrapartum care and another 33% providing prenatal care. Larger percentages of family doctors in the western provinces and in rural Canada still attend deliveries. Women family doctors who provide intrapartum care attend substantially more births than their male colleagues. Compared with a decade ago, fewer family doctors attend births, but those who do attend more births each. The 33% of family physicians who provide only antenatal care lighten the workload of obstetricians. Despite the change in practice patterns, family doctors are still a vital component of maternity care. The CFPC has a responsibility to support and nurture this essential service to childbearing women in Canada.

Acknowledgment

This study used data from the CFPC's National Family Physician Workforce Database, which was part of the Janus Project: Family Physicians Meeting the Needs of Tomorrow's Society. Principal investigators for the database study were Calvin Gutkin, MD, CCFP, FCFP, and Raymond Pong, PHD. The Janus Project Coordinating Committee was chaired by Nick Busing, MD, CCFP, FCFP, and the Database Working Group was chaired by Tim Kerr, MD, CCFP, FCFP. The Centre for Rural and Northern Health Research was contracted to design the research strategy and to conduct the 1997 survey (Director, Raymond Pong; Senior Project Researcher, Andrew Irvine, MA). We thank Steve Slade of the CFPC for his contribution to the statistical analysis. The study was supported by Associated

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Medical Services, the CMA, the Royal College of Physicians and Surgeons, and Scotiabank.

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References

- 1. Klein M, Reynolds JL, Boucher F, Malus M, Rosenberg E. Obstetrical practice and training in Canadian family medicine: conserving an endangered species. Can Fam Physician 1984:30:2093-9.
- 2. Woodward C, Rosser W. Effect of medicolegal liability on patterns of general and family medicine in Canada. Can Med Assoc J 1988;141:291-9.
- 3. Bain ST, Grava-Gubins I, Edney R. The family doctor in obstetrics: who's looking after the shop? Can Fam Physician 1987;33:2693-701.
- 4. Levitt C, Kaczorowski J. Provision of intrapartum care by GP/FPs in Canada: an update. Can Med Assoc J 1999:160:815-6.
- 5. Kruse J, Phillips D, Wesley R. Factors influencing changes in obstetric care provided by family physicians: a national study. J Fam Pract 1989;28:597-602.
- 6. Balaban D, Rosenthal M, Ungemack J, Carlson B, Zervanos N. Obstetric care among family physicians in Pennsylvania. Trends, association with residency training and policy implications. J Fam Pract 1990;31:281-6.
- 7. Kruse J, Phillips D, Wesley R. Withdrawal from maternity care. A comparison of family physicians in Ontario, Canada and the United States. J Fam Pract 1990;30:336-41.
- 8. Smith L, Jewell D. Contribution of general practitioners to hospital intrapartum care in maternity units in England and Wales in 1988. BMJ 1991;302:13-6.
- 9. Buske L. GP/FPs and the delivery of babies. Can Med Assoc J 1997;156:144-5.
- 10. Statistics Canada Internet search. Ottawa, Ont; Statistics Canada; March 1999. Available at www.Statcan.Ca/english/pgdb/ people/population/demo04a.htm. Accessed 1999 March 1.
- 11. Ko G. Obstetrical data. Ottawa, Ont: Canadian Institute of Health Information; 1998.
- 12. Lofsky S. Obstetric human resources in Ontario, 1996-97. Ont Med Rev 1998;65:24-31.
- 13. Cochran WG. Sampling techniques. New York, NY: John Wiley and Sons; 1977.
- 14. Sullivan P, Buske L. Results from CMA's huge 1998 physician survey point to a dispirited profession. Can Med Assoc J 1998;159:525-8.
- 15. Reid AJ, Carroll JC. Choosing to practise obstetrics. What factors influence family practice residents? Can Fam Physician 1991;37:1859-67.
- 16. Rosser WW, Muggah H. Who will deliver Canada's babies

- in the 1990s? Can Fam Physician 1989;35:2419-22,2424.
- 17. Carroll JC. Maternal serum screening. Can Fam Physician 1994;40:1756-64.
- 18. Wilson L, Reid A, Midmer D, Biringer A, Carroll J, Stewart D. Antenatal psychosocial risk factors associated with adverse postpartum family outcomes. Can Med Assoc J 1996;154:785-99.
- 19. Reid A, Carroll J, Ruderman J, Murray M. Differences in intrapartum obstetric care provided to women at low risk by family physicians and obstetricians. Can Med Assoc J 1989:140:625-33.
- 20. Krikke E, Bell N. Relation of family physician or specialist care to obstetric interventions and outcomes in patients at low risk: a western Canadian cohort study. Can Med Assoc J 1989;140:637-43.
- 21. Klein M, Gauthier R, Robbins J, Kaczorowski J, Jorgensen S, Franco E, et al. Relationship of episiotomy to perineal trauma and morbidity, sexual dysfunction and pelvic floor relaxation. Am J Obstet Gynecol 1994;171(3):591-8.
- 22. Reynolds JL. Reducing the frequency of episiotomies through a continuous quality improvement program. Can Med Assoc J 1995;153:275-82.
- 23. Labrecque M, Baillargeon L, Dallaire M, Tremblay A, Pinault J, Gingras S. Association between median episiotomy and severe perineal lacerations in primiparous women. Can Med Assoc J 1997;156:797-802.
- 24. Lane CA, Malm SM. Innovative low-risk maternity clinic. Family physicians provide care in Calgary. Can Fam Physician 1997;43:64-9.
- 25. Osmun WE, Poenn D, Buie M. Dilemma of rural obstetrics. One community's solution. Can Fam Physician 1997;43:1115-9.
- 26. Carroll J, Brown J, Reid A. Female family physicians in obstetrics; achieving person balance. Can Med Assoc J 1995;153:1283-9.
- 27. Shapiro JL. Satisfaction with obstetric care. Patient survey in a family practice shared-call group. Can Fam Physician 1999;45:651-7.
- 28. Iglesias S, Gryzbowski S, Klein M, Gagne G, Lalonde A. Rural obstetrics. Joint position paper on rural maternity care. Can Fam Physician 1998;44:831-6 (Eng), 837-43 (Fr).
- 29. Etches D, Klein M, Handfield-Jones R. Advanced life support in obstetrics. Practical approaches to obstetric emergencies. Can Fam Physician 1998;44:2480 (Eng), 2481 (Fr).