

Diagnostic classification of fear of childbirth: Why specific phobia may not be enough

Nichole Fairbrother and Cora Keeney

2025

Faculty of Social Sciences

Faculty Publications

© 2025 The Author(s). This is an open access article distributed under the terms of the Creative Commons CC BY License:

<https://creativecommons.org/licenses/by/4.0/>.

Original citation:

Fairbrother, N., & Keeney, C. (2025). Diagnostic classification of fear of childbirth: why specific phobia may not be enough. *Behavioural and Cognitive Psychotherapy*, 53(3), 289–295. <https://doi.org/10.1017/s1352465825000128>

Downloaded from UVicSpace Research & Learning Repository

dspace.library.uvic.ca



University
of Victoria

Libraries

BRIEF CLINICAL REPORT

Diagnostic classification of fear of childbirth: why specific phobia may not be enough

Nichole Fairbrother  and Cora Keeney

University of British Columbia, Vancouver, British Columbia, Canada

Corresponding author: Nichole Fairbrother; Email: nicholef@uvic.ca

(Received 13 March 2024; revised 24 February 2025; accepted 10 April 2025; first published online 13 August 2025)

Abstract

Background: Fear of childbirth (FoB) is a common experience during pregnancy which can cause clinically significant distress and impairment. To date, a number of investigations of FoB have assumed that clinically significant FoB is best understood as a type of specific phobia. However, preliminary evidence suggests that specific phobia may not be the only diagnostic category under which clinically significant symptoms of FoB are best described.

Aim: The current study is the first to investigate which DSM-5 diagnostic categories best describe clinically significant symptoms of FoB.

Method: Pregnant people reporting high levels of FoB ($n = 18$) were administered diagnostic interviews related to their experience of FoB.

Results: Participants ($n = 18$) were predominantly nulliparous (73.3%), cisgender women (83.3%). Of these, 14 (77.8%) met criteria for one or more DSM-5 anxiety-related disorders. Preliminary findings suggest that primary FoB may align with specific phobia criteria, whereas secondary FoB (following a traumatic birth) may be better classified under post-traumatic stress disorder (PTSD). FoB also featured in other anxiety-related disorders but was not the primary focus (e.g. obsessive-compulsive disorder). Four participants did not meet criteria for any DSM-5 disorder.

Conclusions: Findings provide preliminary evidence that clinically significant FoB fits within existing DSM-5 categories, in particular specific phobia and PTSD. Although FoB-related concerns appears in other anxiety-related disorder categories, it does not appear as the primary focus. Although informative, due to the small sample employed in this research, replication in larger and more diverse samples is needed.

Keywords: diagnostic category; DMS-5; fear of childbirth; pregnancy

Introduction

The life-changing experience of pregnancy and childbirth is both exciting and joyful. However, some level of fear of childbirth (FoB) is a common experience during pregnancy (O'Connell *et al.*, 2017; Sydsjö *et al.*, 2014). Although estimates from individual studies vary broadly, a recent meta-analysis reported an overall global pooled prevalence of FoB of 14% (O'Connell *et al.*, 2017). Among the only two published studies employing diagnostic criteria to assess FoB, rather than questionnaire estimates, the prevalence of FoB was reported at 3.7% (Räisänen *et al.*, 2014) and 3.3% (Fairbrother *et al.*, 2022a).

For a minority of individuals, FoB can escalate to the point of becoming clinically distressing and impairing (O'Connell *et al.*, 2017). When this occurs, it may also be referred to as tokophobia.

FoB can impact reproductive decisions, including the desire to become pregnant or continue one's pregnancy, waiting longer between births, or overall having fewer children. FoB can also impact parent–infant attachment, and increase the desire for a caesarean delivery (O'Connell *et al.*, 2017; Sydsjö *et al.*, 2014).

Although FoB has received significant research attention, the most appropriate diagnostic classification or category(ies) for clinically significant FoB has yet to be established. Failure to attribute FoB symptomatology to any established diagnosis(es), makes accurate and consistent identification of clinically significant FoB difficult. In a recent FoB workshop consensus statement, ascertaining the most appropriate diagnostic category(ies) applicable to FoB was identified as a high priority (Jomeen *et al.*, 2021). At present, intense FoB (tokophobia) is not listed as a diagnosable condition in the ICD-11 or the DSM-5. FoB is strongly associated with depression (Jomeen *et al.*, 2021). In one study, generalized anxiety disorder emerged as the strongest predictor of FoB (Jomeen *et al.*, 2021), and in another study, authors argue that FoB should be classified as an obsession rather than as a type of phobia (Kitamura *et al.*, 2024).

Some investigators have suggested that specific phobia may be the most appropriate diagnostic category for primary FoB (i.e. FoB among nulliparous people). There is some evidence that post-traumatic stress disorder (PTSD) may be the most appropriate diagnostic category for secondary FoB (i.e. FoB following a traumatic birth experience) (Sharma and Sharma, 2023). Some research also indicates that, for a subset of individuals, FoB occurs in the context of other anxiety and/or anxiety-related disorders (Jomeen *et al.*, 2021). In short, there is no empirical evidence regarding how FoB should be diagnosed using DSM-5 criteria, how often specific phobia and PTSD represent the most appropriate diagnoses, and whether other disorder categories may also apply (e.g. obsessions about childbirth in the context of obsessive-compulsive disorder).

Establishing the most appropriate diagnostic category(ies) for FoB could have far-reaching implications. From a clinical perspective, patients who would most benefit from therapeutic interventions could be identified in a timelier manner, which may improve their ability to receive treatment. Treatment for FoB may also vary depending on the diagnostic category(ies) it falls under (e.g. how one intervenes with panic disorder is different from interventions for PTSD). Research could be better streamlined among studies pertaining to FoB. Ultimately, the identification of one or more clear diagnostic categories for FoB removes ambiguity and allows for more focused mental health care and better anticipated outcomes for parent and infant.

The purpose of the current study was to conduct a pilot assessment ($n = 18$) of the diagnostic categories applicable to self-reported clinically severe pre-natal FoB based on DSM-5 criteria for the anxiety and anxiety-related disorders.

Method

Design

The case series design consisted of questionnaires and a diagnostic interview.

Inclusion criteria

Pregnant people were eligible to participate if they spoke English fluently, were over the age of 19, resided in Canada at the time of recruitment, and reported high FoB. High FoB was defined as: (a) a score of 83 or higher on the Childbirth Fear Questionnaire (CFQ; Fairbrother *et al.*, 2022b) and/or (b) a score of 2 or greater on one of three additional questions pertaining to FoB intensity and related distress and impairment.

The CFQ (Fairbrother *et al.*, 2018; Fairbrother *et al.*, 2022a) is a 40-item self-report measure with nine subscales. Items are measured on a Likert-type scale from 0 (no fear) to 4 (extreme fear). Internal reliability is good to excellent (i.e. Cronbach's alpha reliability coefficient of 0.94 for the

full scale, and 0.76–0.94 for the nine subscales). Convergent and discriminant validity are adequate. We used a cut-off score of 83 on the CFQ as one of two criteria for inclusion in the current study, as scores of 83 or higher were obtained by 25% of the original sample (the top quartile of scores). Full details about the development and the psychometric properties of the CFQ have been published (Fairbrother *et al.*, 2022a; Fairbrother *et al.*, 2022b)

An additional three items (developed for the current research) were also used to select participants for the current study. Specifically, they were asked: (a) how intense is your fear of childbirth?; (b) how much distress does your fear of childbirth cause you?; and (c) how much does your fear of childbirth interfere with your day-to-day life? Response options for these questions ranged from 0 to 4, and were labelled: not at all intense, slightly intense, somewhat intense, very intense and extremely intense for FoB intensity; none, no distress, slight distress, some distress, a lot of distress, and extreme distress for FoB-related distress; and not at all, slightly, somewhat, very much, and extremely for interference from FoB.

Recruitment

Participants were recruited via convenience sampling. This included recruitment via a larger study on fear of childbirth, online social media and other websites catering to pregnant people, maternity support workers (e.g. doulas), and primary care providers (e.g. midwives, family physicians).

Procedures

Prospective participants were directed via an internet link or URL address to the online survey registration. Following registration, they provided consent and completed a short questionnaire requesting information about personal demographics, current pregnancy and reproductive history, previous and current mental health concerns, and birth preferences. Participants who met the study eligibility criteria were invited to participate in a semi-structured diagnostic interview. Interviews were conducted by telephone with a clinical psychology doctoral student, or a registered psychologist. Interviews were audio-recorded unless otherwise requested by the participant. Participants were offered a \$25 honorarium for their time.

Measures

Demographic and reproductive history information

Demographic information (e.g. age, education, marital status, income, race/ethnicity, and country of residence), pregnancy details (e.g. number of fetuses and method of conception), and reproductive history (e.g. number of previous pregnancies, births, miscarriages, and vaginal or caesarean deliveries) were gathered through self-report.

Diagnostic Assessment Research Tool (DART)

The DART (McCabe *et al.*, 2021) is a semi-structured interview designed to assess psychiatric diagnoses, according to their respective criteria in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) criteria. Although only recently developed, early psychometric evidence supports the DART's construct (convergent and discriminant) validity and inter-rater reliability as a diagnostic interview tool for DSM-5 disorders. For the current study we assessed all of the anxiety disorders and the following anxiety-related disorders: illness anxiety disorder, somatic symptom disorder, adjustment disorder, PTSD and acute stress disorder, and obsessive-compulsive disorder (OCD).

Table 1. Participant diagnoses assigned for FoB

DSM-5 diagnoses for FoB (<i>n</i> = 14)	% (<i>N</i>)		
	Parity groups combined (<i>n</i> = 14)	Nulliparous only (<i>n</i> = 10)	Multiparous only (<i>n</i> = 4)
Specific phobia	42.8 (6)	40.0 (4)	50.0 (2)
PTSD	14.3 (2)	0.0 (0)	50.0 (2)
Specific phobia and OCD	7.1 (1)	10.0 (1)	0.0 (0)
Specific phobia and GAD	7.1 (1)	10.0 (1)	0.0 (0)
GAD	7.1 (1)	10.0 (1)	0.0 (0)
Social anxiety disorder	7.1 (1)	10.0 (1)	0.0 (0)
Separation anxiety disorder	7.1 (1)	10.0 (1)	0.0 (0)
GAD and social anxiety disorder	7.1 (1)	10.0 (1)	0.0 (0)

Symptoms reported by four participants (22%) failed to meet criteria for any of the disorders assessed and are not included in this table.

Data analysis

Descriptive statistics were conducted for participant demographic and questionnaire data. Results from the diagnostic interviews are qualitative (e.g. description of symptoms, diagnostic rating) and presented descriptively.

Results

Participants

A total of 18 pregnant people (26.7–38.1 weeks gestation) participated in this study. Of these, six met criteria for entry based on the three additional FoB items, and 12 scored 83 or above on the CFQ. Participants ranged in age from 23 to 42 years ($M = 32.7$, $SD = 5.1$). All of the 15 of 18 participants who provided information about their gender identified as cis-gendered women. Participants were primarily nulliparous ($n = 14$; 73.3%), European ($n = 11$; 73.3%) or Asian ($n = 3$; 20.0%), and well-educated (all had a college degree or higher).

Diagnostic findings

Overall

Fourteen of 18 participants reported symptoms meeting criteria for one or more of the disorders assessed. For the four participants who failed to report symptoms meeting criteria for any of the disorders assessed, this included FoB-related and non-FoB-related conditions. See Table 1.

Specific phobia-related FoB

The most common diagnosis given for clinically significant FoB was specific phobia (8 of 14, 57%). Of these, five (four nulliparous and one multiparous) reported disorder onset during the current pregnancy. Among participants who failed to report FoB-related symptoms meeting criteria for any of the disorders assessed ($n = 4$), reported symptoms primarily fell within specific phobia, FoB. See Table 1. Fears were broad-ranging and included fear of harm to the infant, pain, tearing, inability to cope, and fear of caesarean birth specifically.

Other FoB-related diagnoses

The next most common diagnoses given were PTSD ($n = 2$ of 14, 14.3%) and generalized anxiety disorder (GAD) ($n = 2$ out of 14, 14.3%). Other diagnoses given for FoB-related symptoms included social anxiety disorder ($n = 1$, 7.1%), OCD ($n = 1$, 7.1%), and separation anxiety disorder ($n = 1$, 7.1%). A total of four participants reported symptoms meeting criteria for two FoB-related

disorders (i.e. specific phobia and OCD, specific phobia and GAD, and social anxiety disorder and GAD). Among the two participants who reported symptoms meeting criteria for PTSD, these were related to a previous traumatic and complex childbirth experience (e.g. complication during the delivery leading to baby's distress and multiple unwanted emergency medical procedures). In the context of social anxiety, fears related to a loss of privacy, being touched and nudity. In GAD, worries about the upcoming birth were present alongside other non-FoB related worries. Childbirth-related obsessions were present in OCD, and fears of harm to the infant in the context of separation anxiety disorder.

Extent of FoB-related symptoms across disorders

Specific phobia and PTSD were the only diagnostic categories in which FoB-related symptoms were the exclusive focus. Among participants for whom childbirth-related fears occurred outside of these two disorder categories (i.e. in the context of GAD, separation anxiety, or social anxiety), participants also reported non-FoB-related symptoms commonly associated with those disorders. Specifically, childbirth-related concerns represented only a portion of the disorder-related symptoms endorsed. For the one participant whose symptoms of FoB met criteria for OCD, obsessions were characterized by childbirth-related concerns (e.g. needing to rush to the hospital due to baby's unexpected health concerns). See Table 1.

Parity

Fourteen of 18 participants were nulliparous. Among nulliparous participants, 12 reported FoB-related symptoms meeting criteria for one or more of the disorders assessed. All four participants who failed to report symptoms meeting criteria for any of the disorders assessed were nulliparous. Among multiparous participants, all four reported symptoms meeting criteria for a diagnosis related to their FoB. The two cases of PTSD in this study were among multiparous participants. The other two multiparous participants reported symptoms meeting criteria for FoB-related specific phobia. For one, their specific phobia developed in response to a very complicated previous pregnancy and birth. For the other, their specific phobia, FoB began in childhood.

Non-FoB related diagnoses

Eight of the 18 study participants also reported symptoms sufficient for one or more additional diagnoses either only marginally related, or wholly unrelated to their FoB. These included specific phobia ($n = 2$), panic disorder ($n = 2$), social anxiety disorder ($n = 3$) and OCD ($n = 3$).

Discussion

The purpose of the current research was to improve our understanding of the range of diagnostic category(ies) applicable to clinically meaningful FoB, and to assess the degree to which specific phobia may be the diagnostic category most relevant to FoB. Although specific phobia, as a diagnostic category, has been used to: (a) identify individuals experiencing diagnosable FoB (i.e. study inclusion criteria required a diagnosis of specific phobia, FoB; Sydsjö *et al.*, 2014), and (b) to determine cut-off scores for a measure of FoB (i.e. the cut-off score was based on the mean scores of those who met diagnostic criteria for specific phobia, FoB), to date these decisions have been theoretical, rather than empirical. To our knowledge, no published research to date has sought to determine which diagnostic categories (specific phobia or others) may be most applicable to FoB.

Our study findings suggest that: (a) specific phobia may be the most common diagnostic category relevant to FoB, and (b) it is not the only one. Reinforcing the idea that specific phobia may be the most common diagnostic category relevant to FoB is the fact that for two out of the

four people who did not report symptoms sufficient for a diagnosis, the predominant symptoms were nevertheless those of specific phobia.

The only two diagnostic categories in which FoB emerged as the primary focus were specific phobia and PTSD (among multiparous participants only). If future studies echo these findings, it will be important to distinguish between diagnostic categories relevant to diagnosing clinically significant FoB from diagnostic categories in which FoB may feature.

In keeping with much of the research on FoB, in the current study, when PTSD was a focus of childbirth-related fears, it was a product of prior birth trauma (Sharma and Sharma, 2023).

Limitations and future directions

As the first study to look at the question of the diagnostic classification of FoB, we employed a small convenience sample, and no formal power analysis was conducted. Although this limits the generalizability of the findings, it provides important preliminary insights that can guide future research. Research employing larger, more diverse samples of both nulliparous and multiparous participants will permit greater generalizability and provide a more accurate view of the proportion of cases of FoB which meet criteria for different anxiety and related disorders.

Additionally, this study primarily reports on FoB among cis-gendered women of European descent in a high-income, Western country. Given known disparities in perinatal care and mental health outcomes, it is essential to explore how FoB manifests across different cultural, socioeconomic, and healthcare contexts. Experiences of discrimination, obstetric violence, and structural inequities may shape both the prevalence and expression of FoB, as well as the appropriateness of existing diagnostic frameworks across diverse populations.

Future directions

Future studies should seek, via larger, representative samples, to determine: (a) in what proportion of cases of clinically significant FoB is specific phobia the appropriate diagnosis, (b) how does the distribution of FoB-related diagnoses differ between nulliparous and multiparous people, and (c) are specific phobia and PTSD in fact the only two anxiety or anxiety related disorders in which diagnosable FoB is the sole focus (i.e. not one of several fears, concerns or worries)? Future research should also account for cultural differences in which FoB is expressed, as well as variations in the actual risk of mistreatment and obstetrical violence faced by pregnant people in different communities.

Conclusion

Early results suggest that specific phobia and PTSD (among multiparous subjects) may be the most common anxiety-related disorders relevant to FoB. It also appears (although larger samples are needed) that when FoB occurs in the context of other anxiety and related disorders (e.g. GAD or OCD), it is unlikely to be the only area of focus.

Data availability statement. The dataset associated with this study will be provided upon reasonable request.

Acknowledgements. We would like to thank all of our participants. We would also like to thank team members Fanie Collardeau for all of her hard work conducting study interviews and contributing to the research design, and Emily Friedrich, for her help.

Author contributions. **Nichole Fairbrother:** Conceptualization (lead), Data curation (lead), Formal analysis (lead), Funding acquisition (lead), Investigation (lead), Methodology (lead), Project administration (lead), Resources (lead), Software (lead), Supervision (lead), Validation (lead), Visualization (lead), Writing - original draft (equal), Writing - review & editing (equal); **Cora Keeney:** Conceptualization (supporting), Formal analysis (supporting), Methodology (supporting), Project administration (supporting), Writing - original draft (equal), Writing - review & editing (equal).

Financial support. This research was funded through the Michael Smith Foundation for Health Research's 2018 Pathway to Patient-Oriented Research (P2P) Award Competition (award no. 17452). Funding was awarded to Dr Nichole Fairbrother.

Competing interests. The authors declare no potential competing interests with respect to the research, authorship, and/or publication of this article.

Ethical standards. This study was approved by the University of British Columbia Ethics Board and the Health Research Ethics Board of Island Health. Written informed consent was obtained from all participants at the start of the online questionnaire, and oral consent was provided at the beginning of each diagnostic interview. This research has conformed to the Declaration of Helsinki.

References

- Fairbrother, N., Albert, A., Collardeau, F., & Keeney, C. (2022a). The Childbirth Fear Questionnaire and the Wijma Delivery Expectancy Questionnaire as screening tools for specific phobia, fear of childbirth. *International Journal of Environmental Research and Public Health*, 19, 4647. <https://doi.org/10.3390/ijerph19084647>
- Fairbrother, N., Collardeau, F., Albert, A., & Stoll, K. (2022b). Screening for perinatal anxiety using the Childbirth Fear Questionnaire: a new measure of fear of childbirth. *International Journal of Environmental Research and Public Health*, 19, article 4. <https://doi.org/10.3390/ijerph19042223>
- Fairbrother, N., Thordarson, D. S., & Stoll, K. (2018). Fine tuning fear of childbirth: the relationship between Childbirth Fear Questionnaire subscales and demographic and reproductive variables. *Journal of Reproductive and Infant Psychology*, 36, 15–29. <https://doi.org/10.1080/02646838.2017.1396300>
- Jomeen, J., Martin, C. R., Jones, C., Marshall, C., Ayers, S., Burt, K., Frodsham, L., Horsch, A., Midwinter, D., O'Connell, M., Shakespeare, J., Sheen, K., & Thomson, G. (2021). Tokophobia and fear of birth: a workshop consensus statement on current issues and recommendations for future research. *Journal of Reproductive and Infant Psychology*, 39, 2–15. <https://doi.org/10.1080/02646838.2020.1843908>
- Kitamura, T., Takegata, M., Usui, Y., Ohashi, Y., Sohda, S., Takeda, J., Saito, T., Kasai, Y., Watanabe, H., Haruna, M., & Takeda, S. (2024). Tokophobia: psychopathology and diagnostic consideration of ten cases. *Healthcare*, 12, 519. <https://doi.org/10.3390/healthcare12050519>
- McCabe, R. E., Milosevic, I., Rowa, K., Shnaider, P., Pawluk, E. J., Antony, M. M., & DART Working Group (2021). *Diagnostic Assessment Research Tool* [dataset]. American Psychological Association. <https://doi.org/10.1037/t81500-000>
- O'Connell, M. A., Leahy-Warren, P., Khashan, A. S., Kenny, L. C., & O'Neill, S. M. (2017). Worldwide prevalence of tocophobia in pregnant women: systematic review and meta-analysis. *Acta Obstetrica et Gynecologica Scandinavica*, 96, 907–920. <https://doi.org/10.1111/aogs.13138>
- Räisänen, S., Lehto, S., Nielsen, H., Gissler, M., Kramer, M., & Heinonen, S. (2014). Fear of childbirth in nulliparous and multiparous women: a population-based analysis of all singleton births in Finland in 1997–2010. *BJOG: An International Journal of Obstetrics & Gynaecology*, 121, 965–970. <https://doi.org/10.1111/1471-0528.12599>
- Sharma, V., & Sharma, S. (2023). Tocophobia: a nosological quagmire. *Archives of Women's Mental Health*, 26, 713–715. <https://doi.org/10.1007/s00737-023-01362-9>
- Sydsjö, G., Bladh, M., Lilliecreutz, C., Persson, A.-M., Vyöni, H., & Josefsson, A. (2014). Obstetric outcomes for nulliparous women who received routine individualized treatment for severe fear of childbirth – a retrospective case control study. *BMC Pregnancy and Childbirth*, 14, 126. <https://doi.org/10.1186/1471-2393-14-126>