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Review Article

## Tokophobia: a fear of childbirth and pregnancy - an overview

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### ABSTRACT

Tokophobia is a mental disorder that affects women of all ages and varies from a mild to severe dread of delivery. Knauer first reported in the literature in 1897 that between 20% to 78% of pregnant women experience dread connected to pregnancy and delivery. The International Journal of Reproduction, Contraception, Obstetrics and Gynaecology published a study that found that the prevalence of tokophobia was 30.7% on Levin's scale and 55.3% on Areskog's score. Tokophobia is a multifaceted fear of labor that can be further classified into primary tokophobia and secondary tokophobia. People who have tokophobia may have extreme anxiety that manifests as nightmares, insomnia, panic attacks, and avoidance of situations involving pregnancy or childbirth. The most prevalent type of tokophobia is called secondary tokophobia, and it usually affects women who have already given birth and have experienced a traumatic delivery previously. A 20-item questionnaire called the fear of childbirth questionnaire (FCQ) is used to scale people's fear of giving birth. Cognitive-behavioral therapy (CBT) is mostly used as a non-pharmacological treatment.

**Keywords:** Tokophobia, Pregnancy, Cesarean delivery, Cognitive-behavioral therapy, Fear of childbirth questionnaire

### INTRODUCTION

Tokophobia, also known as Maieusiophobia, is a mental disorder that affects women of all ages and varies from a mild to severe dread of delivery.<sup>1</sup> Pregnancy is a key physiological condition in every woman's life; nevertheless, instead of being a joyful experience, pregnancy may become a stressful and terrifying occurrence in certain women, leading to disease-like disorders. However, the majority of the women can cope with this fear and some stress and anxiety on their own with the help of community and medical support. When this fear becomes pathological dread, it is known as Tokophobia.<sup>2</sup> This dread may induce women to postpone becoming pregnant, even if they desire to have children or undergo a caesarean section to prevent vaginal birth. Tokophobic syndrome may develop in women who have never given birth to a kid or infant, but it may also afflict women who have already had traumatic delivery issues.<sup>3</sup> Knauer first reported in the literature in 1897 that between

20% to 78% of pregnant women experience dread connected to pregnancy and delivery. Fear is more prevalent and severe in nullipara than in parous women. Following that, Australian research found that 48% of women had moderate tokophobia and 26% had substantial fear of delivery. Pathological debilitating fear of birth affects around 6% to 10% of expectant women. Studies have shown that labor anxiety has a major impact on delivery outcomes, resulting in a considerable increase in caesarean births or deliveries. Because this dread can cause stress and anxiety, the usual fears that accompany bringing a newborn into the world are frequently distributed with the use of medical care, education, social support, and self-help measures.<sup>4</sup>

### PREVALENCE

The prevalence of tokophobia, a severe fear of giving birth, varies according to research. The International Journal of Reproduction, Contraception, Obstetrics and Gynaecology

published a study that found that the prevalence of tokophobia was 30.7% on Levin's scale and 55.3% on Areskog's score.<sup>5</sup> Over 20% of people in Western nations suffer from tokophobia, according to a different study that was published in the Journal of Psychosomatic Obstetrics and Gynaecology. However, a study that was published in BMC Psychiatry found that 3.7% of people in the population were thought to have a severe fear of giving birth. Furthermore, a qualitative study conducted in Japan with pregnant women revealed an estimated 14% prevalence of tokophobia. These results imply that tokophobia's prevalence can vary greatly based on the population and the evaluation techniques employed.<sup>6</sup>

## TYPES OF TOKOPHOBIA

Tokophobia is a multifaceted fear of labor that can be further classified into primary tokophobia and secondary tokophobia. The deep-seated fear and dread of delivery, known as primary tokophobia, can start in adolescence and precede pregnancy. Due to a painful delivery experience in the past, subpar obstetric care, postpartum depression, or other similar contributing factors, the person develops secondary tokophobia and becomes emotionally incapable of having children in the future.<sup>7</sup> Fear of childbirth is not a standalone issue; rather, it is linked to the personal traits of the woman, primarily general anxiety, melancholy, low self-esteem, discontent with their relationship, and lack of support. Additionally, there is a pattern of low psychological well-being among the partners of fearful women, which leads to depression, low life satisfaction, and unhappiness with marriages.<sup>8</sup>

## SOME INFORMATION TO KNOW ABOUT THIS SEVERE FEAR OF PREGNANCY AND CHILDBIRTH

### *Symptoms*

Specifically, a strong, illogical fear of pregnancy or childbirth is referred to as tokophobia. People who have tokophobia may have extreme anxiety that manifests as nightmares, insomnia, panic attacks, and avoidance of situations involving pregnancy or childbirth. A person's general well-being may be impacted by this phobia, and managing the accompanying distress may call for therapeutic interventions.<sup>9</sup>

### *Other symptoms*

The psychological difficulties and anxieties connected to getting pregnant and giving birth, with a focus on intense fear and anxiety. People who are worried about these things might be more afraid of stillbirths, abnormal births, or mother death. The fear of getting pregnant can show up as a strong preference for caesarean section deliveries and, in certain situations, as a total avoidance of sexual activity.<sup>10</sup>

Furthermore, these anxieties might go beyond the obvious physical aspects of pregnancy to include worries about parenting abilities, healthcare, and money. This increased anxiety may affect the birthing process, increasing the risk of trauma during childbirth and possibly making it more difficult to build a close bond with the child.<sup>11</sup> Addressing these anxieties frequently entails providing individuals with all the assistance they need to get through the emotional difficulties that come with becoming pregnant and a parent, such as counseling, education, and reassurance.<sup>12</sup>

## CAUSES AND FACTORS

Researchers have developed several theories in response to tokophobia, or the fear of childbirth. An additional factor is a history of mental health problems, such as anxiety and depression, which can increase a woman's fear of giving birth. Anxiety can also be increased by the worry that insufficient pain management will be provided during childbirth. Moreover, hearing about other women's horrific childbirth experiences could exacerbate fear and hasten the development of tokophobia. Comprehending these variables is essential for assisting and addressing tokophobia sufferers.<sup>13</sup>

Tokophobia may be caused by a variety of factors. Several variables are connected to worries and fears regarding getting pregnant and giving birth. All these factors might add to a woman's worries at this point.

### *Dread for the baby's life and/or mistrust of medical professionals*

This fear can be brought on by uncertainties about the medical procedure, mistrust of healthcare providers, or traumatic experiences in the past.

### *Dread of complications from childbirth, including death and preeclampsia*

Anxiety can be caused by worries about possible birth-related issues, such as the potentially fatal condition preeclampsia.

### *Aversion to suffering*

One of the main causes of anxiety during labor and delivery is the expectation of pain and discomfort.

### *Fear of privacy invasion, loss of control, and the unknown*

Fears can arise from the personal nature of childbirth, from a lack of control to uncertainty about the procedure.

### ***Having experienced sexual abuse, depression, or anxiety as a child in the past***

Past traumas, particularly those connected to abuse or anxiety during childhood can resurface and affect the experience of childbirth.

### ***Reading about horrifying delivery experiences from friends or on social media***

Outside factors, like unfavorable accounts spread by others, can exacerbate fear and anxiety.

### ***Hormonal fluctuations that make anxiety harder to control***

During pregnancy, hormonal changes can have an impact on emotions and amplify anxiety-provoking feelings.

### ***Early pregnancy, poverty, and a lack of social support are examples of psychosocial factors***

Stress and anxiety during pregnancy can be exacerbated by socioeconomic obstacles and insufficient support networks.

### ***Lack of knowledge about the labor and delivery process***

Fear of the unknown may be exacerbated by a lack of knowledge about the childbirth process.

A comprehensive approach is often required to address these concerns to allay fears and encourage a more positive pregnancy experience. This approach may include education, emotional support, and open communication with healthcare professionals.<sup>14-16</sup>

## **TOKOPHOBIA AND POSTTRAUMATIC STRESS DISORDER**

Tokophobia is a severe fear of giving birth that causes anxiety symptoms and is typically accompanied by complete avoidance of anything associated with the process. The most prevalent type of tokophobia is called secondary tokophobia, and it usually affects women who have already given birth and have experienced a traumatic delivery previously. Post-traumatic stress disorder (PTSD) is thought to be the cause of it.<sup>17</sup> Healthcare professionals need to be aware of the symptoms of both PTSD and tokophobia to help with appropriate diagnosis and treatment. To reduce the morbidity linked to these conditions, close coordination between obstetricians and mental health specialists is necessary.<sup>18</sup> In addition, supplying partners of tokophobia women with information and resources can improve their capacity to assist their loved ones during the perinatal stage. Women suffering from tokophobia may experience symptoms of PTSD, including reliving parts of the trauma, vivid flashbacks, intrusive thoughts and images, nightmares, intense distress at real or symbolic reminders of the trauma, physical

sensations such as pain, sweating, nausea, or trembling, alertness or feeling on edge, panicking when reminded of the trauma, being easily upset or angry, extreme alertness, disturbed sleep, or a lack of sleep.<sup>19</sup>

Psychological frameworks, such as those that consider trauma, can be utilized to comprehend and explain tokophobia. Interventions should consider the mother-child relationship, both during and after pregnancy, and the potential effects that fear of childbirth and/or a traumatic birth experience may have on the child.<sup>20</sup> Since tokophobia and PTSD are related, treating both disorders at the same time is the appropriate course of treatment. Eye movement desensitization and reprocessing (EMDR), cognitive behavioral therapy (CBT), and supportive counselling are examples of therapeutic modalities. To effectively manage tokophobia and any potential side effects, like PTSD, early detection and intervention are essential.<sup>21</sup> It's crucial to check for mental health issues and eventually refer women for psychiatric assessment in addition to the standard medical care given to them during pregnancy and after childbirth, especially if they have gone through traumatic experiences during the pregnancy or delivery.<sup>22</sup>

Research indicates that anywhere from 9% to 50% of moms say that giving birth was a disturbing observation. "A woman's experience of interactions and/or events directly related to childbirth that caused overwhelming distressing emotions and reactions, leading to short- and/or long-term negative impacts on a woman's health and wellbeing" is the term of a traumatic birth. Using psychiatric clinical standards for distressing stressors, such as the diagnostic and statistical manual of mental disorders, fifth edition (DSM-5) criteria, is an additional strategy. According to these criteria, childbirth is considered traumatic if the mother's or the infant's life is believed to be in danger, or if there is significant physical harm.

When a mother's life and/or the life of her newborn are in jeopardy during childbirth, as in the case of an exigency caesarean childbirth or a preemie, the situation can be objectively traumatic. A traumatic delivery event is defined subjectively, though. This implies that even in cases where there was no objective threat to the mothers' or the newborns' lives, the labor process may have been traumatic for the women. PTSD associated with childbirth can arise as a result of traumatic births. Other traumatic events during pregnancy and after delivery can also cause parents to have pre-existing PTSD.<sup>23</sup>

## **METHODS OF DIAGNOSIS USED TO ASSESS ANXIETY RELATED TO CHILDBIRTH**

### ***Fear of childbirth questionnaire***

A 20-item questionnaire called the fear of childbirth questionnaire (FCQ) is used to scale people's fear of giving birth. It was created and is based on worries that women have expressed. After undergoing a preliminary phase of

development, the FCQ is a new instrument designed to measure the fear of childbirth in the English-speaking population of the United Kingdom. It has good content validity.<sup>22,23</sup> The 30-item questionnaire has been used to measure pregnant women's fear of childbirth in various contexts. It asks questions about fear before, during, and after childbirth.<sup>24</sup>

**Tokophobia severity scale**

The fear of childbirth, or tokophobia, can be measured for severity using the recently developed tokophobia severity scale (TSS), a self-report measure. It was developed in response to issues with measurement irregularities and scoring challenges that plagued the previous measures of obstetric anxiety. Based on the premise of unidimensionality, the TSS is intended to evaluate the degree of tokophobia. A three-factor model, on the other hand, provided a noticeably better fit to the data than a unidimensional model, according to a study.<sup>25</sup> The analysis also emphasized problems with sample size and statistical power in the initial instrument development investigation. Although the study indicates that assumptions about the TSS's measurement model are based on insufficient sample sizes, the tool is still promising.<sup>26</sup>

**W-DEQ A and W-DEQ B**

Measures of pregnancy fear can be obtained by a set of surveys or clinical interviews.<sup>27</sup> The two major commonly applied tools for assessing how difficult a scenario are W-DEQ A and B. A Likert scale, varying from 0 to 6, is practiced to assess the 33 survey items to determine how women feel about giving birth. Evaluation of postnatal experiences during the postnatal period (WDEQ B) and in the future (W-DEQ A). A score over 66 indicates a high dread of labor, and an account over 85 alludes to an equable phobia.<sup>28</sup>

**Fear of birth scale**

A therapy tool for evaluating advanced degrees of birth anxiety is the fear of birth scale (FOBS). Using a visual analog scale, the FOBS measures the level of anxiety female is dealing with concerning their impending delivery.

**Oxford worries about labour scale**

As part of a large-scale study, the Oxford worries about labour scale (OWLS) gauges' women's concerns regarding labor and delivery as well as their experiences with maternity care in England.<sup>29</sup>

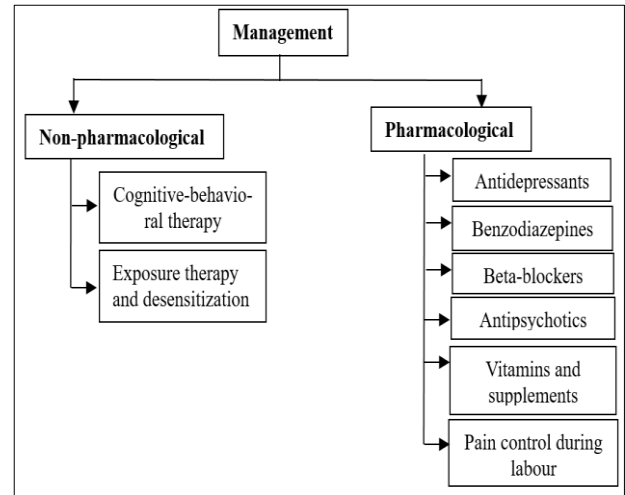
**Slade-Pais expectations of childbirth scale**

Women's expectancy for procreation is measured by the Slade-Pais expectations of childbirth scale (SPECS).<sup>30</sup> Various elements are considered, such as the kind of expectations women have for their pregnancies, how well

they can manage discomfort and worry, how much they rely on others for assistance, including spouses and medical professionals, and how well they can have positive expectations for their pregnancies.<sup>31,32</sup>

**MANAGEMENT OF TOKOPHOBIA**

Management of tokophobia is given in Figure 1.



**Figure 1: General approaches of pharmacological and non-pharmacological treatment of tokophobia.**

**NON-PHARMACOLOGICAL APPROACHES**

**Cognitive-behavioural therapy**

Cognitive-behavioural therapy (CBT) is a popular therapeutic strategy for addressing a variety of mental health issues, including tokophobia, or dread of birthing. CBT for tokophobia aims to confront and alter the unpleasant ideas, attitudes, and emotions associated with pregnancy and childbirth.<sup>28</sup>

The following crucial cognitive behavioural therapy techniques are commonly used to treat tokophobia.

**Psychoeducation**

This comprises teaching individuals about the physiological processes associated with pregnancy, childbirth, and related topics. It helps people understand the reality of conception, pregnancy, and childbirth and dispels any myths or illogical beliefs.

**Cognitive restructuring**

Identifies and refutes negative ideas and perceptions about delivery. The therapist assists the patient in recognizing and replacing erroneous or irrational notions with realistic and balanced alternatives. For example, if the patient believes that giving birth endangers their life, the therapist can help them reframe their views by offering information that supports a safer viewpoint.<sup>32</sup>

### **Exposure therapy**

This is the process of methodically and progressively exposing the patient to stressful experiences or triggers related to pregnancy or childbirth. The process begins with less stressful situations and then progresses to more hard ones. Individuals may tackle their concerns with this technique in a supportive and safe setting, allowing them to gradually build coping skills and lessen anxiety.

### **Techniques for relaxation**

People who suffer from tokophobia can be taught a variety of strategies, including progressive muscular relaxation, deep breathing exercises, and mindfulness meditation. These approaches can assist in alleviating anxiety symptoms and promote relaxation throughout pregnancy and labor.<sup>1,8</sup>

### **Behavioral activation**

The goal of this strategy is to increase people's engagement in pregnancy and birth-related activities. It is helpful to gradually involve them in activities that they may have previously avoided due to fear. Participating in these activities can give people a feeling of accomplishment and increase their confidence in their capacity to handle childbirth-related difficulties.<sup>33</sup>

### **Role-playing and imagery**

These techniques involve visualizing and mentally rehearsing the birth of a healthy baby. By practicing and visualizing how they would handle childbirth and any related anxiety or fear, people can put their skills to use. This approach boosts their confidence in their ability to handle childbirth and reinforces their sense of self-efficacy.

### **Ability to solve problems**

Individuals with tokophobia may benefit from improving their problem-solving abilities. The therapist assists clients in identifying potential barriers or problems associated with delivery and teaches them practical problem-solving skills. People can approach their challenges more objectively, resulting in real answers.<sup>35</sup> These CBT procedures usually adjust to the individual's unique demands and circumstances. These strategies, when applied under the guidance of a skilled therapist, successfully alleviate tokophobia symptoms while also improving overall wellness.<sup>34</sup>

## **EXPOSURE TREATMENT AND DESENSITIZATION**

Desensitization and exposure therapy are useful tactics for tokophobia sufferers. Here is one possible use for them.

### **Assessment**

The therapist conducts an initial evaluation to determine the particular concerns and triggers related to tokophobia. This examination assists in determining the level of anxiety and the most effective treatment approach.<sup>12,22</sup>

### **Education**

The therapist explains how to become pregnant, go through labor, and give birth, as well as the procedures involved. They talk about the many stages, essential medical treatments, and safety precautions. This material clears up misconceptions and offers an accurate representation of the events in question.

### **Progressive exposure**

The patient is carefully exposed to stimuli related to becoming pregnant and giving birth, guided by the therapist. Before moving on to more realistic portrayals, this process could begin with discussing and viewing stories, films, or images that aren't overly frightening.

### **Relaxation techniques**

The therapist teaches patients mindfulness exercises, deep breathing, and guided imagery to help them manage their anxiety during exposure sessions. These techniques can also be applied outside of therapy sessions.

### **Imaginal exposure or virtual reality**

These two techniques can be combined in certain circumstances. Through safe, regulated experiences provided by virtual reality simulations, individuals can gradually confront their fears in a safe environment. The act of imagining and narrating stories about childbirth and pregnancy is known as imaginary exposure.<sup>14,25,36</sup>

### **Support and guidance**

The therapist provides advice and support during the exposure process. They provide clients with coping techniques to deal with any fear or discomfort that may arise during exposure sessions, as well as help in processing their emotions.

### **Reinforcement**

Positive reinforcement is used to help patients in exposure therapy keep moving forward. This could involve acknowledging their accomplishments, praising their efforts, and highlighting the fact that their reactions to fear or anxiety have lessened.<sup>6</sup>

If pregnant and delivery-related stimuli are repeatedly and carefully exposed to, people who experience phobic reactions to these events may eventually see a decrease in their fear and anxiety responses. The goal is to boost their

confidence in their ability to manage the process and help them develop a more realistic understanding of it.<sup>6</sup>

## PHARMACOLOGICAL APPROACHES

It includes pharmaceuticals and additional pharmacological therapies.

Although a specific medication is not approved to treat tokophobia, there are pharmacological interventions that may be considered to alleviate associated symptoms. It's important to keep in mind that a medical professional should determine whether these interventions are appropriate.<sup>10</sup>

### *Antidepressants*

Antidepressants are frequently recommended to treat anxiety and sadness, which are common symptoms of tokophobia. The most frequent antidepressants given for tokophobia are selective serotonin reuptake inhibitors. These drugs operate by raising serotonin levels in the brain, which improves mood and reduces anxiety.

### *Benzodiazepines*

Anxiety disorders are commonly treated with prescriptions for benzodiazepines. One neurotransmitter that can lessen anxiety and encourage relaxation is gamma-aminobutyric acid. Its effects are amplified by these drugs. Because benzodiazepines can cause drowsiness and develop into a habit, they are typically only used as a short-term treatment for tokophobia.<sup>10,11</sup>

### *Beta-blockers*

Beta-blockers are commonly administered to treat hypertension and heart problems. But they can also be used to alleviate anxiety symptoms, such as those caused by tokophobia. Beta-blockers act by inhibiting the effects of adrenaline, which can reduce heart rate, and blood pressure, and promote relaxation.

### *Antipsychotics*

Doctors may occasionally administer atypical antipsychotics such as quetiapine or olanzapine to treat severe anxiety or other mental symptoms associated with tokophobia. These drugs should be used with caution and under strict supervision by a doctor during pregnancy.<sup>13,19</sup>

### *Pregnant women should take vitamins and supplements*

Getting enough iron, vitamin D, and folic acid during pregnancy can support overall mental health. A medical professional may recommend specific prenatal vitamins or supplements based on each patient's needs.

## *Pain management during childbirth*

Some of the fears caused by tokophobia can be lessened by addressing concerns about the agony of childbirth. Among the methods for controlling pain during labor are spinal blocks, nitrous oxide, and epidural anaesthesia. By thoroughly discussing these options with a healthcare provider, pregnant women can make informed decisions about how they would like to manage their pain during labor.<sup>14,31</sup>

Pharmacological remedies, such as exposure therapy, cognitive-behavioural therapy, or counselling, should be used in concert with psychiatric therapies to address the underlying concerns and anxieties associated with tokophobia. Treating this disease with a multidisciplinary team of therapists, psychiatrists, and obstetricians is typically the most successful approach. When selecting a medicine or intervention, it is recommended to visit a healthcare expert who can assess the severity of the problem and carefully analyse the benefits and downsides of the various treatment choices.<sup>17,37</sup>

## CONCLUSION

Pregnancy and childbirth-related anxiety are frequent among women. The various hypotheses put forward to explain the fear of childbirth include disruption in neurohormonal homeostasis, social communication, fears related to medical care (ineffective pain control, fear of loss of control or death, and lack of confidence in the team providing care), psychosocial factors (e.g., younger age, low education, and social disadvantage), and psychological factors (e.g., low self-esteem, lowered pain sensitivity, revival of traumatic memories of tokophobia) related with pregnant women in varying degrees. It is impacted by sociodemographic factors such as education and socioeconomic position. Tokophobia may be reduced with improved sociodemographic situations.

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## REFERENCES

1. Hofberg K, Ward MR. Fear of pregnancy and childbirth. *Postgrad Med J.* 2003;79(935):505-10.
2. Wijma K, Wijma B, Zar M. Psychometric aspects of the W-DEQ; a new questionnaire for the measurement of fear of childbirth. *J Psychosom Obstet Gynaecol.* 1998;19(2):84-97.
3. Knauer O. For general practitioners With a foreword by A. Martin. S. Karger AG Publishers. 1897.
4. Hofberg KM, Brockington IF. Tokophobia: A morbid dread of childbirth. Its presence in Great Britain and Grand Cayman, British West Indies. *J Psychosom Obstet Gynaecol.* 2001;22.
5. Demšar K, Svetina M, Verdenik I, Tul N, Blickstein I, Globevnik Velikonja V. Tokophobia (fear of childbirth):

- prevalence and risk factors. *J Perinat Med.* 2018;46(2):151-4.
6. Ramalingappa P, Gowda RS, Srinivasamurthy SH. A study of factors associated with tokophobia and its effect on pregnancy. *Int J Reprod Contracept Obstet Gynecol.* 2022;11(3).
  7. Lewis LN, Nath S, Howard L. Sixty seconds on . . . tokophobia. *BMJ.* 2018;362:k3933.
  8. Takegata M, Usui Y, Sohda S, Takeda S, Takeda J, Saito T, et al. Tokophobia: Case Reports and Narratives of Ten Japanese Women. *Healthcare (Basel).* 2023;11(5):696.
  9. Hofberg K, Brockington I. Tokophobia: an unreasoning dread of childbirth. A series of 26 cases. *Br J Psychiatry.* 2000;176:83-5.
  10. Bhatia MS, Jhanjee A. Tokophobia: A dread of pregnancy. *Ind Psychiatry J.* 2012;21(2):158-9.
  11. Melender HL. Experiences of fears associated with pregnancy and childbirth: a study of 329 pregnant women. *Birth.* 2002;29(2):101-11.
  12. Alehagen S, Wijma K, Wijma B. Fear during labor: Fear during labor. *Acta Obstetrica et Gynecologica Scandinavica.* 2001;80(4):315-20.
  13. Billert H. Tokophobia--a multidisciplinary problem. *Ginekol Pol.* 2007;78(10):807-11.
  14. Saisto T, Halmesmaki E. Fear of childbirth: a neglected dilemma: Fear of childbirth. *Acta Obstetrica et Gynecologica Scandinavica.* 2003;82(3):201-8.
  15. Kristina H, Ian B. Tokophobia: an unreasoning dread of childbirth. A series of 26 cases. *Br J Psychiatry.* 2000;176:83-5.
  16. Rouhe H, Salmela-Aro K, Gissler M, Halmesmaki E, Saisto T. Mental health problems common in women with fear of childbirth. *Obstetric Anesthesia Digest.* 2012;32(3):192.
  17. Kola ST, Hofoss D, Daltveit AK. Indications for caesarean deliveries in Norway. *Am J Obstet Gynecol.* 2003;188:864-70.
  18. Cwm Taf Morgannwg University Health Board, Obstetrics and Gynaecology Directorate. Guideline for tokophobia. 2003. Available at: <https://wisdom.nhs.wales/a-z-guidelines/t/tokophobia-guideline-pdf1/>. Accessed on 24 February 2024.
  19. Hofberg K, Brockington I. Tokophobia: an unreasoning dread of childbirth. A series of 26 cases. *Br J Psychiatry.* 2000;176:83-5.
  20. Birth Trauma Scotland. Perinatal trauma, grief & tokophobia. Available at: <https://www.birthtraumascotland.com/about-birth-trauma>. Accessed on 24 February 2024.
  21. Archibald S. A proposed psychological model for understanding and supporting individuals living with tokophobia. *Br J Midwifery.* 2021;29:11.
  22. Cherif E, Meddouri LS, Hajri A, Maamri A, Zalila H. Tokophobia or post-traumatic stress disorder? about a tunisian case. *Eur Psychiatry.* 2021;64(1):S452.
  23. Horsch A, Garthus-Niegel S, Ayers S, Chandra P, Hartmann K, Vaisbuch E, et al. Childbirth-related posttraumatic stress disorder: definition, risk factors, pathophysiology, diagnosis, prevention, and treatment. *Am J Obstet Gynecol.* 2024;230(3S):S1116-27.
  24. Slade P, Balling K, Houghton G, Sheen K. A new scale for fear of childbirth: the Fear of Childbirth Questionnaire (FCQ). *J Reprod Infant Psychol.* 2022;40(6):602-12.
  25. Johnson AR, Kumar MG, Jacob R, Jessie MA, Mary F, Agrawal T, et al. Fear of Childbirth among Pregnant Women Availing Antenatal Services in a Maternity Hospital in Rural Karnataka. *Indian J Psychol Med.* 2019;41(4):318-22.
  26. Martin CR, Jones C, Huang C, Jomeen J, Boubert L, Marshall CA. The Tokophobia Severity Scale (TSS): measurement model, power and sample size considerations. *J Reprod Infant Psychol.* 2022;40(6):613-22.
  27. Wootton BM, Davis E, Moses K, Moody A, Maguire P. The development and initial validation of the Tokophobia Severity Scale. *Clin Psychol (Australian Psychol Soc).* 2020;24(3):267-75.
  28. Stoll K, Swift EM, Fairbrother N, Nethery E, Janssen P. A systematic review of nonpharmacological prenatal interventions for pregnancy-specific anxiety and fear of childbirth. *Birth.* 2018;45(1):7-18.
  29. Striebich S, Mattern E, Ayerle GM. Support for pregnant women identified with fear of childbirth (FOC)/tokophobia - A systematic review of approaches and interventions. *Midwifery.* 2018;61:97-115.
  30. O'Connell MA, Khashan AS, Leahy-Warren P, Stewart F, O'Neill SM. Interventions for fear of childbirth including tocophobia. *Cochrane Database Syst Rev.* 2021;7(7):CD013321.
  31. Haines H, Pallant JF, Karlström A, Hildingsson I. Cross-cultural comparison of levels of childbirth-related fear in an Australian and Swedish sample. *Midwifery.* 2011;27(4):560-7.
  32. Redshaw M, Martin C, Rowe R, Hockley C. The Oxford Worries about Labour Scale: women's experience and measurement characteristics of a measure of maternal concern about labour and birth. *Psychol Health Med.* 2009;14(3):354-66.
  33. Sheen K. The development of the Slade Pais expectations of childbirth scale (SPECS). *J Reprod Infant Psychol.* 2016;34(5):495-510.
  34. Hassanzadeh R, Abbas-Alizadeh F, Meedyda S, Mohammad-Alizadeh-Charandabi S, Mirghafourvand M. Assessment of childbirth preparation classes: a parallel convergent mixed study. *Reprod Health.* 2019;16(1):160.
  35. Cleveland Clinic. Tokophobia (fear of childbirth). Available at: <https://my.clevelandclinic.org/health/diseases/22711-tokophobia-fear-of-childbirth>. Accessed on 24 February 2024.
  36. MedicineNet. Overcoming tokophobia (fear of pregnancy) symptoms & causes. Available at: [https://www.medicinenet.com/overcoming\\_tokophobia/article.htm](https://www.medicinenet.com/overcoming_tokophobia/article.htm). Accessed on 24 February 2024.
  37. Ramalingappa P, Gowda RS, Srinivasamurthy SH. A study of factors associated with tokophobia and its effect on pregnancy. *Int J Reprod Contracept Obstet Gynecol.* 2022;11:3.

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