

Women's disabilities affect likelihood of prenatal care and negative outcomes

Apr 1, 2022 Contemporary OB/Gyn Journal—MJH Life Sciences

[Michele Meyer](#)

[Consortium|Prenatal Health|On the Pulse](#)

A study published in American Journal of Preventive Medicine compared prenatal care in women with various disabilities.

A new study published in the *American Journal of Preventive Medicine* shows that babies born to mothers with disabilities are more likely to die or suffer complications, which often leads to costly medical care post-birth. ¹⁻³

The investigators conducted a large-scale, population-based cohort study spanning 1,069,388 births in Ontario, Canada. Females aged 15-49 years who gave birth to both live and stillbirth babies born between 2003 and 2017 were followed from conception to delivery.

Toronto's Institute for Clinical Evaluative Sciences provided the health and demographic numbers for Ontario province's 14.7 million residents.

The researchers compared prenatal care between women without disabilities (n=953,766) and with disabilities (n=115,622).

The latter were split into groups—sensory (vision or hearing loss), physical (including musculoskeletal and neurologic), intellectual/developmental (including autism spectrum disorder, fetal alcohol spectrum disorder, and autosomal or chromosomal anomalies), or multiple disabilities.

The Revised Graduated Prenatal Care Utilization Index² determined the adequacy of physician visits, as none (0 visits), fewer than recommended (1 to 10 visits), recommended (11 to 14 visits), and more than recommended (15 or more visits).^{[3],[4]}

Those guidelines suggested the first appointment with a family physician or obstetrician occur within 8 to 10 weeks of pregnancy. Gestational age was judged by first trimester ultrasound in 70% of cases and last menstrual period in the remainder.^[5]

Qualitative studies suggest that—as with very young or low-income women^{[6]-10}—these mothers face barriers to prenatal care, such as inaccessible spaces, negative attitudes among providers, and lack of resources tailored to their needs.^{[7]-10}

That can lead to delays in starting prenatal care and fewer visits overall—both dangerous to babies' health.^{[8]-10}

“Adequate prenatal care reduces risks of adverse perinatal outcomes, such as preterm birth, and perinatal mortality,” noted Fareha Nishat, MPH, University of Toronto, lead author of the study.^[9]

The researchers examined this understudied group to determine if the type of disability made a difference in mothers seeking prenatal care—and found that it did.

Despite Canada's universal health care—with no-cost prenatal visits—those with disabilities were treated differently.

“Particular vulnerability was observed in women with intellectual/developmental disabilities,” the study authors wrote. Those mothers were least likely to get timely and sustained prenatal care. Along with women with hearing loss, those mothers were late to see a doctor and then sought care fewer than recommended times.

Those with physical disabilities, compared to those without, had increased odds of intensive prenatal care (AOR=1.22, 95% CI=1.19, 1.24) and decreased odds of no prenatal care (AOR=0.94, 95% CI=0.89, 0.99) vs adequate care.

Women with sensory disabilities had increased odds of intensive (AOR=1.11, 95% CI=1.08, 1.14), inadequate (AOR=1.06, 95% CI=1.02, 1.09), and no (AOR=1.24, 95% CI=1.14, 1.35) prenatal care.

Women with intellectual/developmental disabilities had increased odds of inadequate (AOR=1.25, 95% CI=1.08, 1.44) and no (AOR=1.64, 95% CI=1.16, 2.34) prenatal care.

Women with multiple disabilities had increased odds of intensive (AOR=1.41, 95% CI=1.32, 1.51) and inadequate (AOR=1.14, 95% CI=1.05, 1.22) prenatal care.

Given the high rates perinatal complications, “inadequate prenatal care in this population is a lost opportunity to address modifiable risk factors, such as chronic disease management, smoking, and obesity,” the authors noted.

They urged ob-gyns to collaborate with women having disabilities—10% of reproductive age females—on better addressing their needs and access to care, and not just in Canada.^[10]

“Only 1 population-based study of 33,383 US women with disabilities and 6.4 million without disabilities has directly examined the relationship between disability and prenatal care adequacy,” the authors noted.^[11]

“(Our) findings show the need to address barriers to timely and sustained prenatal care among women with disabilities,” they said, recommending health care provider training and longer appointments. “Services should be inclusive, accessible, and respectful so that women with disabilities maintain autonomy and dignity.”^[12]

References

1. MacKay AP, Berg CJ, Atrash HK. Pregnancy-related mortality from preeclampsia and eclampsia. *Obstet Gynecol*. 2001;97(4):533–538. doi:10.1016/S0029-7844(00)01223-0
2. Alexander GR, Kotelchuck M. Quantifying the adequacy of prenatal care: a comparison of indices. *Public Health Rep*. 1996 Sep-Oct;111(5):408-18; discussion 419. PMID:8837629; PMCID:PMC1381783
3. Schuurmans N, Blake J. Healthy beginnings: Giving your baby the best start, from preconception to birth.; 2017. Accessed February 11,

2022. <https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1475503>

4. Kilpatrick SJ, Papile LA, Macones GA, eds. Guidelines for perinatal care. 8th ed. Itasca, IL: American Academy of Pediatrics. 2017. <https://ebooks.aapublications.org/content/9781610020886/9781610020886>. Accessed July 9, 2021.
5. You JJ, Alter DA, Stukel TA, et al. Proliferation of prenatal ultrasonography. *CMAJ*. 2010 Feb 9;182(2):143-51. doi:10.1503/cmaj.090979. Epub 2010 Jan 4. PMID:20048009; PMCID:PMC2817321
6. Heaman MI, Martens PJ, Brownell MD, et al. Inequities in utilization of prenatal care: a population-based study in the Canadian province of Manitoba. *BMC Pregnancy Childbirth*. 2018 Nov 1;18(1):430. doi:10.1186/s12884-018-2061-1. PMID:30382911; PMCID:PMC6211437
7. Mitra M, Parish SL, Clements KM, Cui X, Diop H. Pregnancy outcomes among women with intellectual and developmental disabilities. *Am J Prev Med*. 2015 Mar;48(3):300-8. doi:10.1016/j.amepre.2014.09.032. Epub 2014 Dec 26. PMID:25547927
8. Partridge S, Balayla J, Holcroft CA, Abenheim HA. Inadequate prenatal care utilization and risks of infant mortality and poor birth outcome: a retrospective analysis of 28,729,765 U.S. deliveries over 8 years. *Am J Perinatol*. 2012 Nov;29(10):787-93. doi:10.1055/s-0032-1316439. Epub 2012 Jul 26. PMID:22836820.
9. Tarasoff LA, Ravindran S, Malik H, Salaeva D, Brown HK. Maternal disability and risk for pregnancy, delivery, and postpartum complications: a systematic review and meta-analysis. *Am J Obstet Gynecol*. 2020 Jan;222(1):27.e1-27.e32. doi:10.1016/j.ajog.2019.07.015. Epub 2019 Jul 12. PMID:31306650; PMCID:PMC6937395
10. Centers for Disease Control and Prevention (CDC). Prevalence and most common causes of disability among adults--United States, 2005. *MMWR Morb Mortal Wkly Rep*. 2009 May 1;58(16):421-6. PMID:19407734.
11. Horner-Johnson W, Biel FM, Caughey AB, Darney BG. Differences in prenatal care by presence and type of maternal disability. *Am J Prev Med*. 2019 Mar;56(3):376-382. doi:10.1016/j.amepre.2018.10.021. PMID:30777157; PMCID:PMC6402767

12. Renfrew MJ, McFadden A, Bastos MH, et al. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *Lancet*. 2014 Sep 20;384(9948):1129-45. doi:10.1016/S0140-6736(14)60789-3. Epub 2014 Jun 22. Erratum in: *Lancet*. 2014 Sep 20;384(9948):1098. PMID:24965816