A review on prevalence of tokophobia: Fear of childbirth, diagnosis & its management approaches

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Abstract:

Tokophobia, also known as maieusiophobia or parturiphobia, is a condition that affects 5–15 percent of pregnant women. Given the unpleasant and unpredictable sensation, it can be viewed in part as a typical human occurrence, but extreme cases that interfere with the woman's ability to go about her everyday business are classified as pathological kinds of Tokophobia. It is a terrible illness that is quite distinct. Due to a lack of appropriate psychological assessments, it has been challenging to research the prevalence and effects of tokophobia. Due to its complexity and ramifications for obstetrics, anesthesiology, psychology, and psychiatry, it is urgent and desirable to establish a multidisciplinary approach to treating dread of childbirth. It is essential to comprehend the genesis and development of the condition in order to better comprehend the aetiology and developmental stages of tokophobia and to promote suitable, effective, and evidence-based therapies. More research is necessary because there hasn't been much done in these fields. Focusing on the evaluation of the care pathways and applicable treatments can help with this.

Keywords: Tokophobia, Maieusiophobia, Parturiphobia, Fear of Childbirth, Fear of Pregnancy, Psychometric Study

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Introduction:

Phobias are defined as an excessive and irrational fear of something that is unlikely to cause harm to you. Phobia, as opposed to ordinary anxiety, has a recognised fundamental cause (like a situation, place or

object). Upon coming into contact with the cause, one may experience terror and a profound sense of dread, which may have an impact on one's career, academics, and interpersonal relationships.

Tokophobia, often called maieusiophobia or parturiphobia, is a slight to severe fear of being pregnant or giving birth that can make a woman put off being pregnant. Fear of labour can be viewed as a normal human feeling to some extent given that it is a painful and unpredictable procedure, but extreme cases that impair a woman's capacity to function normally are categorised as pathological types of tokophobia. The percentage of pregnant women who are affected by this phenomenon ranges from 5 to 15%. Tokophobia comes in two flavours: primary and secondary. A nulliparous woman with primary tokophobia has a pathological fear of giving birth, whereas women with secondary tokophobia have had traumatic obstetrical experiences in the past.[1]

Pregnancy is a momentous life event that affects a woman physically, hormonally, and emotionally. The genesis of tokophobia is complex and can be connected to risk factors in a number of different ways. In the study population of pregnant females, or study participants, about 53.4% reported having a moderate fear of giving birth, whereas 23.1% reported having a high or very high fear. The fact that 90% of the participants in this study were nulliparous may have greatly contributed to the high prevalence.[2]

Giving birth is recognised as an extraordinary life experience and a severe stressor, and every mother has considerable social and emotional impacts. [23,24,25] Birth celebrations are associated with discomfort, fear, and losing one's sense of control. [26,27]

Women who are multiparous examine the repercussions of a new birth, whereas those who are pregnant for the first time think about how pregnancy provides birth. [28,29] Pregnant women have a mild fear of childbirth in 80% of FOC cases. [30] Moderate levels of FOC are present in 20% of expectant mothers. [31,32] Additionally, 6–10% of expectant women have significant FOC that interferes with their ability to function on a daily basis. [33] Additionally, 13% of women who are not pregnant delay childbirth due to FOC or because they do not want to have children. [31]

Fear of childbirth is recognised to have an adverse effect on the pregnancy, labour, and postnatal phases. [32,33]

FOC may also cause the woman to have prenatal dejection and ineffective labour contractions. [34] During labour and delivery, FOC patients say they have more pain. [35,36]

Therefore, fear-induced stress and discomfort may necessitate a caesarean section (CS). [37]

Controlling FOC has several goals, including assisting the mother in embracing the unknowns associated with childbirth, managing the pregnancy, reducing pregnancy-related anxiety, and increasing the proportion of vaginal births (VB). [38] A few newer methods for lowering FOC include childbirth education,[39] breathing exercises,[40] hydrotherapy, [41] hypnosis, [42] continuity of midwifery care, [43] midwife counselling, [44] haptotherapy, [45] doula support, [46] and cognitive and behavioural therapies. [47] Birth pain has been the focus of study and treatments for FOC. [48] However, in addition to labour pain, FOC is also associated with previous birth styles, a history of depression, psychological tensions around the mode of delivery, a lack of social support, and level of expertise. [49,50]

Type of Tokophobia: There are four types of tokophobia (Fig-1)

1. **Fear of the unknown:** Mothers may feel terrified during labour because they fear not knowing and desire to influence what will happen. Mothers could feel ineffective and uncertain about their abilities to give birth, for instance.
2. **Dislike of pain:** Although there are several ways to reduce labour pain, first-time mothers frequently fear it. Meditation, breathing techniques, and prenatal classes can all be helpful. Women who can relax and feel in control experience less pain.
3. **Fear of procedures during childbirth:** Controlling your fear of childbirth requires that you have a thorough understanding of what labour entails and some technical

information to help you relax while you are pregnant. Some cures include feeling in control and aware of what is happening. By attending childbirth classes, doing prenatal yoga, reading literature about childbirth, and interacting with the medical team, women can achieve this.

4. **Fear of slipping out of control:** It's important for women to have emotional and familial support and to convey their needs to their doctors as the pregnancy progresses because uncertainty may get worse. Depending on the woman's experience level, normal childbirth can last anywhere from 8 hours on average to 12 to 24 hours for a primipara. There is plenty of time to get to the hospital as a result. Doctors will reassure the woman that competent and knowledgeable medical professionals will be on hand. [11]

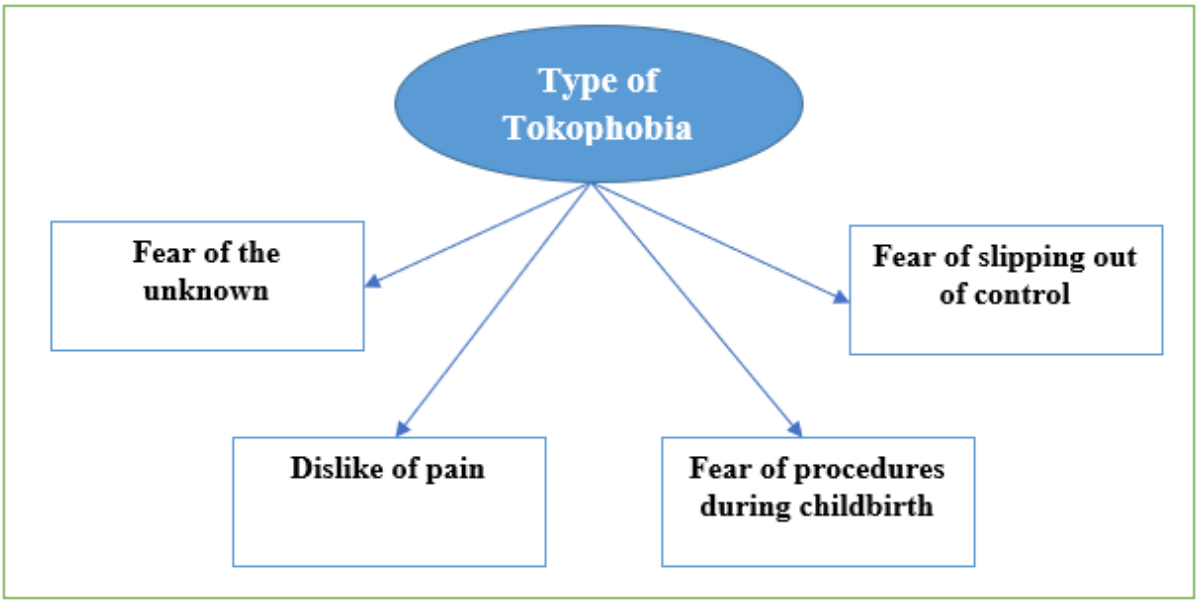

Figure-1: Type of Tokophobia

Significant Elements Related to Tokophobia

1. anxiousness and depression
2. Pre-existing mental illness
3. Relationships with Others
4. Past maltreatment/ historical abuse
5. Previous traumatic obstetric history
6. First Maternity
7. Lack of self-confidence
8. Worrisome in behaviour
9. Lack of familial support
10. Social and cultural factors observed or learned about the horrific obstetric experiences of other women

It's important to recognise when "general anxiety" or "worrisome conduct" has a pathological component and becomes "morbid fear" or a "deep sense of dread." Numerous factors, such as a fear of episiotomies, a sense of helplessness in the face of the circumstance, pain, a fear of needles, hospitals, unpleasant or unprofessional medical staff, a fear of being injured, etc., can induce a profound sensation of dread. Insufficient assistance may worsen the situation.

The Ante Natal Care (ANC) Profile consists of a number of tests to evaluate the general health of the mother and the foetus as well as to identify any pathological conditions that might be preventing the foetus from developing normally. However, we also need to understand the psychological aspects because anxiety isn't just caused by clinical conditions.

Because there aren't enough valid psychological tests available, it has been challenging to research the prevalence and effects of tokophobia. One of the earliest psychometric studies currently available suggests that it may be possible to use the Wijma Delivery Expectancy/ Experience Questionnaire (W-DEQ) both before and after delivery in nulliparous, primigravid, as well as in parous women, in order to pierce a

psychological construct related to Tokophobia. The Revised Prenatal Distress Questionnaire, also known as the Sociodemographic Information Form, is another psychometric exam that can be used to determine whether expecting women are anxious or unhappy (NUPDQ). This could make it simpler to assist pregnant mothers more. [3] In a recent study, techniques resembling the Labor Anxiety Questionnaire (KLPII) were employed to gauge the level of tokophobia and state and trait anxiety in the study group. They assessed the effect of sociodemographic factors such age, educational level, medical training, place of residence, place of delivery, employment, and financial status on the severity of tokophobia and situational anxiety using the State-Trait Anxiety Inventory (STAI) scale. [4]

Birth anxiety is a problem that is largely ignored, despite the fact that it still exists today. Two of the main causes of the rise in tokophobia among women are age and socioeconomic level. The pathological component's participation and the rise in anxiety, which typically prolong pregnancies and increase the need for caesarean sections, have a negative impact on the pregnant woman's quality of life. Tokophobia may have an impact on a number of pregnancy-related events, some of which are included in Table 1. After giving birth, tokophobia may affect the mother, aggravate puerperal depression, impede the bonding process between mother and child, and make breastfeeding challenging. It may occasionally be linked to post-traumatic stress disorder. [5]

Table-1: Effects of tokophobia on pregnancy

1. Abnormal uterine growth
2. An inadequate birthweight
3. Tardiness or immaturity
4. Changes in the heart rate of the foetus
5. Disproportionate uterine arteries

Evaluations of the intensity, prevalence, and risk factors for developing a fear of childbirth are essential, as are the identification of at-risk women through psychological therapies. Pregnant women who experience prenatal anxiety, somatosensory amplification, or state-continuous anxiety need to be constantly watched. Anxiety sensitivity, the exaggeration of sensorimotor symptoms, and fear of labour were found to have a fragile positive connection. With greater prevalence of tokophobia, anxiety sensitivity and somatosensory amplification drastically increased. [6]

A woman needs expert psychological treatment (based on CBT and psychoeducation) to get over her fear, as well as the development of a safe and supportive environment for her. Women who desire effective analgesia for labour pain relief and who exhibit elevated levels of dread and negative emotions should always receive neuraxial treatments. In a study that examined the outcomes of pregnancies for women who received both psychological and obstetric support, it was discovered that women with severe tokophobia who received psychosomatic support experienced caesarean sections for psychosocial reasons at a rate that was 50% lower than the reference group and comparable to vaginal birth rates. It has been demonstrated that the price of psychosomatic support is substantially lower than the savings from fewer Caesarean procedures. [7]

Diagnosis approaches used to determine childbirth anxiety:

1. **W-DEQ A and W-DEQ B:** A set of questionnaires or clinical interviews can be used to measure pregnancy fear. [12,13,14] W-DEQ A and W-DEQ B are the most widely used instruments for determining how tough a situation is. The 33 questions on the surveys are evaluated on a Likert scale (from 0 to 6) to gauge how women feel about giving birth. Future (W-DEQ A) and postnatal period evaluation of postnatal experiences (W-DEQ B). [14] High fear of labour is indicated by a score above 66, and severe fear is indicated by a score above 85.
2. **Fear of Birth Scale (FOBS):** The Fear of Birth Scale (FOBS) is a therapeutic assessment used to assess high levels of birth anxiety. [15] The FOBS gauges how much anxiety women are feeling about their imminent birth using a visual analogue scale.

3. **Oxford Worries about Labour Scale (OWLS):** The OWLS measures women's worries about labour and delivery as well as their experiences with maternity care in England as part of an extensive study. [16]
4. **Slade-Pais Expectations of Childbirth Scale SPECS):** The Slade-Pais Expectations of Childbirth Scale measures women's expectations for childbirth (SPECS). [16]

The factors taken into account include: the sorts of pregnancy expectations women have, their capacities for managing pain and fear, their dependence on others for support, such as partners and medical personnel, and their capacity for having good prenatal expectations. [17,18]

Management the fear of childbirth (FOC): There are few therapies or classes (shown in fig-2) to manage or overcome the tokophobia patient.

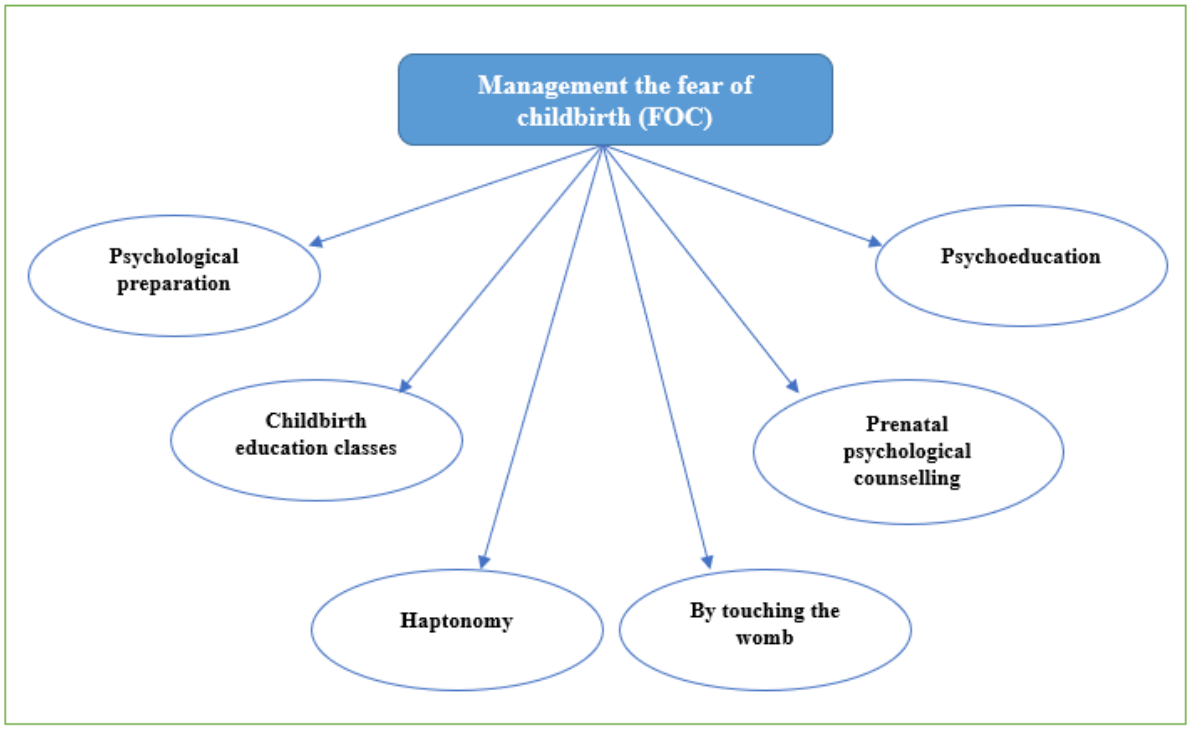

Figure-2: Schematic management the fear of childbirth

1. **Psychological or emotional preparation during pregnancy:** One of the most important elements in conquering the fear of childbirth is psychological or emotional preparation during pregnancy, especially in the final trimester. Most women have negative opinions of childbirth, which typically include that it is quite painful. In order to learn to control their thoughts and emotions, which get more intense as the time for delivery approaches, pregnant women are recommended to learn about birth, how contractions function, and how they will feel at various stages of pregnancy. Developing self-control over one's body and realising that pain felt during labour is distinct from pain felt elsewhere are further recommendations.
2. **Classes on childbirth education/childbirth education classes:** These classes are served psychoeducational resource for women who are expecting to become a mother. In these courses, women gain useful knowledge about labour, managing contractions, positions to facilitate labour, types of anaesthesia, types of medical birth procedures, and the justifications for why they might be required, as well as about breathing, relaxation, and massage techniques to manage labour as effectively as possible. Additionally, these courses cover perineal massage techniques to improve tissue elasticity and muscle tone as well as practical exercises for strengthening the perineal muscles. [19,51,52,53]

3. **Haptonomy:** Another strategy for conquering birth fear is haptonomy. Emotional touch is emphasised in this strategy.According to studies, these emotional encounters promote a sense of fulfilment and wellbeing. [20]
4. **By touching the womb:**The mother establishes conscious touch, recognises the foetus, and creates a secure relationship by placing her hands on the womb. Using this technique, the mother's and/or father's hands must be put on the baby's belly in order to observe the baby's responses to their touches. The parents often touch the tummy with more than just their fingertips, moving their hand over it. The movements of the foetus must be attended to concurrently by the parents. It is recommended that parents talk to their kids. The voices of the mother and father are also a part of this method. The foetus will benefit from feeling more at ease, supported, and in control as well as from being led and having a reduced heart rate during birth, which will help the baby be placed correctly for labour and eventual delivery.
5. **Prenatal psychological counselling:** This counselling aims to make pregnant women more comfortable in their own skin, lessen emotional pregnancy symptoms like prenatal anxiety, stress, and depression, activate maternal coping mechanisms, make the foetus mentally and emotionally available, and enhance mother-fetal attachment. [21,22] Some of the techniques used in prenatal psychological therapies include breathing exercises, relaxation techniques, guided meditations, art therapy, and the letter technique (writing a message to the baby or another woman who is scared of giving birth).
6. **Psychoeducation:** The purpose of behavioural techniques is to help the person explore other approaches to the issue and change how they see the world. These strategies and processes to produce desired behavioural change include systematic, psychological, educational, and other methods and techniques. Behavioural strategies can include making an action plan for the current situation while using problem-solving approaches. Psychoeducation provides opportunities for learning as well as for establishing a safe environment, expressing emotions, sowing seeds of hope, developing self-recognition, and developing new learning strategies. [52,53,54]

Multidisciplinary Approach

Tokophobia is a very specific and terrible condition. A multidisciplinary approach to addressing fear of childbirth is urgently needed due to its complexity and implications for obstetrics, anesthesiology, psychology, and psychiatry.

A recent study recommended utilising the W-DEQ tool with

i. a cutoff value of 85,
ii. a more thoroughly tested version,
iii. a three-point scale measuring of birthing anxiety using a single question like "Are you afraid of the birth?" were all suggested by a recent study.

According to this study, these techniques can be employed in studies to make precise comparisons. It should also be confirmed whether there is a clinical tool or psychometric study that is shorter, more Tokophobia-focused than the W-DEQ, easier for women to complete, and simpler for doctors to administer. [8] It has been discovered that psychoeducative group therapy created especially for primigravid women is the most effective type of therapy. Its pillars should be the obstetric examination and listening to and assisting the phobic female. With the aid of competent counselling, the majority of women might be persuaded to forgo caesarean sections. [9]

In a recent study that sought to provide a comprehensive evaluation of various treatments used to reduce pregnant women's fear of childbirth, it was demonstrated that education and psychotherapy intervention significantly reduced FOC. [10]

To promote appropriate, effective, and evidence-based therapy and to better understand the aetiology and developmental stages of tokophobia, the condition's genesis and development must be better understood.

Pregnant women may be advised to attend prenatal education and preparation sessions in order to reduce their anxiety about giving birth. Psychotherapy approaches may be helpful for tokophobic women. More research is required because little has been done in these fields. This can be helped by focusing on the evaluation of care pathways and applicable treatments.

Conclusion:

Fear of childbirth, which has a deleterious effect on pregnancy and childbirth, is one reason for requests for caesarean deliveries. Furthermore, this anxiety could lead to a tense bond between the mother and the foetus, and later, the mother and the new-born, which is connected to breastfeeding difficulties and postpartum depression.

Studies show that there are many ways to deal with pregnant anxiety. A few of these include mental counselling, haptonomy, and seminars that prepare women for childbirth through psychoeducation. Together, these methods help the woman transform her perception of a bad birth into a positive one. The establishment of a strong prenatal attachment between mother and foetus is another goal of mental and emotional preparation throughout pregnancy, which also aims to decrease the emotional adverse effects of pregnancy.

According to this study, these techniques can be applied in studies to produce reliable comparisons. Additionally, it's important to verify a clinical tool or piece of psychometric study that is shorter and more narrowly focused on Tokophobia than the longer W-DEQ and easier for women to complete and doctors to administer. It has been found that psychoeducative group therapy created especially for primigravid women is the most effective kind of therapy. Its cornerstones should include both the obstetric examination and listening to and assisting the phobic female. With the application of suitable counselling, most women may be persuaded to give up their desire for caesarean sections.

Conflict of Interest; The authors declare that the review was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest

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