

Peer-reviewed Section

Research Proposal: Attitudes and Beliefs of Nurses' Towards Pushing Method in the Second Stage of Labour

Susan Lin^a, RN, MSN(C)

^aUBC School of Nursing; Vancouver Coastal Health

Labour and birth is a powerful, emotionally intense and normal physiological phenomenon. Culminating in the birth of a newborn, the pushing stage of labour is perhaps the most challenging, yet rewarding, phase. Nurses play a critical role in women's birth experiences by providing professional guidance, support, and advice. In particular, they advise women about pushing methods during the second stage of labour. Although midwifery care is increasing, 85% of births in British Columbia remain under the care of physicians and nurses in medicalized hospital settings (Dedyna, 2012). In hospitals, nurses are the care providers who are most involved during women's labour and birth as they are present throughout the entire process. Accordingly, nurses strongly influence the pushing technique used by women.

Although research evidence supports the use of spontaneous pushing, Valsalva pushing remains at the forefront of practice. Since personal and professional attitudes and beliefs shape practice decisions, actions, and approaches (Ajzen, 1991; Ajzen & Albarracin, 2007; Madden, Ellen, & Ajzen, 1992), knowledge of nurses' ideologies and philosophies towards pushing is fundamental to understanding the rationale and justifications for this dissonance in research evidence and practice.

Background

Women in labour use two different pushing methods. Spontaneous pushing, also known as non-directed, self-directed, uncoached or physiological pushing, describes an open-glottis technique where women are encouraged to listen to their bodies and bear down with their natural urges (Bosomworth & Bettany-Saltikov, 2006; Chalk, 2004; Martin, 2009; Prins, Boxem, Lucas, & Hutton, 2011; Roberts & Hanson, 2007). Conversely, Valsalva pushing, also known as directed or coached pushing, describes a closed-glottis technique where women are instructed to bear down for as long and as hard as they can, typically to a count of ten seconds, for three sustained pushes per contraction (Bosomworth & Bettany-Saltikov, 2006; Chalk, 2004; Martin, 2009; Prins et al., 2011; Roberts & Hanson, 2007). Although women instinctively use spontaneous pushing efforts, care providers routinely direct women to use Valsalva pushing (Bosomworth & Bettany-Saltikov, 2006; Chalk, 2004; Martin, 2009; Prins et al., 2011; Roberts & Hanson, 2007). Research evidence, however, does not support the routine use of Valsalva pushing, and instead associates it with potential risks to maternal

and fetal wellbeing (Bloom, Casey, Schaffer, McIntire, & Leveno, 2006; Lemos, Dean, & de Andrade, 2011; Low et al., 2012; Prins et al., 2011; Roberts & Hanson, 2007; Schaffer et al., 2005; Yildirim & Beji, 2008).

Multiple studies have explored the effects of the two pushing methods on various fetal and maternal outcomes, including duration of second stage, degree of perineal injury, urodynamic indices, maternal satisfaction, newborn APGAR scores, and umbilical cord gases (Bloom et al., 2006; Lemos et al., 2011; Low et al., 2012; Prins et al., 2011; Schaffer et al., 2005; Yildirim & Beji, 2008). A current systematic review by Prins et al. (2011) of randomized controlled trials comparing the two pushing methods did not support the routine use of Valsalva pushing. Although Prins et al. (2011) concluded no significant differences in fetal outcomes, they reported poorer urodynamic measures in women who used Valsalva pushing compared to women who used spontaneous pushing. While there were no significant differences between most other measures, the authors importantly emphasized there was no evidence to support the routine use of Valsalva pushing. Although Prins et al. (2011) reported a shorter duration of second stage with Valsalva pushing, they emphasized the clinical significance of this finding is debatable. Based on this comprehensive review, the authors concluded care providers should support women to choose their own method of pushing and ideally encourage spontaneous pushing rather than Valsalva pushing.

Although findings are at times insignificant, studies consistently conclude Valsalva pushing does not infer any added benefits and is associated with potential risks compared to spontaneous pushing. Thus, research evidence supports the use of spontaneous pushing, especially in the absence of indications requiring expedited delivery (Bloom et al., 2006; Lemos et al., 2011; Low et al., 2012; Prins et al., 2011; Schaffer et al., 2005; Yildirim & Beji, 2008). However, since Valsalva pushing remains the most common method used, there is a visible discord in current practice and research evidence.

Problem Statement

Personal and professional attitudes and beliefs shape practice decisions, actions, and approaches (Ajzen, 1991; Ajzen & Albarracin, 2007; Madden et al., 1992). Accordingly, the attitudes and beliefs of nurses' towards pushing strongly influence their approaches to and guidance of pushing in labour. Knowledge of nurses' perspectives is therefore fundamental to understanding the underlying principles and ideologies for the continued discord between research evidence and practice. Although multiple studies have explored the effects of the two pushing methods on various fetal and maternal outcomes, there is limited research exploring the attitudes and beliefs of nurses' towards pushing. This dearth of research reporting nurses' perceptions thus represents a gap in current literature.

Purpose

The purpose of my proposed research is to explore nurses' attitudes and beliefs towards pushing in the second stage of labour. Specifically, I will explore nurses' perceptions of Valsalva and spontaneous pushing in order to understand the rationale, influences and decision-making processes underpinning the support of one pushing method over the other.

Research Question

This study will aim to answer the following central question:

1. What are the attitudes and beliefs of nurses' towards pushing method in the second stage of labour?

Exploration of this central question will be supported by the following subquestions:

- i) How do nurses perceive Valsalva pushing?
- ii) How do nurses perceive spontaneous pushing?
- ii) What factors influence nurses' decision-making related to the pushing method encouraged during the second stage of labour?
- iv) What social and/or structural pressures do nurses perceive influence their support of Valsalva or spontaneous pushing
- v) How do nurses rationalize encouraging one pushing method over the other?

Theoretical Perspective

I will be using the theory of planned behaviour (Ajzen, 1991; Ajzen & Albarracin, 2007) as the theoretical framework for this study. An extension of the theory of reasoned action, the theory of planned behaviour is used to predict, explain, and understand human behaviour and actions (Ajzen, 1991; Ajzen & Albarracin, 2007). Although rooted in psychology, many health and nursing related studies have used this theory as the theoretical framework to explain behavioural phenomena.

The theory of planned behaviour postulates that three types of beliefs, or conceptual considerations, determine an individual's behavioural intentions and subsequent actions or inactions: behavioural, normative, and control beliefs (Ajzen, 1991; Ajzen & Albarracin, 2007). Strongly shaped by perceived consequences, the behavioural belief (attitude) consists of an individual's positive or negative attitude toward the behaviour of interest. The normative belief (subjective norm) consists of an individual's perception of the social and/or structural pressures exerted by others on the

individual to perform (or not perform) the behaviour. Lastly, the control belief (behavioural control) consists of an individual's perceived ease or difficulty in performing the behaviour. Positive attitudes (related to perceived positive consequences of the action), approval from important others (related to the social acceptance of the action) and high control (related to readily available resources and the absence of obstacles in engaging in the action) increase the likelihood of an individual performing a particular behaviour or action (Ajzen, 1991; Ajzen & Albarracin, 2007). Operationalizing these theoretical concepts will help understand the various factors and characteristics that influence nurses' guidance and support of women in the pushing stage of labour (see Figure 1).

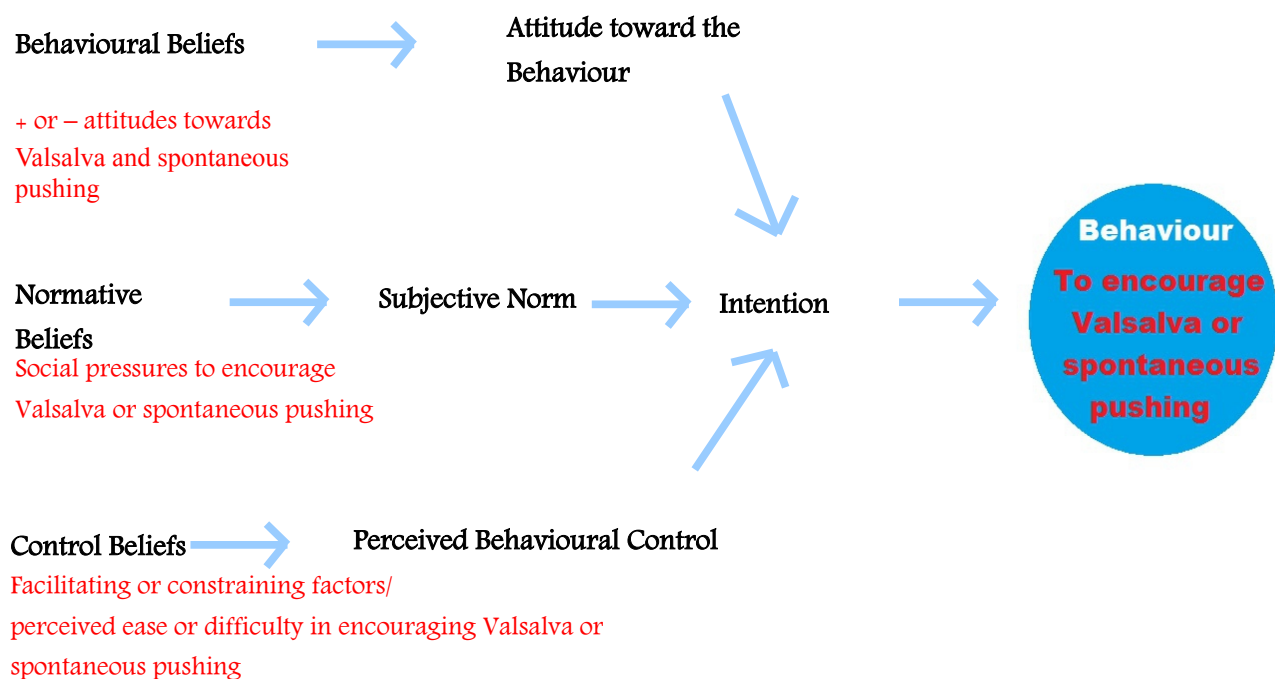


Figure 1. Operationalized Theory of Planned Behaviour (Adapted from Ajzen & Albarracin, 2007, p. 6)

The behaviour or action of interest in my study is the approach to pushing used by perinatal nurses. Specifically, the behaviour relates to whether nurses' encourage women to use Valsalva pushing or spontaneous pushing. According to the theory of planned behaviour, such behaviour is governed by behavioural (attitude), normative (subjective norm), and control (perceived behavioural control) beliefs (Ajzen, 1991; Ajzen & Albarracin, 2007). The behavioural belief will refer to nurses' attitudes towards the two pushing methods, specifically their perceptions of the positive or negative implications associated with Valsalva and spontaneous pushing. The normative belief will refer to nurses' perceptions of the social and/or structural pressures (for example, from patients, other nurses, physicians, or the cultural norms of the unit) exerted on them to encourage use of a particular

pushing method. The control belief will refer to nurses' perceptions of the practice autonomy they have in encouraging a particular pushing method as determined by the presence of facilitating or constraining factors. According to the theory of planned behaviour, behavioural, normative, and control beliefs influence an individual's intention, which then influences the choice of behaviour (see Figure 1). The control belief, however, can also directly influence behaviour, as indicated by the dotted line (see Figure 1). Exploration of these fundamental beliefs underlying nurses' behavioural intentions and actions will provide direction for intervening to change nurses' attitudes and the social and structural influences affecting women's access to spontaneous pushing.

Providing women with evidence-based direction for pushing can reduce the severity and incidence of negative maternal and infant outcomes associated with the second stage of labour. Since nurses have a pivotal role in guiding women to push, exploring the attitudes and beliefs of nurses will provide valuable knowledge of the principles and ideologies underlying current practice conditions that are not supported by research evidence and thus perpetuate the unnecessary medicalization of birth. This knowledge will provide direction for challenging traditional practice norms to reflect evidence-based practice and contribute to preserving the normalcies of birth.

References

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179–211. doi: 10.1016/0749-5978(91)90020-T
- Ajzen, I., & Albarracin, D. (2007). Predicting and changing behavior: A reasoned action approach. In I. Ajzen, D. Albarracin, & R. Hornik (Eds.), *Prediction and change of health behavior: Applying the reasoned action approach* (pp. 3–21). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bloom, S. L., Casey, B. M., Schaffer, J. I., McIntire, D. D., & Leveno, K. J. (2006). A randomized trial of coached versus uncoached maternal pushing during the second stage of labor. *Obstetrical & Gynecological Survey*, 61(5), 304–305. doi: 10.1097/01.ogx.0000216651.46614.60
- Bosomworth, A., & Bettany-Saltikov, J. (2006). Just take a deep breath...A review to compare the effects of spontaneous versus directed Valsalva pushing in the second stage of labour on maternal and fetal wellbeing. *Midwifery Digest*, 16(2), 157–166.
- Chalk, A. (2004). Spontaneous versus directed pushing. *British Journal of Midwifery*, 12(10), 626–30.
- Dedyna, K. (2012, November 1). Health minister encourages home births in low-risk cases. *The Victoria Times Colonist*. Retrieved from <http://www.timescolonist.com>
- Lemos, A., Dean, E., & de Andrade, A. D. (2011). The valsalva maneuver duration during labor expulsive stage. Repercussions on the maternal and neonatal birth condition. *Revista Brasileira De Fisioterapia (São Carlos (São Paulo, Brazil))*, 15(1), 66–72. doi: 10.1590/S1413-35552011000100012
- Low, L. K., Miller, J. M., Guo, Y., Ashton-Miller, J. A., DeLancey, J. O. L., & Sampselle, C. M. (2013). Spontaneous pushing to prevent postpartum urinary incontinence: A randomized, controlled trial. *International Urogynecology Journal*, 24(3), 453. doi: 10.1007/s00192-012-1884-y
- Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A comparison of the theory of planned behaviour and the theory of reasoned action. *Personality and Social Psychology Bulletin*, 18(1), 3–9. doi: 10.1177/0146167292181001
- Martin, C. (2009). Effects of valsalva manoeuvre on maternal and fetal wellbeing. *British Journal Of Midwifery*, 17(5), 279–285.
- Prins, M., Boxem, J., Lucas, C., & Hutton, E. (2011). Effect of spontaneous pushing versus valsalva pushing in the second stage of labour on mother and fetus: A systematic review of randomised trials. *BJOG: An International Journal of Obstetrics and Gynaecology*, 118(6), 662–670. doi: 10.1111/j.1471-0528.2011.02910.x
- Roberts, J., & Hanson, L. (2007). Best practices in second stage labor care: Maternal bearing down and positioning. *Journal of Midwifery and Women's Health*, 52(3), 238–245. doi: 10.1016/j.jmwh.2006.12.011
- Schaffer, J. I., Bloom, S. L., Casey, B. M., McIntire, D. D., Nihira, M. A., & Leveno, K. J. (2005). A randomized trial of the effects of coached vs uncoached maternal pushing during the second stage of labor on postpartum pelvic floor structure and function. *American Journal of Obstetrics and Gynecology*, 192(5), 1692–1696. doi: 10.1016/j.ajog.2004.11.043
- Yildirim, G., & Beji, N. K. (2008). Effects of pushing techniques in birth on mother and fetus: A randomized study. *Birth*, 35(1), 25–25. doi: 10.1111/j.1523-536X.2007.00208.