

## OPINION

# The Medicalization Of Childbirth

A necessary system for safety or a lack of evidence-based practice?

**LAUREN FILBEY**

Bachelor of Science in Nursing Class of 2020,  
McMaster University  
Correspondence: [filbeyl@mcmaster.ca](mailto:filbeyl@mcmaster.ca)

### ABSTRACT

There has been an alarming trend in Canadian hospitals to over-medicalize the process of childbirth. The attribution of pathology to childbearing has led to an increased use of medical interventions that elevates healthcare costs and postoperative risk without improving the birthing experience for mothers and newborns. Nurses occupy an optimal position for addressing this problem because of the significant duration of contact they have with patients and their professional competency in non-pharmacological approaches. This is reflected in the positive outcomes linked to the use of continual labour support, an intervention largely performed by nurses and midwives.

### INTRODUCTION

Medicalization is the process of defining a human condition as a pathology that should be managed with a medical framework consisting of diagnosis and treatment.<sup>1</sup> However, pregnancy and the process of delivery are neither inherently pathological nor a disease state.

Prior to the 18th century, childbirth was entrenched within the realm of midwifery.<sup>2</sup> As critical health issues related to labour were identified, physicians became more involved in the childbirthing sphere.<sup>2</sup> Medical interventions provide life-saving measures for childbirth that should not be devalued. For example, from 2003-2009, over half of maternal deaths worldwide could be attributed to preventable complications such as sepsis, hemorrhage, or hypertensive disorders.<sup>3</sup> However, situations that warrant medical services rather than natural birthing strategies have not been firmly established, contributing to the overuse of medical interventions.

The incorrect attribution of pathology to childbirth fosters the overuse of medical interventions including inductions, vacuum-assisted deliveries, and caesarean sections (CS).<sup>4-8</sup> The rate of CS in Canada has risen 10% since 1995 to a current total of approximately 25% of all births.<sup>5,9</sup> A cross-sectional analysis concluded that labour is induced in 10% of all first-time mothers without appropriate medical indication.<sup>10</sup> Additionally, vacuum-extraction deliveries have increased by 56% in Canada since 1991.<sup>8</sup>

Excessive use of medical interventions during delivery are justified on the pretext of safety but are associated with decreased maternal autonomy, increased negative clinical outcomes, and escalating healthcare costs.<sup>2,5-7</sup> Canadians should call for systems-level action to provide care that prioritizes the well-being of women and newborns.

### OVERUSE OF THE SUPINE POSITION

The practice of placing mothers in a supine position during delivery is commonly used despite its association with negative clinical outcomes.<sup>11</sup> The supine position offers optimal accessibility for the healthcare provider which has contributed to its popularity amongst clinicians.<sup>7,12</sup> However, since maternal position during labour impacts the process and outcomes of childbearing, the decision therefore should be based on evidence rather than convenience.<sup>6</sup> A number of studies demonstrated lower length of labour, self-reported pain, amount of assistance needed, and risk of abnormal fetal heart rates when delivering in the upright position.<sup>13</sup> In comparison, women who labour in a supine position report higher rates of dissatisfaction with their birth and increased perineal trauma.<sup>7,14-16</sup> Given these results, the standard position for delivery should be reconsidered and mothers should be made aware of the numerous positions amenable to birth.

### BARRIERS TO MOVEMENT

The use of medical interventions often restricts movement, confining women to the supine position. This practice conflicts with the World Health Organization's recommendations for intrapartum care which suggests that mobility is a critical factor in shaping a positive childbirth experience.<sup>17</sup> Hormonal studies have found that increased time spent in the supine position increased release of catecholamines, which are

hormones associated with emotional responses of stress and fear.<sup>18</sup> Two commonly used interventions that restrict movement are electronic fetal heart rate monitoring (EFM) and induction.

EFM is widely used with the aim of identifying fetal deterioration.<sup>19</sup> However, its capacity to detect true fetal distress remains quite low.<sup>19</sup> Since its installation in hospitals, there has not been a substantial decrease in fetal morbidity.<sup>20</sup> The usage of EFM largely limits a woman's capacity to change position and often keeps her confined to bed, directly limiting her options of feasible birthing positions.

Induction is intended to promote labour in women past 41 weeks of gestation to prevent complications associated with carrying a fetus past term. However, surveys from developed nations have found that up to 25% of deliveries were induced despite not surpassing gestational term.<sup>21</sup> Pharmacological induction of labour often requires the insertion of an IV, which complicates movement and promotes stasis, further inclining women to labour in the supine position.<sup>22</sup>

## INCREASING CS RATES IN CANADIAN WOMEN

When necessary, CS can save the lives of mothers and babies and minimize the risk of serious complications.<sup>4</sup> As previously discussed, the rates of CS in Canada have recently escalated significantly. The World Health Organization has identified a CS rate greater than 15% to be futile; this threshold raises concerns that many CS are medically unnecessary.<sup>4,5,9</sup>

A CS can result in severe acute and chronic complications. Acute complications include intra- and post-operative bleeding, wound infections or sepsis, and even death.<sup>4,23</sup> Long-term complications include menstrual irregularities, ectopic pregnancy, abnormal placentation, and pelvic adhesions that generate recurrent pain.<sup>24</sup> The escalating usage of CS suggests that clinicians are not fully considering the gravity of this procedure and its ramifications for mothers.

Economic burdens must also be considered in the scrutiny of increasing CS rates. In fact, a CS in Canada can be 45% more expensive than a vaginal delivery.<sup>5,25</sup> The current CS practices place increased economic stress on the already strained Canadian healthcare system.<sup>5</sup>

It is recognized that CS rates in Canada have been steadily rising; however, causative factors have not been widely identified. Fear of malpractice lawsuits engendering a culture of defensive medicine has been implicated in this trend, as it inclines physicians to perform CS on complex birthing situations.<sup>23</sup> Further, declining birth rates among North American women could be encouraging financially-motivated physicians to supplement their incomes by providing excessive care in the form of unnecessary CS.<sup>26</sup>

## THE ROLE OF THE NURSE IN THE BIRTHING PROCESS

Evidence demonstrates that continuous support for labouring women from nurses promotes high rates of satisfaction in women and decreases the need for mechanical or surgical interventions.<sup>11,27</sup> Women who received continuous labour support were more likely to experience spontaneous vaginal births, experience less pain, feel more active in the decision-making

process, and deliver babies with higher APGAR scores.<sup>11,27</sup>

Nurses are often at the patient bedside during delivery and therefore play a critical role in encouraging women in labour to assume more control in the birthing process. Nursing education around the benefits of upright birthing positions and continuous labour support during the intrapartum period could help improve the birthing experience for mothers and newborns.

## CONCLUSION

The process of pregnancy and childbirth should not be considered inherently pathological or high-risk. The medicalization of childbirth is an unnecessary trend that is increasing in Canada without medical indication. Over-medicalization of childbirth creates negative subjective experiences and clinical outcomes for mothers and newborns and places an economic burden on the Canadian healthcare system. Ultimately, medical approaches to childbirth must be re-evaluated to allow current practices to reflect evidence-based research. Canadians should call for systems-level action to encourage care that facilitates the well-being of women and newborns.

### REVIEWED BY: JAMIE SASSI

Jamie is a 2nd year student in the BHSc Midwifery program at McMaster University. She is a research assistant for a project investigating the impact of midwifery services in underserved populations. She is also the co-chair of the McMaster Interprofessional Student Collaborative, a student-run organization that promotes interprofessional collaboration.

### EDITED BY: KRISTEN GALE

1. Merriam-Webster's Collegiate Dictionary. 11th ed. Springfield, MA: Merriam-Webster Incorporated; 2003. 1162 p.
2. Cahill HA. Male appropriation and medicalization of childbirth: an historical analysis. *J Adv Nurs*. 2001;33(3):334-342. Available from: doi:10.1046/j.1365-2648.2001.01669.x.
3. Say L, Chou D, Gemmill A, Tuncalp O, Moller AB, Daniels J, et al. Global causes of maternal death: A WHO systematic analysis. *Lancet Glob Health*. 2014;2(6):e323-33. Available from: doi:10.1016/S2214-109X(14)70227-X.
4. Kingdon C, Downe S, Betran, AP. Non-clinical interventions to reduce unnecessary caesarean section targeted at organisations, facilities and systems: Systematic review of qualitative studies. *PLoS ONE*. 2018;13(9):1-16. Available from: doi:10.1371/journal.pone.0203274.
5. Bermudez-Tamayo C, Johri M, Chaillet N. Budget impact of a program for safely reducing caesarean sections in Canada. *Midwifery*. 2018;60:20-6. Available from: doi:10.1016/j.midw.2018.01.22.022.
6. Diorgu FC, Steen MP, Keeling JJ, Mason-Whitehead E. Mothers and midwives perceptions of birthing position and perineal trauma: An exploratory study. *Women Birth*. 2016;29(6):518-523. Available from: doi:10.1016/j.wombi.2016.05.002.
7. De Jonge A, Teunissen TAM, Lagro-Janseer ALM. Supine position compared to other positions during the second stage of labor: A meta-analytic review. *J Psychosom Obstet and Gynecol*. 2004;25(1):35-45. Available from: doi:10.1080/01674820410001737423.
8. Canadian Institute for Health Information (CIHI). *Giving birth in Canada: A regional profile*. Ottawa: CIHI; 2004. 11 p.
9. Canadian Institute for Health Information (CIHI). *Patient cost estimator: Methodological: Notes and glossary*. Ottawa: CIHI; 2015. 15 p. Report No.:9.
10. Davey MA, King J. Caesarean section following induction of labour in uncomplicated first births - A population-based cross-sectional analysis of 42,950 births. *BMC Pregnancy and Childbirth*. 2016;16(92). Available from: doi:10.1186/s12884-016-0869-0.
11. Chow J. *Canadian Maternity and Pediatric Nursing*. 1st ed. Philadelphia: Wolters Kluwer; 2013. 1968 p.
12. Boyle M. Childbirth in bed: The historical perspective. *Pract Midwife*. 2003;3(11):21-4. Available from: <https://europepmc.org/abstract/med/12026562>. [cited 2019 Mar 6].
13. da Silva F, de Oliveira SM, Bick D, Osava RH, Tuesta EF, Riesco ML. Risk factors for birth-related perineal trauma: Cross-sectional study in a birth centre. *J Clin Nurs*. 2012;21(15-16):2209-18. Available from: doi:10.1111/j.1365-2702.2012.04133.x.
14. de Jong PR, Johanson RB, Baxen P, Adrians VD, Van der Westhuisen S, Jones PW. Randomised trial comparing the upright and supine positions for the second stage of labour. *Br J Obstet Gynaecol*. 1997;104(5):567-71. Available from: doi:10.1111/j.1471-0528.1997.tb11534.x.
15. Waldenström U, Gottvall K. A randomized trial of birthing stool or conventional semi recumbent position for second-stage labor. *Birth*. 1991;18(1):5-10. Available from: doi:10.1111/j.1523-536X.1991.tb00045.x.
16. Marttila M, Kajanaja P, Ylikorkala O. Maternal half-sitting position in the second stage of labour. *J Perinatal Med*. 1983;11(6):286-89. Available from: doi:10.1515/jpme.1983.11.6.286.
17. World Health Organization. *WHO recommendations: intrapartum care for a positive childbirth experience*. Geneva: World Health Organization; 2018. 210 p. Report No.: 978-92-4-155021-5.
18. Ondeck M. Healthy birth practice #2: Walk, move around, and change position throughout labour. *J Perinat Educ*. 2014;24(4):188-93. Available from: doi:10.1891/1058-1243.23.4.188.
19. Nageotte MP. Fetal heart rate monitoring. *Semin Fetal Neonatal Med*. 2015;20(3):144-8. Available from: doi:10.1016/j.siny.2015.02.002.
20. Freeman RK. Intrapartum fetal monitoring - A disappointing story. *N Engl J Med*. 1990;322(9):624-6. Available from: doi:10.1056/NEJM199003013220910.
21. Caughey AB, Sundaram V, Kaimal AJ, Cheng YW, Gienger A, Little SE, et al. *Maternal and neonatal outcomes of elective induction of labor*. Rockville (MD): Agency for Healthcare Research and Quality (US); 2009. 257 p. Report No.: 09-E005.
22. Lucas M, Bricker L. Intravenous prostaglandin for induction of labour. *Cochrane Database Syst Rev*. 2000;(4):CD002864. Available from: doi:10.1002/14651858.CD002864.
23. Dubay L, Kaestner R, Waidmann T. The impact of malpractice fears on caesarean section rates. *Health Econ*. 1999;18(4):491-522. Available from: doi:10.1016/S0167-6296(99)00004-1.
24. Moro F, Marvelos D, Pateman K, Holland T, Hoo WL, Jurkovic D. Prevalence of pelvic adhesions on ultrasound examination in women with a history of Caesarean section. *Ultrasound Obstet Gynecol*. 2015;45(2):223-8. Available from: doi:10.1002/uog.14628.
25. Halpern S. SOGC joint policy statement on normal childbirth. *J Obstet Gynecol Can*. 2009;31(7):602-40. Available from: doi:10.1016/S1701-2163(16)34236-0.
26. Gruber J, Owings M. Physician financial incentives and caesarean section delivery. *RAND J Econ*. 1996;27(1):99-123. Available from: doi:10.2307/2555794.
27. Hodnett ED, Gates S, Hofmeyr GJ, Sakala C. Continuous support for women during childbirth. *Cochrane Database of Syst Rev*. 2013;7. Available from: doi:10.1002/14651858.