

PSYCHOLOGICAL PERSPECTIVES ON FEAR OF CHILDBIRTH

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Abstract: *The current review aims to shed light on the psychology of tokophobia (fear of childbirth) with an emphasis on its etiology, as well as its physiological, cognitive and behavioral aspects for suffering women/mothers. Findings from the most recent reviewed articles support the perspective that its etiology is attributed to the way the woman's/mother's personality is structured and organized, the comorbidity with anxiety or depressive disorders, the possibly unfavorable family and/or social environment, the poor emotional husband support, the possible history of abuse, as well as any previous traumatic child delivery experience. At the same time, other factors such as family finances, the woman's/mother's age and emotional maturity, the degree to which the gestation was desired, and the woman's/mother's education on labor and motherhood are also proven to significantly contribute to the gradual psychological construction of that specific type of phobia. The variety of the primary articles reviewed makes any further conclusions hard to draw. Nevertheless, these endless and unjustifiable vicious circles of fear of childbirth seem to be a major concern for scientists and psychologists to further investigate. The following factors should be investigated in future research for their potential impact on the development of fear of childbirth: 1) the neurobiology of pregnancy and childbirth, 2) the woman's personality, 3) the hormonal and biochemical factors, and 4) the influence of social and mass media on fear of childbirth.*

Key-words: *tokophobia, etiology, childbirth, perspectives.*

1. Introduction

During the latest decades, the commercialization of healthcare, combined with the direct medicalization of births in clinics and maternity hospitals, has led to a rapid increase in the rates of cesarean sections performed at an international level. Indicatively, recently published articles advocate the observation that 15% of all births actually have a valid medical reason (including absolute or relative indication) to be

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carried out through caesarean section - while of the remaining 85%, the majority could have been replaced by vaginal childbirth (Li et al., 2021; Negrini et al., 2021). At the same time, the rates of caesarean sections carried out globally have risen spectacularly, from 7% in the early 1990s to 21% today - while similar increasing trends are expected - based on the corresponding statistics - and for the years to today come (Betrán et al., 2016; Betrán et al., 2021). These numbers have raised important scientific concerns about the phenomenon of tokophobia as a possible strong causative factor that leads more and more women to prefer cesarean sections, as opposed to vaginal childbirth.

In that direction, many theoretical researchers and mental health professionals have attempted to analyze the psychological dimensions of tokophobia, with the view to diving deeper into its etiological background and offering valuable information for future generations of maternity healthcare professionals to exploit. Thus, tokophobia is a complex condition arising from a diverse range of factors, including psychological, temperamental, societal, familial and financial aspects.

2. Objectives

The purpose of the current review was to find, select and briefly summarize the most recent articles available, that focus on the psychological perspectives of tokophobia and, more specifically, on the psychological etiological factors that lie behind this mental health condition in pregnant women -both antenatally and postnatally.

3. Materials and Methods

For the present systematic review to be carried out, a detailed and systematic electronic search strategy was performed. The main search engine used was Google Search, and the main scientific databases availed were: NCBI Database, PubMed Database, ResearchGate Database, CAB Direct Database, and Scopus. Data on the psychological perspectives of tokophobia were sought, and the keywords used included the terms: tokophobia, etiology, childbirth, and perspectives.

The inclusion criteria included:

- (1) that the citations had to be published later than 2013 (and with a definite preference for the most recent ones),
- (2) that they had to be written in the English language,
- (3) that their full-text version would be available for free retrieval, and
- (4) that they would respond successfully to the present subject area.

On the other hand, the exclusion criteria included: (1) citations published before 2013, (2) citations written in other languages than English, (3) citations whose full-text version would not be accessible for free, and (4) citations with a reference to other similar subjects, but not precisely focusing on the psychological perspectives of tokophobia.

From the search process described above, and in accordance with all the inclusion criteria mentioned, 344 citations were initially identified after the detailed screening of titles and abstracts (Figure 1). Next, other 332 citations were excluded: for representing databases' duplications, for concentrating on different populations or different kinds of

interventions or different timings, or for not implicating tokophobia from a psychological point of view, or for being unfinished trials (still ongoing studies), or for not having the full paper available for free access. After a detailed evaluation of all the above, 12 (twelve) articles were finally found to meet the inclusion criteria and, thus, were included in the current review (Figure 1).

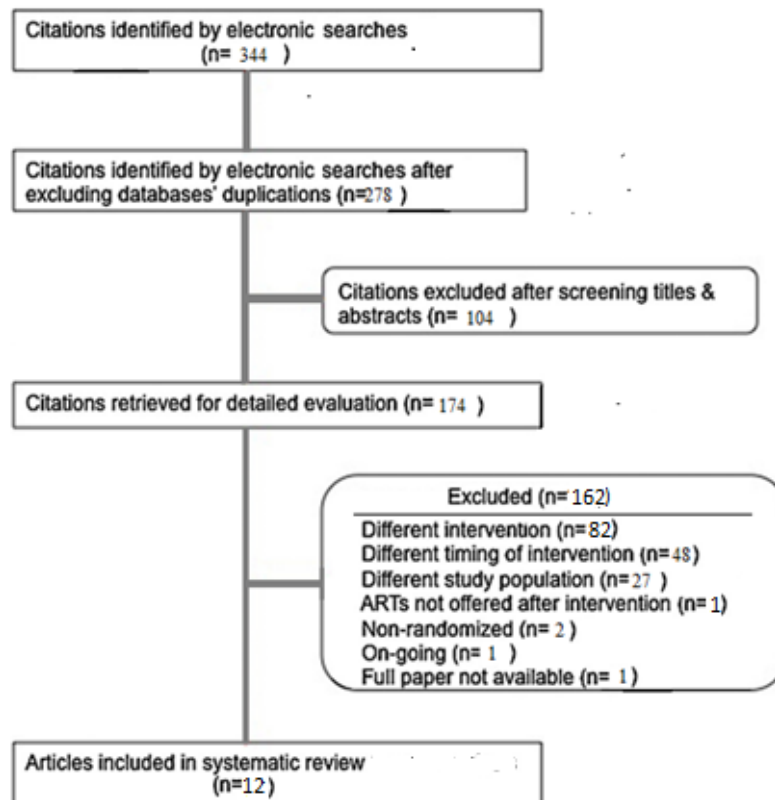


Fig. 1. Flow chart describing the electronic searching process followed for the current review

4. Results

Starting the review with the psychological perspectives of tokophobia, it has to be underlined that the deeper nature of the phobia might differ slightly from woman to woman, depending on the specific triggering factor that causes the need for avoidance, each time. In that direction, fear of episiotomy, fear of experiencing severe pain, fear of the unborn child being injured during the vaginal birth, fear of needles, hospitals and medical procedures, and even the fear of dying during the process, suggest some of the most representative factors that tend to trigger tokophobia in the pregnant and parturient women of all ages (Figure 2).

Attribute	Mean rank
Fear of episiotomy	11.10
Fear of having no control on the situation	10.60
Fear of pain	9.47
Future sexual life	7.75
Fear of unprofessional medical staff	7.64
Fear of having a cesarean birth	7.62
Fear from unkind medical staff	7.62
Fear from losing control during birth	7.59
Fear of being injured	6.67
Fear of hospitals	6.53
Fear of needles	6.49
Fear of having a vacuum extraction	5.72
Fear of blood	5.68
Fear of dying during labor	4.51

: Ranking the attribute of fear of childbirth.

Fig. 2. Detailed list of the most important fears expressed by women with tokophobia (Source: Demšar et al, 2018).

Bibliographically, however, the landscape seems to be formatted much more multi-dimensional. Thus, in 2016, Leeners, Görres, Block, and Hengartner carried out cross-sectional research in Germany that compared the delivery experiences of 170 matched controls with 85 women who had a history of childhood sexual abuse (CSA). Women with CSA reported extremely terrifying deliveries at a rate of 24.7%, compared to 5.3% in the control group, indicating that women with CSA were more likely to report bad birth experiences and fear of delivery. This shows the higher risk of perinatal anxiety in women with CSA pasts. Also, the study showed that women with CSA had longer times for delivery (14.5 hours versus 7.2 hours) and more cases of bad memories coming up during labor (Leeners et al., 2016).

In 2017, Beiranvand et al. focused their research interest on investigating the relationship that allegedly links the prevalence of tokophobia with specific risk factors for its occurrence. The research sample consisted of 400 primiparous pregnant women with a gestational age of 18-32 weeks who were followed up in obstetric clinics in the city of Khorramabad, from March to October 2014. For the aim of the research, the following research tools were used: a questionnaire of demographic and social characteristics, the Childbirth Attitude Questionnaire (CAQ), as well as the Northouse Social Support Questionnaire. The answers they gave were collected and statistically analyzed, with the results revealing that the prevalence of tokophobia was 80.8% of the participants (CAQ \geq 28), while the risk factors included: low finances ($p = 0.020$), non-participation of the pregnant woman in painless childbirth preparation classes ($p = 0.040$) and preference for the mode of delivery (natural childbirth) ($p < 0.001$). These findings are interesting because they reveal the way how the development of

tokophobia depends on the three specific predisposing factors (income, preparation with painless childbirth classes, preference for natural childbirth) (Beiranvand et al., 2017)

A few months later, and more specifically, in August 2017, Sioma-Markowska and colleagues worked on an outstanding prospective study that investigated the causative factors and the personally experienced fears of women with tokophobia. The study included the participation of 120 pregnant women who, at the time of the study, were in the 3rd trimester of pregnancy. Their experiences regarding tokophobia were measured with the use of the revised version of the Labor Anxiety Questionnaire (KLP II), along with an interview questionnaire that aimed to select their demographic and socioeconomic data. The results revealed that tokophobia was experienced in a more intense way in the women who were over 30 years old (Pearson's chi-squared test = 0.00422; $p < 0.05$), whereas successive childbirths ($p = 0.04217$), first gestation and fear of labor pain proved to be key-factors to the clinical manifestation of tokophobia. These conclusions are significant because they show that certain factors, such as age and labor preview experiences greatly contribute to the expression of fear of childbirth (Sioma-Markowska et al., 2017).

Next, in March 2019, O'Connell and colleagues published another distinguished prospective study that investigated the prevalence and risk factors of tokophobia in pregnant women from Ireland. The study sample consisted of 882 pregnant women, aged over 18 years with a gestational age between 12 and 24 weeks. The following research instruments were used: a simple demographic questionnaire, the Wijma Delivery Expectancy Questionnaire Version A (W-DEQ A), the Edinburgh Postnatal Depression Score (EPDS), and the Perinatal Infant Care Social Support Scale (PICSS). The results of the scores they recorded were statistically analyzed, and it was shown that the overall prevalence of severe tokophobia was 5.3% and of fairly severe tokophobia was 36.7%, with 7.4% (for severe tokophobia) affecting nulliparous women and 4.3% for multiparous women -nevertheless, the differentiation in the prevalence of tokophobia between nulliparous and multiparous women was not statistically significant ($p < 0.07$). At the same time, it was shown that the prevalence of fairly severe tokophobia was 43% for women who had never before given birth and 33.6% for multiparous women - with this differentiation presenting to be statistically significant ($p < 0.005$). Furthermore, regarding risk factors, higher levels of tokophobia were associated with pregnant women in unmarried marital status compared to married women or women who simply lived with the fathers of the children they were carrying ($p < 0.008$), as well as with pregnant women with poor information on the physiology of pregnancy and gestation (adjusted RR = 2.62, 95% [CI] 1.34-5.13) and possible perinatal depressive symptomatology (adjusted RR=12.87, 95% CI 6.07-27.25). These findings are important because they highlight marital status, perceived informational support, and depression as significant risk factors for the development of fear of childbirth (O'Connell et al., 2019).

Additionally, in July of the same year (2019), Johnson et al. reported the results of another large cross-sectional study investigating risk factors for tokophobia in women attending a large maternity clinic in the Indian state of Karnataka. The study included

388 pregnant women, of mean age 22.9 ± 2.9 years old, who had been either primiparous or multiparous at any gestational age except for the labor phase and were administered a demographic and social characteristics questionnaire, as well as the Fear of Childbirth Questionnaire. Their answers were statistically analyzed, and the results revealed that 45.5% of the participants (176 women) suffered from tokophobia, while the most crucial risk factors for the development of this phobia were the pregnant woman's teenage age, the absence of other previous pregnancies and births, and the absence of living children. These findings are noteworthy because they show how these three factors can contribute decisively to the manifestation of tokophobia (Johnson et al., 2019).

Approximately one year later (November 2020), Gelaw and colleagues published an outstanding randomized controlled trial that aimed to investigate the psychology of tokophobia -with an emphasis on its risk factors, in pregnant women in Southern Ethiopia. The study included 387 pregnant women of any gestational age without serious obstetric or medical problems. Tokophobia and social support were assessed using Wijma Delivery Expectation/Experience Questionnaire (W-DEQ), and the Oslo Social Support Scale. The results were statistically analyzed, and it was concluded that 10.3% of the participants suffered from mild tokophobia, 39.8% from moderate, 25.3% from high, and 24.5% from severe. At the same time, it was shown that the risk factors associated with the manifestation of tokophobia in these women were: their pregnancy being unplanned (adjusted OR = 2.30, 95% CI: 1.12, 4.74), having gestation complications (adjusted OR = 6.24, 95% CI: 2.72, 14.29), and having low social support from people in their environment (adjusted OR = 1.93, 95%CI: 1.01, 3.68). These findings are considered noteworthy because they demonstrate statistically how the manifestation of tokophobia in these women depends on these factors (Gelaw et al., 2020).

In December 2020, Challacombe and colleagues published another significant primary pilot study, which suggested that the manifestation of tokophobia has its roots in the perspective of the emotional bond between mother and child (Challacombe et al., 2020). The study sample consisted of 341 pregnant women from London, aged over 16 years old, with a free history of obstetric miscarriages, with a gestational age of 10-12 and 29 weeks (study in two distinct periods). For the needs of the research, the following research tools were used: a questionnaire of demographic and social characteristics, the Wijma Delivery Expectancy/Experience Questionnaire (W-DEQ), the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders (4th ed.; DSM-IV) Axis I Disorders (SCID, research version), and the Edinburgh Postnatal Depression Scale (EPDS). The results were statistically analyzed, and it was revealed that the manifestation of tokophobia was related to the maternal perception of an ineffective emotional bond with the unborn infant - even when depression, anxiety disorders and social factors were weighted (Coef = 0.10, 95% CI 0.07–0.14, $p < 0.001$). At the same time, the very interesting conclusion was that whether or not the mother would effectively deal with her tokophobia depended significantly on the low (weak) emotional bond with the infant after childbirth (Coef 0.37, 95% CI 0.25-0.49, $p < 0.001$). These findings are

interesting because they present tokophobia as a result of the pregnant woman's ineffective emotional bond with her unborn child (Challacombe et al., 2020).

In June 2021, Zhou and colleagues published another notable cross-sectional study investigating risk factors for the development of tokophobia in healthy pregnant women in China (Zhou et al., 2021). The study included 992 pregnant women, aged over 18 years old, with a gestational age between 14 and 41 weeks, who were carrying a single child (not multiple pregnancies), and had no history of mental disorders or serious obstetric problems. A demographic and social characteristics questionnaire, the Childbirth Attitudes Questionnaire (CAQ), the Multidimensional Scale of Perceived Social Support (MSPSS), the Edinburgh Postnatal Depression Scale (EPDS), and the Pregnancy Pressure Scale (PPS) were used as research instruments. The participants' scores were collected and statistically analyzed, and the result showed that 72% of the participants suffered from low to mild tokophobia, 6% ($n = 51/922$) severe and 22% ($n = 199/922$) moderate. At the same time, it was shown that the risk factors most associated with the occurrence of tokophobia were the place of residence, marital status, number of children born, gestational age, relationship with the partner, the anxiety that each one experienced regarding the course of the pregnancy, the social support she received from the people around her, as well as the symptoms of depression (Zhou et al., 2021).

In February 2023, Rúger-Navarrete and colleagues studied how adverse birth experiences that a woman may have had in the past are a predisposing factor for the development of tokophobia in subsequent pregnancies (Rúger-Navarrete et al., 2023). The descriptive cross-sectional study sample consisted of 414 pregnant women who attended pregnancy counseling courses and who - during the period of the study - were in their 35th week of pregnancy. Women who gave birth by both main modes of delivery (vaginal and cesarean section) were included, the inclusion criteria also included not having significant pathologies of labor but also giving birth to children without neonatal pathologies. The research instruments were the Birth Anticipation Scale (BAS), and Childbirth Experience Questionnaire in its validated Spanish version (CEQ-E), and the results of the assessments were statistically analyzed. It was concluded that the presence of tokophobia in these pregnant women burdened to a great extent their birth experience, and additionally, women who were more scared of labor were revealed to have worse gynecological outcomes and a greater likelihood of undergoing cesarean section ($p = 0.008$ C. I 95%). Regarding risk factors, fear was an important predisposing factor for shaping the image of the birth experience, therefore, the deeper the fear, the greater the risk of having labor complications (OR 1.1) (Rúger-Navarrete et al., 2023). These findings are considered important because they show that previous, possibly traumatic, birth experiences are a significant predisposing factor for the development of tokophobia, and they also agree with the findings of Johnson et al. (2019) regarding the special emphasis put on women's traumatic past labor experiences.

In September 2023, Dal Moro and colleagues published another significant paper that aimed to describe and investigate the frequency and the associated causative factors of tokophobia in pregnant women in Brazil (Dal Moro et al., 2023). For the research, 125

pregnant women between 28 and 36 weeks of gestation were mentally assessed with the Wijma Delivery Expectancy Questionnaire – W-DEQ(A), Beck Anxiety Inventory, Edinburgh Postnatal Depression Scale, and Multidimensional Scale of Perceived Social Support. The results showed that tokophobia and anxiety ($r = 0.50$, $p < 0.001$), tokophobia and depressive symptoms ($r = 0.34$, $p < 0.001$), and tokophobia and poor social support ($r = -0.23$, $p = 0.008$) were tightly related to one another, while at the same time, high educational level ($p = 0.003$) and positive history of traumatic past labor experiences ($p = 0.001$) also mattered a lot in the danger of manifesting tokophobia. These conclusions are of great importance because they reveal that specific causes such as the mother's emotional state and temperament, history of labor, educational level and social support seem to all contribute to the clinical expression of fear of childbirth (Dal Moro et al., 2023).

Next, in April 2024, Alemu and colleagues published another important cross-sectional study on tokophobia and its associated factors in pregnant women in Ethiopia (Alemu et al., 2024). The study included 560 pregnant women, aged 25 ($SD \pm 3.2$) years old, both primiparous and multiparous, most of whom were married and had at least one child. As research tools, the researchers used a simple demographic questionnaire, the Wijma Delivery Expectancy/Experience Questionnaire (W-DEQ), the question: "Do you have support from your husband?" (with possible answers, "yes" and "no"), and the Oslo Social Support Scale (OSSS-3). The scores obtained by the participants were statistically analyzed and it was found that, of the 560 participants, 133 (23.8%; CI 20.4–26.8) had low levels of tokophobia, 67 (12%; CI 9.3-14.8) had moderate levels, 217 (38.8%; CI 34.6-42.7) had high levels, and 143 (25.5%; CI 21.8–29.1) had very high levels. At the same time, it was shown that the most important factors associated with the development of tokophobia were being between 18-24 years of age at the time of the pregnancy (adjusted OR = 1.6; 95% CI 1.1-2.3), p -value = -0.08), working as a daily wage worker (adjusted OR = 0.3, 95% CI 0.3, 0-74; p -value = 0.004), and having a third trimester gestational age (adjusted OR = 1.9, 95% CI 1.1-3.4), p -value = 0.022) (Alemu et al., 2024). These findings are valuable as they statistically present the relationship that links these three risk factors (maternal age, maternal occupation, and gestational age) with the likelihood of developing tokophobia -which also aligns with the findings of previous studies (Sioma-Markowska et al., 2017; Johnson et al., 2019).

In August 2024, Reyhan and Dagli, published a significant paper that aimed to describe the relationship between women's personality traits and their degrees of postpartum depression, contentment with the delivery experience, and fear of childbirth (Reyhan & Dađlı, 2024). The study, which took place in the Department of Obstetrics and Gynecology at a state hospital in southern Turkey between April and August 2022, involved 400 healthy pregnant women in their third trimester of pregnancy, ranging in age from 18 to 49. Three phases were used to gather data: the Birth Anticipation/Experience Scale and the Five-Factor Personality Scale were filled out by participants during the first interview. They completed the Edinburgh Postnatal Depression Scale in the fourth week after giving birth and the Birth Satisfaction Scale on the tenth postpartum day. The results showed that both postpartum depression and

fear of childbirth were significantly positively correlated ($p < 0.001$) with neurotic personality traits. However, there was a significant negative correlation ($p < 0.001$) between these outcomes and personality traits such as conscientiousness, agreeableness, openness, and extraversion, suggesting a protective function. No significant ($p > 0.05$) relationship between birth satisfaction and any personality traits was found by Reyhan and Dağlı (2024). To reduce the risk of postpartum depression and birthing anxiety, our findings highlight the importance of identifying women who show high levels of neuroticism during prenatal care so that they can receive specialized psychological help (Reyhan & Dağlı, 2024).

5. Discussion

Our research shows that psychological, temperamental, social, familial, and economic factors all have an impact on the fear of childbirth (FOC). The need for early mental health examinations and therapies was highlighted by the identification of anxiety and depression as important psychological variables for FOC (Zhoo et al., 2021 & O'Connell et al., 2019). Personality traits, such as neuroticism, have also been found to contribute to an individual's susceptibility to fear of childbirth (FOC) (Reyhan & Dağlı, 2024). Social support is an important factor in reducing the fear of childbirth (FOC) (Dal Moro et al., 2023; Gelaw et al., 2020; Zhoo et al., 2021). Because FOC can be made worse by financial challenges, healthcare and financial independence are very relevant. Pregnant women who are not employed or do not cohabit with their partner tend to display higher levels of anxiety associated with pregnancy and fear of giving birth, as compared to women who have a secured job and have stable relationships (Alemu et al., 2024; Beiranvand et al., 2017; Zhoo et al., 2021). The link between taking prenatal lessons and reduced levels of FOC emphasizes the importance of developing and enforcing sufficient and well-proportioned educational programs (Kacperczyk-Bartnik et al., 2019; Kashiha et al., 2023). To offer full support and care, it is necessary to work through this continuum of aspects altogether so that pregnant couples are fully assisted to the extent.

These findings give hope to more and more researchers in the direction of keeping on with the further and more detailed investigation of the present topic, to help women of the future have their tokophobia issues prevented or resolved on time, without the need for cesarean section to arise as a medical surgical solution to be later regretted.

6. Conclusions

To conclude, modern scientific literature has offered encouraging statistical results, as for the explanation of the multidimensional nature of human tokophobia. The woman's age and emotional maturity, the degree to which the gestation was desired, the woman's/mother's education on labor and motherhood, the way the woman's personality is organized, the comorbidity with anxiety and depression, as well as the possible history of previous traumatic child delivery experience, are some of the main causative factors that play a detrimental role in each pregnant woman's psycho-emotional state. In addition, other, more external factors including the family finances

and the family and social support availability, have equally been shown to significantly contribute to the fear of childbirth pathology -thus leading more and more women to resort to cesarean section, with all the subsequent unfavorable consequences that this preference will lead to. The following factors should be investigated in future research for their potential impact on the development of fear of childbirth: 1) the neurobiology of pregnancy and childbirth, 2) the woman's personality, 3) the hormonal and biochemical factors, and 4) the influence of social and mass media on fear of childbirth.

7. Limitations

The present review has several limitations. A first limitation concerns the difficulty of selecting primary arthrography that only includes, as a sample, women with tokophobia and not with other (probably undiagnosed) mental health comorbidities (anxiety disorders, depressive disorders, etc.) that could affect their choice for cesarean section. A second limitation concerns the fact that tokophobia is largely still underestimated, under-assessed and underdiagnosed in a large number of clinical places, which means that its causes are much harder to detect by the currently working in the clinical sector personnel. A third limitation that is worth mentioning is the fact that the causes of tokophobia are sometimes equally hard to detect in women (i.e., personality traits, temperament, etc.).

References

- Alemu, C., Wudu, H., & Lakew, S. (2024). Fear of childbirth and its associated factors among pregnant women in Dejen Woreda, East Gojjam Zone, Northwest Ethiopia: a community-based cross-sectional study. *Scientific Reports*, *14*(1), 9319. <https://doi.org/10.1038/s41598-024-58855-5>
- Beiranvand, S., Behboodi Moghadam, Z., Salsali, M., Alavi Majd, H., Birjandi, M., & Bostani Khalesi, Z. (2017). Prevalence of Fear of Childbirth and Its Associated Factors in Primigravid Women: A Cross- Sectional Study. *Shiraz E-Medical Journal*, *18*(11), e61896. <https://doi.org/10.5812/semj.61896>
- Betran, A. P., Ye, J., Moller, A.-B., Souza, J. P., & Zhang, J. (2021). Trends and projections of caesarean section rates: global and regional estimates. *BMJ Global Health*, *6*(6), e005671. <https://doi.org/10.1136/bmjgh-2021-005671>
- Betrán, A. P., Ye, J., Moller, A.-B., Zhang, J., Gülmezoglu, A. M., & Torloni, M. R. (2016). The Increasing Trend in Caesarean Section Rates: Global, Regional and National Estimates: 1990-2014. *PLOS ONE*, *11*(2), e0148343. <https://doi.org/10.1371/journal.pone.0148343>
- Challacombe, F. L., & Wroe, A. L. (2013). A hidden problem: consequences of the misdiagnosis of perinatal obsessive–compulsive disorder. *British Journal of General Practice*, *63*(610), 275–276. <https://doi.org/10.3399/bjgp13x667376>
- Dal Moro, A., Soeckl, G., Schier, F., Ricardo Rasmussen Petterle, & Rückl, S. (2023). Fear of childbirth: prevalence and associated factors in pregnant women of a maternity

- hospital in southern Brazil. *BMC Pregnancy and Childbirth*, 23(1), 632. <https://doi.org/10.1186/s12884-023-05948-0>
- Demšar, K., Svetina, M., Verdenik, I., Tul, N., Blickstein, I., & Globovnik Velikonja, V. (2018). Tokophobia (fear of childbirth): prevalence and risk factors. *Journal of Perinatal Medicine*, 46(2), 151–154. <https://doi.org/10.1515/jpm-2016-0282>
- Gelaw, T., Ketema, T. G., Beyene, K., Gurara, M. K., & Ukke, G. G. (2020). Fear of childbirth among pregnant women attending antenatal care in Arba Minch town, southern Ethiopia: a cross-sectional study. *BMC Pregnancy and Childbirth*, 20(1), 672. <https://doi.org/10.1186/s12884-020-03367-z>
- Johnson, A. R., Kumar G, M., Jacob, R., Jessie, M. A., Mary, F., Agrawal, T., & Raman, V. (2019). Fear of Childbirth among Pregnant Women Availing Antenatal Services in a Maternity Hospital in Rural Karnataka. *Indian Journal of Psychological Medicine*, 41(4), 318-322. https://doi.org/10.4103/ijpsym.ijpsym_292_18
- Kacperczyk-Bartnik, J., Bartnik, P., Symonides, A., Sroka-Ostrowska, N., Dobrowolska-Redo, A., & Romejko-Wolniewicz, E. (2019). Association between antenatal classes attendance and perceived fear and pain during labour. *Taiwanese Journal of Obstetrics and Gynecology*, 58(4), 492–496. <https://doi.org/10.1016/j.tjog.2019.05.011>
- Kashiha, M., Hosseini, J., & Samadaee Gelehkolae, K. (2023). Mothers' Perceptions About Childbirth Preparation Classes: A Qualitative Study. *International Journal of Community Based Nursing & Midwifery*, 11(4), 278–286. <https://doi.org/10.30476/ijcbnm.2023.98607.2247>
- Leeners, B., Görres, G., Block, E., & Hengartner, M. P. (2016). Birth experiences in adult women with a history of childhood sexual abuse. *Journal of Psychosomatic Research*, 83, 27–32. <https://doi.org/10.1016/j.jpsychores.2016.02.006>
- Li, J. (2021). Survey of factors influencing women's selection of the delivery method of their second child in Shanxi Province, China. *Pakistan Journal of Medical Sciences*, 37(3), 846-850. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8155418/>
- Negrini, R., da Silva Ferreira, R. D., & Guimarães, D. Z. (2021). Value-based care in obstetrics: comparison between vaginal birth and caesarean section. *BMC Pregnancy and Childbirth*, 21(1): 333. <https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-021-03798-2>
- O'Connell, M. A., Leahy-Warren, P., Kenny, L. C., O'Neill, S. M., & Khashan, A. S. (2019). The prevalence and risk factors of fear of childbirth among pregnant women: A cross-sectional study in Ireland. *Acta Obstetrica et Gynecologica Scandinavica*, 98(8), 1014–1023. <https://doi.org/10.1111/aogs.13599>
- Reyhan, F. A., & Dağlı, E. (2024). The relationship between women's personality traits and fear of childbirth, birth satisfaction, and postpartum depression. *Revista da Associação Médica Brasileira*, 70(8), e20231730. <https://doi.org/10.1590/1806-9282.20231730>
- Rúger-Navarrete, A., Vázquez-Lara, J. M., Antúnez-Calvente, I., Rodríguez-Díaz, L., Riesco-González, F. J., Palomo-Gómez, R., Gómez-Salgado, J., & Fernández-Carrasco, F. J. (2023). Antenatal Fear of Childbirth as a Risk Factor for a Bad Childbirth Experience. *Healthcare*, 11(3), 297. <https://doi.org/10.3390/healthcare11030297>

- Sioma-Markowska, U., Żur, A., Skrzypulec-Plinta, V., Machura, M. and Czajkowska, M. (2017). Causes and frequency of tocophobia — own experiences. *Ginekologia Polska*, 88(5), 239–243. doi:<https://doi.org/10.5603/gp.a2017.0045>.
- Zhou, X., Liu, H., Li, X., & Zhang, S. (2021). Fear of Childbirth and Associated Risk Factors in Healthy Pregnant Women in Northwest of China: A Cross-Sectional Study. *Psychology Research and Behavior Management*, 14, 731–741. <https://doi.org/10.2147/prbm.s309889>