

Addressing fragmented early pregnancy care in Canada

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In this issue of *CMAJ*, Jain and colleagues argue for multifactorial screening for people at risk of early-onset preeclampsia, and acetylsalicylic acid (ASA) initiation for those who screen positive.¹ Multifactorial screening at about 12 weeks' gestation calculates risk according to clinical risk factors and results of uterine artery ultrasonography and biochemical testing. If patients screen positive, taking daily ASA until 36 weeks of pregnancy substantially reduces rates of early-onset preeclampsia.¹ Despite its proven success, uptake of this integrated preventive strategy has been slow,² and barriers to its implementation reveal just how fragmented early pregnancy care is in Canada.

The introduction of a new first-trimester screening tool provides an opportunity to critically examine the provision of early pregnancy care in Canada. The proportion of people without adequate prenatal care has risen over the last decade,³ and 1 in 5 pregnant people miss the window of opportunity for first-trimester genetic screening, especially in rural areas.⁴

Preconception and first-trimester pregnancy care are typically provided by a patient's family physician or a walk-in clinic,⁵ but reproductive-aged adults are least likely to have a primary care provider,⁶ especially with the current crisis in primary care.⁷ Moreover, the proportion of family physicians providing comprehensive maternity care has dwindled,⁵ creating a widening gap in early pregnancy care. The number of patients requiring such care exceeds the current capacity of obstetricians and midwives to replace the attrition of family physicians. Roughly 40% of pregnant patients in Ontario visit an emergency department during or shortly after pregnancy,⁸ and the inability to access streamlined early pregnancy care is likely a major contributor.⁹

Because maternal morbidity from preeclampsia is increasingly common,¹⁰ this early preeclampsia prevention strategy is timely and relevant to any person in early pregnancy. Hypertensive disorders of pregnancy, especially severe early-onset preeclampsia, pose a serious risk to the gestational parent, fetus and newborn.¹¹ Without a widespread preventive strategy, the problem is expected to worsen in Canada. For example, pre-pregnancy diabetes, obesity and hypertension — conditions associated with preeclampsia, the incidence of which is increas-

ing — affect 1%, 18% and 1% of births in Canada, respectively.¹² To date, preeclampsia prophylaxis with ASA has had a low uptake in pregnant people in Canada,² in part owing to a lack of access to providers of early pregnancy care and timely access to ultrasonography.

Many jurisdictions in Canada lack ultrasonographers trained in uterine artery Doppler measurement and standardized laboratory services for measuring placental growth factor — a component of multimodal screening. People in rural areas might need to travel long distances to a centre equipped with these imaging and laboratory services. Even in urban centres, patients and providers report difficulty in accessing radiologist-interpreted ultrasonography in early pregnancy; lack of timely access to ultrasonography contributes to first-trimester use of the emergency department.¹³ Alarming, in Ontario, 4 in 5 people with symptoms of pregnancy loss seek care in an emergency department,⁸ and patients often receive follow-up care through a repeat emergency department visit.¹⁴

Health anxiety and the inability to access urgent prenatal care services play an important role in the decision process to visit the emergency department.¹⁵ Thus, introducing multifactorial screening within primary care, or having expectations about how primary care providers manage a positive screen result, requires careful consideration of the aforementioned factors. Once screening is complete, people in early pregnancy will need to receive their results promptly to permit discussion with their informed care provider about initiating ASA. Hence, accessible and unambiguous guidance for providers to counsel patients who screen positive is paramount, as a patient's lack of knowledge about the benefits of ASA and the risks of preeclampsia decrease adherence.¹⁶

Although similar barriers were historically overcome in the case of serum screening for trisomies and open neural tube defects,¹⁷ unrealized consequences of widespread multimodal screening for early preeclampsia may exist, especially at the recommended fixed false-positive rate of 10%.¹⁸ Even marginal increases in referrals to obstetrician-gynecologists and maternal-fetal medicine subspecialists may add to overwhelmed

maternal care systems facing critical shortages of health human resources.¹⁹ For example, if a person in early pregnancy is identified as being “at high risk of developing preterm preeclampsia,” might there ensue a cascade of additional surveillance, including costly referral to a specialist at a distant centre? To mitigate unintended referrals to subspecialists for patients who screen positive, clear communication should be given to patients and providers to avoid falsely labelling patients when scaling regional and provincial programs.

Introducing a preeclampsia prevention strategy creates an opportunity for improving first-trimester care provision. Rather than putting the onus on pregnant people or their individual family physicians to navigate fractured systems, some peer countries currently use dedicated interdisciplinary teams that are readily accessible and navigable in early pregnancy and that are equipped to manage early complications, like miscarriage.^{20,21}

Patients in early pregnancy need centralized and streamlined access to early pregnancy care, prenatal care, care for complications and mitigation of risks posed by pre-existing conditions. Jain and colleagues’ commentary on multimodal screening for early preeclampsia¹ serves more broadly as a reminder that Canada’s fractured early pregnancy care systems can be mended.

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