Obstetrical Crisis in Canada: The decline of intrapartum care by Family Physicians

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Abstract: The proportion of family physicians (FPs) providing intrapartum care is rapidly declining. The involvement of FPs in intrapartum care is invaluable; they provide continuity, trust, and familiarity to women throughout pregnancy. FPs contribute significantly to obstetrical care in our nation; in 1995, they delivered half of the babies born in Canada. Since 1983, however, the percentage of FPs delivering babies has dropped from 68% to 18.7%. Reasons for this decline include the centralization of medical care, decline in interest, lifestyle factors and inadequate training. This review discusses research related to the decline, analysis of resident interest in obstetrics as part of family practice, as well as possible solutions for this impending crisis.

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According to the National Physician Database, the Canadian Institute for Health Information and the most recent Janus Project from the College of Family Physicians of Canada both report that the proportion of family physicians (FPs) including intrapartum care in their practice has been declining for the past 20 years.[1,2] This trend, if left unaddressed, may result in serious shortages of FPs delivering babies across Canada.

Why is it crucial to have FPs involved in intrapartum care? The most recent survey reveals that FPs delivered half of the babies born in Canada in 1995 and are therefore an integral part of obstetrical care.[3] Patients maintain relationships with their FPs throughout life and develop a trust and familiarity with them, making continuity of care extremely important to patients. Patients experience a decrease in anxiety when a known and trusted FP is present at delivery.[4] Finally, FPs perform fewer interventions to low-risk women during childbirth when compared to obstetricians. In tertiary care environments, the tendency for unnecessary interventions is common.[4] It has been demonstrated that the application of some technologies within the obstetrical specialty may unintentionally cause poorer outcomes for women who don't require intervention.[4] Therefore, it is feasible that low-risk pregnant women be followed by their FP throughout the entire term of pregnancy.

Throughout the decline in obstetrical care by FPs, a possible solution included integrating midwifery as an alternative in obstetrical care. Midwives are a limited but important resource; however, it is unlikely that they will meet the demands caused by this rapid decline in obstetrical care. There are relatively few midwives practicing, and many provinces do not have licensure programs instilled, making it difficult to both measure and evaluate their usefulness in obstetrical care in Canada at the present time.

How bad is the decline? The Janus Study

In 1983, 68% of FPs were attending births across Canada, while in 1995, only 32% of FPs were attending births.[5] The Janus Project, which analyzes how FPs are meeting the needs of patients in the evolving healthcare system, conducted two recent studies. The first, published in 2000, involved a randomly selected sample of FPs who were providing intrapartum care.[2] In 2002, a second study was published, involving a broader survey of all FPs registered in the IMS (Intercontinental Marketing Services) Health database.[6]

The original Janus study published in 2000 involved a random sample of FPs that were sent a survey. Of those responding, only 19.3% reported including intrapartum care in their practice. The average number of deliveries attended was 38.4/year, with women attending on average 55.4 births/year, and men attending 30 births/year. As well, 33% of FPs reported providing prenatal care only; however, a large proportion of this group of physicians referred their patients at an early stage of pregnancy.[2] Overall, 58.4% of physicians who were sent the survey responded. As in any survey, the response rate may be a limiting factor, as non-responders may not necessarily provide intrapartum care, leading the outcomes to be overestimated.

The most recent Janus Project report involved sending all FPs registered in the IMS Health database a survey.[6] Overall, 18.7% reported providing intrapartum care, with female FPs attending on average 53 births/year and men attending an average of 30 births/year. A response rate of 51.2% was achieved, again, limiting the information provided as perhaps an overestimation or inaccurate reporting of the actual number of FPs providing intrapartum care. From both of these studies, it is evident that there has been a rapid decline in FPs involved in intrapartum care.

In the 2000 study, FPs still providing intrapartum care showed a gradual increase in the number of births provided annually.[2] However, this increases the workload on each individual providing intrapartum care and adds a burden to the community for each physician retiring or discontinuing intrapartum care. This compensation will only sustain obstetrical care in Canada to a limited extent.

Reasons for FPs dropping intrapartum care

Why are FPs dropping intrapartum care as part of their practice? There have been a number of ideas proposed, including the centralization of medical care, lack of education, lifestyle factors, inadequate pay, fear of litigation and the rise of insurance costs.

Centralization of medical care:

Centralization of medical services has been a result of cuts and staffing inadequacies. In primary and even some

secondary care centers, staffing difficulties and budgetary constraints have often led to the discontinuation of maternal care units.[4] This leaves maternity care vulnerable as problematic births lack support from obstetrical colleagues. As a result, many women travel long distances in order to access safe and adequate intrapartum care. Other aspects of women's health care also decline, including counseling, office gynecology, and prevention.[4] Gradual dissemination of the rural medical community results in a high "outflow" of patients to urban centers, due to lack of support and quality care in rural areas. Overall, economic cutbacks lead to longterm cascades of events that precipitate negative outcomes in rural communities, where one third of Canadians reside.

Canadian childbearing women are at risk as safe maternal care is becoming more difficult to access. As well, without FPs to follow them throughout pregnancy, there is a lack of continuity of care and trust, both very important to the quality of care the Canadian healthcare system aims to provide.

Insurance rates vs. remuneration:
In Canada, litigation and insurance costs are not among the top concerns; however, some physicians justify leaving obstetrics due to financial issues. Previous studies have blamed the climbing insurance rates for the drop out of FPs from intrapartum care.[7] However, although insurance rates are climbing, just exactly how much are FPs being paid compared to their insurance rates?

FPs are remunerated for obstetrical services from Medical Services Insurance (MSI) according to Table 1. Premium fees are remunerated when deliveries are performed in off-peak hours.

Table 1: Obstetrical fees claimed by Family Physicians (MSI, as of April 22, 2003)

Event	Units	Remuneration ($)
Delivery	200	410.00
Multiple vaginal birth	65*	133.25
Premium fees	30-50%	143.50 - 205.00
Transfer during labour	100	205.00
Resuscitation of newborn	50	102.50
First examination - infant	13.5	27.68
Subsequent care - infant	13.5	27.68
Post partum visit	13.5	27.68
Hospital discharge fee	8	16.40
Post natal care visit	19	38.95

*** Per additional birth.**

With the average FP delivering 38.4 babies/year[2], this amounts to substantial remuneration. However, this statistic is highly variable among physicians. Gender differences have been noted amongst those providing intrapartum care: female FPs deliver, on average 55.4 babies/year while male FPs deliver an average of 30 babies/year.[2] This average is increasing annually as the number of FPs providing intrapartum care declines.[2]

Insurance rates for providing intrapartum care are approximately $4692.00/year for liability insurance, with a large proportion of the fee being rebated by the province (Camp Hill Family Medicine Clinic figures, Halifax, Nova Scotia). In summary, obstetrical care does not appear to be burdened by an unreasonable remuneration versus insurance ratio.

Education:
The current family medicine residency program involves two months of obstetrical rotation. Many residents do not feel adequately prepared for practice after this rotation.[9] Although ALSO (Advanced Life Support in Obstetrics) and ALARM (Advances in Labour and Risk Management) courses are available to residents and have proven to greatly increase confidence in the delivery room, they are not mandatory across the country in residency programs.[8]

Four years ago, Ruderman and colleagues explored how family residents' interests change over the course of their post-graduate training. Residents filled out the questionnaire at entry into the program, and upon exit. The study was performed over the course of 4 years and included 215 completed and usable questionnaires for analysis. Overall, 44% of the sample responded as "certain" or "likely" to do obstetrics upon graduation. However, by graduation, this figure dropped to 34%. On average, 58% of women and 31% of men entering the program demonstrated interest in practicing obstetrics upon exit. However, after graduation, only 49% of women and 22% of men were still interested in providing intrapartum care as part of their practice.[9]

Overall, residents entering with the intention to include intrapartum care in their family practice were highly likely to remain interested upon exit from the program. Likewise, those who did not show interest did not change their minds upon exit.[9] Therefore, it is not the interested individuals that are of concern; it is the increase in the number of individuals lacking initial interest that is the problem. What can we do to increase interest, or provide more confidence in intrapartum care?

POSSIBLE SOLUTIONS

Education
When asked how many deliveries residents thought they would need to attend during residency before they felt comfortable practicing obstetrics, respondents in the Ruderman study reported an average of 68 deliveries.[9] The actual number of births attended by residents in the family medicine residency program in the Ruderman study was 56, with over 85% of the respondents delivering at least 20 babies.[9] Overall, there was no significant difference between the number they estimated to be adequate to feel comfortable delivering on their own and the actual number of deliveries they were able to perform throughout their residency.[9]

However, there was a discrepancy between the number of patients that residents thought they needed to follow through all stages of intrapartum care (44.7) and the actual number they reported following (8.5). Thus, there is perhaps a general lack of confidence in intrapartum care as a whole, rather than a lack of confidence in the delivery room. This suggests that residency training should include more training in all aspects of maternal care, not necessarily just deliveries.

Programs such as ALARM and ALSO are instrumental in educating residents and physicians and developing obstetrical skills related to deliveries. However, a more rigorous curriculum of pre- and postnatal care may address the inadequacies felt by residents who lose interest in practicing obstetrics. More experience in continuity of care is essential in order to allow residents to feel confident in all aspects of intrapartum care. In Ruderman's study, at graduation, 30% stated that the residency program had "turned them off" or made them "less likely" to do obstetrics, while another 35% reported that the program made "no difference". A final 35% reported that the residency program "turned them on" or made them "more likely" to do obstetrics. Only one third were satisfied with the residency program. This is perhaps an indication as to where we should start in order to curb the decline in intrapartum care. What happens in those two years of residency that turns 30% of residents off of obstetrics?

This discussion has focused on the educational aspect of theories pertaining to the decline of intrapartum care. In reality, it is one aspect that is highly subject to influence in the short term, and perhaps one of the only ones amenable to change at the present time.

Trends in Obstetrical Practice

In other studies pertaining to residents, there seem to be two trends that predominate in the practice of obstetrics among FPs. First, there are a high percentage of females interested in practicing obstetrics upon graduation. This "feminization" of medicine comes as a surprise; historically, females have been known to predominantly undertake less technical and more predictable practices due to family responsibilities.[10] Second, physicians planning on practicing in rural settings were also more interested in providing obstetrical care.[11] This finding is extremely important with the centralization of medical care and loss of rural support to physicians. However, despite this interest, there is still an overall decrease in rural area FPs as a whole.[11]

Shared-Call Practices

Further solutions to the decline in intrapartum care include addressing lifestyle issues. A proposed solution that has been very beneficial to medical communities across Canada is the shared-call practice.[12,13] Patient satisfaction is of great importance: although pre- and postnatal care may be followed by the patient's FP, the patient's main physician may not necessarily attend the delivery. In a study by Shapiro in 1999, however, patients were satisfied overall with this form of obstetrical care. Of the patients responding to the survey (70%), the primary physician did not make 96% of the deliveries. However, 88% of the patients were satisfied with their level of care and over 79% of the patients said they would choose shared-call again.[13]

Role Models

Evidence has shown in resident surveys that early role models have played a pivotal role in peaking early interest in obstetrical care.[9] Furthermore, reports have shown that residents with interest early on in their medical careers were most likely to provide intrapartum care once in practice.[9] Exposure of undergraduates to pique early interest in obstetrics is an important avenue to explore. Programs such as Dalhousie's "deliver a baby night" and optional electives in Women's Health are very important in exposing medical students early on. The "deliver a baby night" program at Dalhousie university offers undergraduates in medicine an evening shift on the maternity ward at the IWK. Students are able to shadow, assist and experience births firsthand. Good role models are essential in order to pique interest, and positive experiences early in medical education may curb this downward trend.

CONCLUSION

Overall, it is evident that there has been a gradual decline in intrapartum care by FPs in Canada over the past 20 years. Factors have included the centralization of medical care due to budgetary cuts, lack of interest, inadequate training, and lifestyle factors. Solutions to this impending problem include analysis of the residency programs across the country, consideration of more shared-call practices, and an increase in undergraduate exposure and positive experience early on. The most important and attainable change at the present time seems obvious: education. Exposure of undergraduates, residents and FPs to training and upgrading of skills is essential to maintaining FP involvement in intrapartum care.

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