Mediterranean Journal of Clinical Psychology MJCP

ISSN: 2282-1619

VOL. I, N. 1 (2013)

TOKOPHOBIA: WHEN FEAR OF CHILDBIRTH PREVAILS

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Abstract: The aim of the present article is to start to analyze the tokophobic condition by reporting the main studies that since the end of the nineties have drawn the attention both of the medical community and the public to a disorder that currently seems to involve an increasing number of women. In the first part we will try to trace a brief history of "tokophobia", of which

term we will try to trace a brief history of "tokophobia", of which term we will report the etymology and try to give a definition according to current parameters. This phobia will then be analyzed by highlighting its primary causes, associated factors and its consequences.

In the second part of this paper, the results of further studies on the subject will be reported, giving particular attention to the research carried out by Hofberg and Brockinton (2000).

Finally, we will try to give a brief overview of the possible treatments currently provided to mitigate, when it is not possible to heal it, the tokophobic condition.

Keywords: fear, childbirth, pregnancy, motherhood.

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INTRODUCTION

Although pregnancy is a natural and often longed process, in the life cycle of a woman it is not uncommon for her to experience a sense of anxiety for the physical and mental consequences that motherhood entails.

Fear is generally a normal and physiological human reaction necessary for the protection and safety of the individual. With regard to childbirth, it is probably "healthy" to experience concern or anxiety to a certain degree, as it can help women to make ready for childbirth itself (Fisher et al., 2006). However, if their fear becomes paralyzing and terrifying, it can get physically and emotionally disabling and give rise to specific pathologies such as "tokophobia".

Despite a considerable number of studies regarding the fear of childbirth which were carried out in the second half of the twentieth century, there still is neither definitive recognition – nor a real interest in the tokophobic condition, which has not been included either in the DSM (Diagnostic and Statistical Manual of Mental Disorders), published by the American Psychiatric Association (APA: 2000), or in the ICD-10 (WHO: 2001) yet.

Tokophobia

The term "tokophobia" was identified as a medical condition and used for the first time in 2000 by Hofberg and Brockington and by Heuvel in 2008 (according to a Dutch study carried out by Heuvel, about 17% of pregnant women report feelings of fear, which become intense and disabling, especially in relation to childbirth, for 6% of them) to define an intense state of anxiety which leads some women to fear, and consequently to avoid, childbirth and pregnancy despite desperately wanting a baby.

Through their study of twenty-six tokophobic women, the two psychiatrists identified three types of tokophobia, depending on the circumstances that determine its onset:

- 1. Primary tokophobia regarding nulliparous women
- 2. Secondary tokophobia as a consequence of a previous experience of traumatic childbirth
- 3. Tokophobia as a symptom of depression.

When fear of childbirth precedes the first conception, it is called "primary tokophobia". This fear can begin during adolescence or early adulthood.

Although sexual relations may be normal, the use of contraceptives is often obsessive to prevent pregnancy and the subsequent childbirth.

Unlike primary tokophobia, "secondary tokophobia" usually develops after childbirth. In general, it is a traumatic delivery, but it may also occur after a normal "obstetric" delivery, a miscarriage, the birth of a dead fetus or an abortion.

Tokophobia as a "symptom of prenatal depression" is less common. Hofberg and Brockington (2000) showed that some women develop an intense phobia, and the subsequent avoidance of childbirth, as a symptom of depression in the prenatal period. In such cases, the fear and the avoidance of childbirth are typically characterized by the recurrent and intrusive belief of the subject that she is not able to give birth to the baby or by the dread that it could die.

Factors associated with tokophobia

The etiology of tokophobia is multifactorial and may be related to a natural predisposition of the subject to anxiety, as well as to other individual, relational and antropopsychical characteristics.

Motherhood takes place within a socio-cultural and socio-political context which affects the way in which women approach childbirth psychologically and/or approach it again on a second delivery. The context also plays a part in "how" and "why" women may experience an intense fear of childbirth. This means that fear of childbirth has both a social and a personal aspect (Fisher et al., 2006).

As regards the personal aspect, on the one hand there is a strong association between fear of childbirth and other types of pregnancy-related forms of anxiety, and on the other certain personal characteristics and socioeconomic factors (Heuvel, 2008).

General anxiety, neurosis, depression, psychological disorders, vulnerability, low self-esteem, dissatisfaction with the partner and lack of support from the social network are all factors that have a strong impact on the fear of vaginal childbirth and other pregnancy-related forms of anxiety (Saisto, Salmela-Aro, Nurmi and Halmesmäki, 2001). In addition, according to the study by Zar (2001), it seems that the childbirth expectations of a pregnant woman are related to her previous experiences and to her behaviour during the birth itself.

In a Swedish study based on a population of pregnant women (Andersson, Sundström-Poromaa, Bixo, Wulff, Bondestam, Åström, 2003) the prevalence of mood and anxiety disorders was relatively high. Furthermore, it was detected significantly higher prevalence of fear of childbirth and other specific symptoms in women with a psychiatric diagnosis, who experimented a fear of childbirth twice as high as the fear experimented by pregnant women who did not have this type of diagnosis.

Another factor to take into consideration is fear of pain. Saisto and Halmesmäki (2003) state that being persuaded to have a low pain threshold tolerance and the consequent fear of it are the main causes of tokophobia. Researchers believe the fear of pain during labor is closely related to fear of pain in general (regardless of its intensity) and is one of the most common reasons why mothers require a C-section as an attempt to avoid pain itself. In 2006 study by Fisher et al. it is said that the fear of pain during childbirth seems to be divided into two different parts: some pregnant women fear the pain during contractions, while others fear the experience of pain during the expulsion of the baby.

Since pregnancy is one of the major events in the life of a woman (and of her partner), fear of the unknown is not unusual, particularly in the case of a primiparous. This fear seems to be common to all cultures and all types of people, but in the particular case of women it may have deeper implications. Unlike societies in which childbirth is a natural event, whose consequences are unpredictable but are generally accepted regardless of its result, in Western countries even before giving birth women are informed about the possible need for surgical intervention, which not only makes childbirth a completely medicalized event, but also increases its perception in terms of a potentially dangerous event (De Koninck, 1998; Morgan, 1998).

The consequences of the increasingly frequent use of medical treatments, even in cases where there is no danger of difficult labors and deliveries, are very serious: future mothers are losing their ability to understand the importance of the birth itself, getting passive and developing an intense feeling of incompetence.

The study carried out by Fisher et al. (2006) showed the importance of another factor that may lead to the development of a pathological fear of childbirth: the so-called "horror stories." Fisher used this terms to describe the stories told by relatives, friends or acquaintances about traumatic or upsetting deliveries that have a particularly strong impact especially on primiparous. Such stories have always been part of women's culture, as they have been transmitted from generation to generation.

However, detachment from childbirth as a natural event has let them proliferate beyond measure especially within those "culturally limited" contexts where women do not seek alternative information or investigate on the matter, so as to compromise their decision-making capacity (Hoerge, Howard, 1995).

This reinforces an idea of childbirth as "risky" and "uncontrollable", an event that requires medical intervention to get over.

Many women are actually afraid not to be able to give birth. As revealed in the study of Sjögren (1997), 65% of the women in the sample (consisting of 100 tokophobic women) imputed their fear of childbirth to their alleged mental and physical inability to deal with it and carry it out to.

In general, the factors related to this type of disorder are the following:

- The fear of doing something wrong during labor that may harm the fetus (Melender, 2002; Szeverényi et al., 1998)
- The fear of losing control of their physical bodies as well as their sense of reality (Fisher, 2006)
- Feelings of hopelessness, helplessness, distrust and fear of lack of assistance in case of need. Most of the women expressed the fear of losing their power during childbirth. This loss was two-dimensional: on the one hand, pregnant women were afraid to lose their power because of medical intervention; on the other hand, they feared that their beliefs and values might not coincide with those of the medical staff during childbirth and, as a consequence, that these values would not be respected (Fisher, 2006).

This belief, and the consequent fear, do not apparently have any rationale; in fact, they do not show any correlation with a real experience of previous pain or with a previous traumatic childbirth experience. However, they may be attributed either to a reminiscence and concretization of some traumatic event occurred during childhood (abandonment, abuse, etc.), or to previous experiences of rejection to a request for help (for example during meetings and/or contacts with the medical staff) (Melender, 2002).

In any case, the birth of a child is a significant and revolutionary event not only for women, but for the couple itself, as it defines and necessarily involves the transition of the people involved to adulthood (Ruble et al. 1990), generating new responsibilities and requiring the acquisition of new specific skills.

As reported by Saisto and Halmesmäki (2003), because of the rapid changes in Western society the meaning, the importance, and the admiration of motherhood, though, have considerably decreased, especially as a consequence of the emancipation of women, and their new working position. The lack of real and concrete models that can help primiparous women to get ready for motherhood in the twenty-first century, increases their doubts about their ability to be mothers and properly take care of their child.

Standley et al. (1979) defined anxiety as prenatal anxiety of future parenting, of the concern that arises from having to take care of the baby daily and the fear of being unable to feed it. These concerns generally decrease after proper and essential preparation and education of pregnant women.

Finally, with regard to the conjugal relationship, the birth of a child in a family may have an ambivalent effect: on the one hand, it may reinforce the relationship between the couple, on the other it may contribute to their separation. This varies depending on the relational structure of the new parents before the child's birth.

In addition to the above-mentioned factors Benoit and Parker (1994) described and showed the significant role of socio-cultural factors, which may favour the predisposition to anxiety and fear of childbirth in pregnant women during pregnancy:

- generational transmission: the fear of childbirth can be transmitted from generation to generation, producing a "second generation" effect caused by a traumatic experience which has not been elaborated, and therefore is still unresolved, by the mother. The reproductive adaptation of women reflects their mothers' one, which means there might be a sort of psychological legacy (Uddenberg, 1974);
- lack of support by the social network;
- dissatisfaction with regard to the relationship with the partner;
- low level of education:
- low socio-economic level;
- dissatisfaction of the partner with his life and with the relationship with his partner;

- Melender (2002) also added that unemployed women who do not live with the father of their baby are more likely to feel greater anxiety about pregnancy and a bigger fear of childbirth than women with a stable relationship with their partner and a job.

Another factor of great importance is negative past experiences, both with regard to pregnancy and to childbirth, currently considered as the main causes of secondary tokophobia.

When women experience a negative previous delivery, they continue to feel fear also in correlation with subsequent births (Saisto, Ylikorkala, Halmesmaki, 1999; Weaver, 2004; Wijma et al., 1998).

Hofberg and Ward (2003) argue that this could potentially give rise to a vicious circle in which fear causes/leads to medical intervention during childbirth, which in turn generates more fear and increases the likelihood of a negative experience of childbirth.

Although women with previous positive experiences of childbirth were aware of the uniqueness of each birth, women with a history of negative experiences were not able to see the event as unique and believed that future deliveries would be equally traumatic.

Women whose previous labors were very long and difficult experience the same fear during the subsequent deliveries; therefore, there is a sedimentation of fears about the possibility of having to face a similar experience with the following childbirth. Women who experienced a very quick previous delivery, however, fear that the following childbirth may be even faster so as to be forced to go into labor in places they consider to be "inappropriate." Since childbirth is now an increasingly medicalized event, the "appropriate" and "safe" place to give birth to a baby is usually identified with the hospital (Davis-Floyd, 1992; Morgan, 1998; Reibel, 2004). It is not surprising that women may experience a feeling of intense anxiety when confronted with the possibility of having to give birth to their baby outside this safe and protected space.

Finally, other factors seem to contribute to worsen the tokophobic condition: traumas and abuses. Hofberg and Brockington (2000) believe that an experience of sexual abuse may cause women to develop an aversion to gynecological exams, even routine ones, such as the Pap test or other obstetric treatments. A trauma resulting from a complex vaginal delivery or even the mere thought of it, may even result in a re-enactment of terrifying and distressing memories of sexual abuse perpetrated in childhood.

In a recent study by Heimstad, Dahloe, Laache, Skogvoll and Schei (2006) they identified a strong correlation between the experiences of childhood abuse and a more pronounced risk of complicated deliveries. In fact, only half of the women in the sample (tokophobic women) with experiences of sexual or physical abuse (respectively 54% and 57%) had a vaginal delivery without complications, compared with 75% of tokophobic women who had not been abused

Consequences

Tokophobia can cause a variety of effects which should not be underestimated, as they may lead to dramatic consequences.

In some tragic cases, the fear of childbirth and the belief that they are unable to deal with it are so pervasive as to force pregnant women to terminate their pregnancy, despite desperately wanting a baby, which forces them to have to live with the psychological impact of that decision for all their lives. Other women begin to seek a midwife who is willing to perform a caesarean section, even in the absence of a real need and despite the risks associated with this procedure, even before conception (Hofberg, Ward, 2003). Some women whose fear of childbirth is very intense and pathological even prefer to forgo biological motherhood opting for adoption, while others reach menopause without having given birth to a very much desired baby, whose lack they regret to their old age (Hofberg et al., 2003); other women resort to irreversible gynecological procedures, such as sterilization, to ensure the avoidance of the feared event.

Finally, the deleterious effects of maternal anxiety during pregnancy and childbirth are widely recognized and proven. In 1933 Grantly Dick-Read said that fear is directly responsible for many of the unforeseeable complications of labor.

A mother who is stressed or anxious during labor actually produces a specific hormone, called cortisol, which has a direct and deleterious effect on the production of oxytocin (a hormone that plays an important role in the initiation and maintenance of labor and delivery). The blood circulation is diverted outside the uterus and the muscles affected by tension hinder the others, causing pain, slowing or even stopping the labor. The mother may feel frustrated or angry and risks losing her focus and purpose, with the result that the baby might suffer from stress or a trauma, and the mother may need medical intervention. Furthermore, it was observed a high risk of

bleeding in very anxious mothers (Wadhwa, Sandman, 1993; Paarlberg, Vingerhoets, 1999).

As to the child, the effect of anxiety on it may cause a reduced supply of oxygen and nutrients as well as the impairment of blood supply to the placenta; an extra amount of cortisol could also generate an irritable, anxious and troubled baby.

In addition to this, the newborn will be affected by any drug administered to the mother to relieve anxiogenic symptoms. After childbirth, studies show that there is greater likelihood that the efficiency of the primary vital functions of the children of anxious mothers is well below average.

Maternal anxiety may also be a risk factor for the development of mental and motion delays in the baby during early childhood (Huizink, Robles de Medina et al., 2003). In their study carried out in 2007 Talge et al. showed that high levels of cortisol in the amniotic fluid in the womb can affect the development of the brain of fetuses, compromising the area connected to social skills, to the linguistic ability and memory.

Finally, a research implemented by O'Connor et al. in 2005 found that prenatal anxiety can affect the baby in the womb with long-term implications about his/her well-being that may make the baby more sensitive and prone to anxiety and depressive disorders in childhood and in old age.

Further studies on tokophobia

The fear of childbirth was identified and studied by Marcé, a French psychiatrist, in his *Traité de la folie des femmes enceintes, accouchées et des nouvelles des Nourrices* (1858) at the end of the nineteenth century.

Yet, a more specific analysis, which properly recognized the pathological aspect, was only performed in the following century, when in 2000 Hofberg and Brockinton published an article in the British Journal of Psychiatry in which they used the word "tokophobia" for the first time to define the pathological and obsessive fear of childbirth.

As there were no other studies recognizing this phobia in the medical literature, their goal was therefore to classify tokophobia as a real disease which required better observation and experimental attention to identify specific treatments.

The article by Hofberg and Brockington (2000), whose title was *Tokophobia: An unreasoning dread of childbirth*, originated from a

qualitative analysis of a series of interviews with a sample of twenty-six women, who experienced such a dread of childbirth that they preferred to avoid it although they desperately wanted a baby.

The subjects were selected through a process of non-probability sampling and were referred from three different sources: twelve women were referred to the psychiatrist by obstetricians in the West Midlands, fourteen by psychiatrists on the mother and baby unit of Queen Elizabeth Psychiatric Hospital in Birmingham and one was contacted after the publication of her story in a magazine.

The twenty-six women were seen over a two-year period in their homes by the same psychiatrist (who was not the treating doctor), who used semistructured interviews in the preliminary study combining free narrative of their own stories by the interviewees with specific direct questions for obtaining information with regard to:

- Diagnosis of depressive episodes, anxiety disorders and post-traumatic stress disorders
- Contraceptive methods used
- Sexual relationships
- Mother-child relationship
- Situations related to childhood sexual abuse and/or rape.

Through their interviews the authors aimed to investigate and analyze trends, habits, characteristics of the past, but also of the "here and now" that may identify women with common symptoms of tokophobia.

Three main types of tokophobia emerged from the study: primary tokophobia, secondary tokophobia and tokophobia as a symptom of depression in the prenatal period.

Primary tokophobia occurred in eight subjects in the sample. These subjects, despite the initial primary tokophobia, carried out their pregnancies, although with different results: four women in the sample were able to give birth according to the required method (cesarean section), establishing a good bond with the baby and enjoying excellent psychological health; the remaining subjects reported symptoms of postnatal depression, post-traumatic stress disorder and severe delays in achieving a healthy and proper bonding with their infants.

Secondary tokophobia involved fourteen women in the sample, who wanted to have another child not to leave the family incomplete, but had developed a dread of facing another birth as painful and traumatic as the previous one.

Thirteen subjects proceeded with further pregnancies but experimented recurrent and intrusive anxiety characterized by the belief that they were unable to deliver their babies. In three of them anxiety reached such a level that pregnant women felt enormous relief when they realized that their pregnancy would not come to an end.

Finally, there is the tokophobia as a symptom of depression in the prenatal period, which was developed by four subjects in the sample (two of them primiparous) who were so shocked at the realization of their pregnancy to require a termination of it or, through the implementation of very intense physical exercise, to try to induce a miscarriage. The other two women, who already had children and had experienced a previous non-traumatic vaginal delivery, due to complex relationships, difficulties and depressive illness, failed to establish a healthy bond with the fetus and became adamant that they could not deliver their babies.

In conclusion, with their revolutionary study Hogberg and Brockinton were able to draw the attention of the scientific community to a condition, the fear of childbirth, that when degenerating into an obsessive and pathological condition may require special care and further study.

Previous and subsequent studies to the article published by Hofberg and Brockinton in 2000 came to similar conclusions. However, they mainly dealt with the fear of childbirth in general or associated with other variables such as: the request for caesarean section (Wax, Cartin, Pinette, Blackstone, 2004; Fenwick, Staff, Gamble, Creedy, Bayes, 2008; Waldetroms, Hildingsson, Ryding, 2006; Högberg, Lynöe, Wulff, 2008; Nieminen, Stephansson, Ryding, 2009), the onset of post-traumatic stress disorder as a result of a traumatic delivery (Ayers, Eagle, Warding, 2006; Leeds, Hargreaves, 2006-2007; Bailham-Joseph, 2003; Saisto, Ylikorkala, Halmesmäki, 1999), depression, psychological disorders or other symptoms during pregnancy (Haines, Rubertsson, Pallant, Hildingsson, 2012; Handelzalts, Fisher, Lurie, Shalev, Golan, Sadan, 2012), rejection or delay in bonding with the infant after childbirth and other possible physical and psychological damage in the newborn (Wadhwa, Sandman et al., 1993).

In order to be faced and overcome in a positive way, tokophobia requires a close collaboration between obstetricians and psychiatrists so as to ensure a balance between the surgical and the psychological aspect of childbirth.

Treatments and interventions

The purpose of interventions designed to assist tokophobic women should be to help them to control the intense anxiety connected to pregnancy and childbirth so that they can accept the uncertainties and doubts related to it (Bewley, Cockburn, 2002). Treatments should gradually reduce stress factors promoting better adaptation during gestation and the withdrawal of the request for caesarean section (Saisto, Salmela-Aro, Nurmi, Kononen, Halmesmäki, 2001).

The first studies carried out to identify treatments that could alleviate the fear of childbirth date back to the twenties (Hofberg, Ward, 2003). In 1950 it was taken into consideration psychoprophylaxis as a possible solution (Vellay, Vellay, 1956), while in the nineties they examined the benefits of hypnosis (Jenkins, Pritchard, 1993). In 1998 Ryding proposed counseling or brief therapy to a sample of pregnant women who had required a cesarean delivery (though it was considered unnecessary by midwives), after which half of pregnant women canceled the cesarean section choosing to give birth naturally (Hofberg, Ward, 2004).

Saisto and Halmesmäki (2003) believe that psychotherapeutic interventions (regardless of the type of therapy adopted) could prove to be a practical solution to overcome tokophobic symptoms, although they may be emotionally stressful, challenging and expensive. However, no studies documenting the validity and effectiveness of those interventions have been currently performed yet.

It is therefore possible to state that there has not been a particularly significant evolution in research so far. Studies to evaluate the treatment of tokophobic disorder are currently scarce; in fact, there is neither a common consensus about how, where and by whom the treatment should be given nor a full agreement about the definition of the fear of childbirth as a real disease.

In a study by Heuvel in 2008 stated that a complete and consistent definition of tokophobia should include at least four points:

- 1. intense anxiety and worry concerning childbirth, which often increases in the third trimester of pregnancy;
- 2. difficulties to control this concern;
- 3. difficulty to concentrate at work or in family activities;

4. at least three of the following symptoms: fear of pain, fear of being unable to give birth, physical disorders, nightmares, avoidance of the feared situation (eg. by avoiding to get pregnant, ending the pregnancy or by requesting a caesarean section without real medical reasons), discomfort or significant weakening.

To give a clear definition of the fear of childbirth, while also developing adequate diagnostic methods, can promote a collective awareness of the psychological and social emergency of this disorder.

The medical staff that takes care of tokophobic women should pay special attention to their feelings concerning pregnancy, childbirth and motherhood, giving mothers the opportunity to talk about their fears, whether they are nulliparous or mothers with previous traumatic experiences of childbirth.

CONCLUSIONS

Tokophobia as an obsessive fear of childbirth was recognized as a specific medical-psychological phobia only with the study of Hofberg and Brockinton (2000). Before the publication of their article, there were already several studies concerning the fear of childbirth, but they described the discomfort of pregnant women facing childbirth as a general fear, often quite natural for an event considered to be unknown and painful.

Hofberg and Brockinton emphasized the traumatic aspect of childbirth, and its consequences, as an experience that can be upsetting for some women. Since then, many studies have been conducted to analyze not only the causes of obsessive fear of childbirth, but above all its consequences, which sometimes can be very serious. What emerges is certainly a need for further study of the subject to give full prominence to a psychological and social condition which, if neglected, may be very limiting in women's lives.

In particular, it would be extremely useful a multidisciplinary approach to the problem of tokophobia which may involve psychologists, obstetricians, gynecologists, nurses, relatives, friends and the partners of pregnant women in order to create some sort of container to the anxieties and fears of the patient.

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Mediterranean Journal of Clinical Psychology, Vol. I, No. 1, Doi: 10.6092/2282-1619/2013.1.893 (2013)