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Causes and frequency of tocophobia — own experiences

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ABSTRACT

Objectives: The phenomenon of tocophobia (pathological fear of labor) has not been fully explored. Currently, there are no diagnostic criteria that would enable its detection or make it recognizable as a disease entity. The aim of study was to determine the degree of anxiety/tocophobia as well as to learn about and analyze the causes of this phenomenon in Polish pregnant women.

Material and methods: The prospective study included 120 pregnant women in the third trimester of gestation from February to May 2016. The study was performed with the use of a standardized and revised version of the Labor Anxiety Questionnaire (KLP II) designed by Putyński and Paciorek (1997) as well as a proprietary interview questionnaire and structured data documentation form.

Results: In 6.7% of the subjects, the level of labor anxiety was very high (> 18 in KLP II). It was the highest in women over 30 years of age (Pearson's chi squared test = 0.00422; $p < 0.05$). It has been shown that successive childbirths have an impact on the degree of anxiety ($p = 0.04217$).The highest level of anxiety was noted in primiparous women. In 85% of the subjects, anxiety was caused by fear of labor pain. 56.7% of the tested women did not use any professional help in the preparation for childbirth and motherhood.

Conclusions: Primiparas and women over 30 years of age experience very high levels of fear significantly more frequently. The lack of proper preparation for childbirth determines the occurrence of tocophobia. Ante-natal classes and prenatal education based on standards of obstetric care should be promoted in order to reduce or eliminate fear of natural labor.

Key words: labor, anxiety, tocophobia, causes, frequency

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INTRODUCTION

The emotional state of a pregnant woman is significant for the course of pregnancy, fetal development, labor and postpartum period [1–3]. Labor anxiety can reflect prenatal stress or intense phobia-like anxiety, which is currently referred to as *tocophobia* or *parturiphobia* [4–7]. Fear, being a negative emotional state, usually remains unnoted and may be unnoticed. Its presence affects the way of thinking, reduces the ability of logical understanding, leads to stressful relationships, lowers perception and affects behavior. It can be one of the elements disrupting childbirth. Women in labor who experience negative emotional states have longer childbirths, stronger need for pain relief and epidural anesthesia as well as are at a higher risk of an elective

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and emergency cesarean section [8, 9]. Anxiety and fear frequentlyentail requests for a cesarean section without medical indications [10–12].

In light of some literature reports, 13% of women who are not pregnant experience strong fear of labor, which causes conscious delay and avoidance of pregnancy [4]. Also, the literature knows some rare cases when women have decided to terminate pregnancy and abstained from sexual intercourse completely [13]. It is estimated that tocophobia can concern even 10% of the pregnant, 2% of whom experience particularly intense fear that requires specialist assistance [14]. The phenomenon of tocophobia has not been fully explored and therefore data on its frequency are scarce. Polish data are lacking. There are currently no clear diagnostic criteria that would enable detection of tocophobia.

At present, tocophobia is classified as an anxiety disorder with diversified background (primary or secondary tocophobia). It basically involves the occurrence of intense fear of labor which is difficult to control and can consequently lead to dysfunction in every aspect of life (work, family); or the occurrence of at least three of the symptoms listed below: fear of pain, fear of the inability to deliver a child on one's own without assistance, mental health problems, nightmares, persistent attempts to avoid natural labor and demanding cesarean section [15]. Scientists believe that the phenomenon of tocophobia is also associated with the medicalization of labor; medical procedures may cause a loss of faith in the possibility of delivering a child on one's own without help.

OBJECTIVES

The aim of this paper was to determine the frequency of tocophobia as well as to learn about and analyze the causes of this phenomenon in Polish pregnant women.

MATERIAL AND METHODS

The prospective study included 120 pregnant women in the third trimester of gestation hospitalized at the clinical unit of obstetrics and gynecology of the Medical University of Silesia from February to May 2016.

Labor anxiety was assessed using an available tool: the standardized and revised Labor Anxiety Questionnaire (*Kwestionariusz Lęku Porodowego*, KLP II) designed by Putyński L. and Paciorek M. and published in 1997. KLP II consists of nine statements regarding childbirth. A respondent estimates her level of anxiety by selecting one of four categories: *strongly agree, rather agree, rather disagree* and *strongly disagree*. All responses were analyzed according to the key provided by the authors of the questionnaire, i.e. statements 2, 3 and 5 were assigned points from 0 to 3, and statements 1, 4, 6, 7, 8 and 9 were given points from 3 to 0. The maximum score is 27. The results were interpreted using the following scale: up to 13: low labor anxiety; 14–15: slightly increased anxiety, 16–17: high anxiety and > 18: very high anxiety [16].

Sociodemographic characteristics of all respondents and forms of preparation for labor were evaluated using a proprietary interview questionnaire. Data obtained from medical records concerning obstetric history were collected in a structured form for data documentation.

The study enrolled women in the third trimester of pregnancy with the physiological course who agreed for the participation in the study and correctly answered all questions (100%) from the proprietary interview questionnaire.

The results were analyzed statistically using the STATISTICA 12 system. As for qualitative (nominal) data, set size and percentage contributions were calculated. The correlations between two qualitative variables were tested with the use of the Pearson's chi squared test. Values $p < 0.05$ were deemed statistically significant.

RESULTS

Table 1 presents the characteristics of the tested pregnant women. It includes demographic structure and data obtained from an obstetric interview.

A low level of labor anxiety in Labor Anxiety Questionnaire (KLP II) was found in 88 subjects, which constitutes 73.3% of the tested population. Slightly increased anxiety was noted in 15.0% of women. A high level of labor anxiety concerned 6 pregnant women (5.0%), and very high anxiety was noted in 8 respondents (6.7%). The women with high and very high anxiety levels were all primiparous (100%).

Causes of labor anxiety are presented in Figure 1. Fear of pain concerned 85% of the respondents. 76.7% of the tested women were anxious about the condition of their children, and 57.5% about possible complications during childbirth. Other causes of fear included: no preparation for childbirth (50%), the lack of knowledge about the course of labor (36.7%) and no support from the medical personnel (33.3%). The conclusion of labor by a cesarean section evoked fear in 33.3% of the tested pregnant women. 25% of the respondents were worried about their health during labor and about episiotomy. Both the procedure associated with anesthesia and the duration of labor caused fear in 8.3% of the respondents. Also, 8.3% of the respondents claimed that no support from their partner was the cause of anxiety (Fig. 1).

Based on the Pearson's chi-squared test with the value 0.00422 ($p < 0.05$), the level of labor anxiety was found to increase with age. Low and moderate levels of anxiety were noted in women aged 20–25 and younger than 20. Higher anxiety was found in women aged 26–30. The degree of anxiety was the highest in women over 30 years of age (Fig. 2).

Table 1. Characteristics of the tested pregnant women

n = 120				
Age	< 20 years	20–25 years	26–30 years	> 30 years
	6 (5.0%)	9 (7.5%)	42 (35.0%)	63 (52.5%)
Education	Higher	Secondary	Vocational	
	12 (10.0%)	54 (45.0%)	54 (45.0%)	
Parity	Primiparous	Multiparous		
	90 (75.0%)	30 (25.0%)		
Obstetric history	History of cesarean section	Procedural birth	Obstetric failures	Difficulty in becoming pregnant
	18 (15.0%)	6 (5.0%)	30 (25.0%)	44 (36.7%)
Preparation for childbirth	Ante-natal classes with the partner	Ante-natal classes without the partner	No preparation in ante-natal classes	Education by a primary care midwife
	15 (12.5%)	37 (30.8%)	68 (56.7%)	24 (20.0%)
n = 30				
Emotional attitude towards previous childbirth(s)	Positive experience	Trauma	No emotion	
	18 (60.0%)	3 (10.0%)	9 (30.0%)	

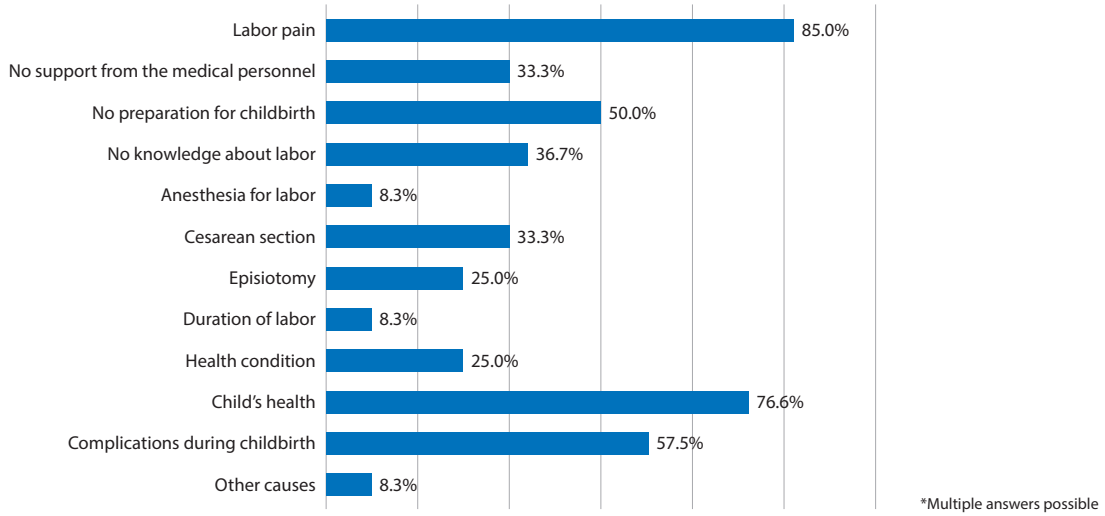

Figure 1. Causes of labor anxiety in the tested group of pregnant women

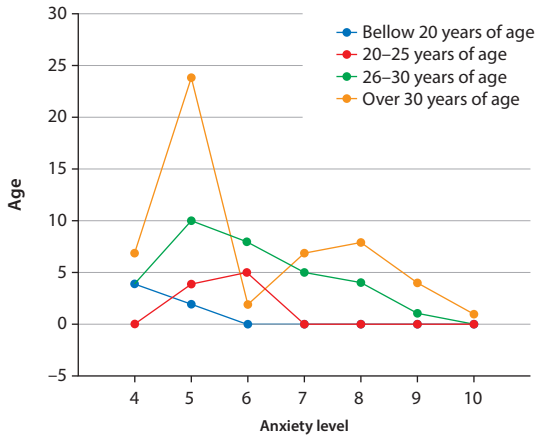

Figure 2. Age of pregnant women and the level of labor anxiety

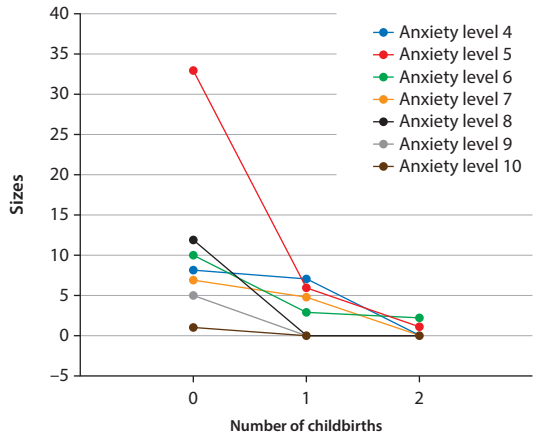

Figure 3. Number of childbirths and the level of labor anxiety

The correlation analysis between the number of childbirths in the past and the degree of labor anxiety on a scale from 1 to 10 has revealed that women who have never given birth in the past exhibit the highest levels of anxiety ($p = 0.04217$). The anxiety levels decrease with an increase in the number of labors in the past (Fig. 3).

DISCUSSION

Tocophobia is a multifaceted condition and concerns threats that might happen to a pregnant woman, such as pain or trauma, as well as the sense of one's own inability, loss of control, insufficient emotional support and, finally, death of the woman herself or her child [7]. Scandinavian countries are pioneers in the field of studies on tocophobia. In most of them, there are multidisciplinary clinics that deal with broadly understood research and treatment of women with this condition [17]. A large study with 7200 women from six European countries has revealed considerable differences in the occurrence of tocophobia between countries ranging from 1.9% to 14.2%. Residents of Sweden and Estonia experienced greater anxiety associated with childbirth than those of Belgium [17]. Raising social and clinical awareness concerning tocophobia has resulted in a reduction of the frequency of this condition in Sweden in the past decade from 6–10% to 2.5–4.5%. The percentage of multiparous women aware of tocophobia in 1997 was 1.5% and increased to 7.8% in 2010, and the respective values in primiparous women were1.1% in 1997 and 3.6% in 2010 [17]. Polish data are lacking. There are currently no clear diagnostic criteria that would enable detection of tocophobia.

In our study group, a very high level of labor anxiety (> 18 in KLP II) was noted in 6.7% of the respondents, all of them primiparous. The Labor Anxiety Questionnaire II is a valid and accurate tool to measure the level of labor anxiety. It can be used in screening to estimate the level of anxiety [16] and enables rapid implementation of psychoprophylactic measures as well as provision of appropriate support to women in labor, which results in higher childbirth quality. The fact that women request a cesarean section (*cesarean delivery on maternal request*, CDMR) in extreme cases of high (pathological) fear of natural labor is being raised more and more frequently in medical circles.

The most common cause of strong labor anxiety, as noted in the literature, is fear of labor pain [18, 19]. This is confirmed in our research. Most tested women (85%) acknowledged that labor pain was the cause of fear. Other causes of high anxiety listed by Saisto, Halmesmaki 2003 [18] and Melender 2002 [19] include young age, the lack of support and the lack of proper knowledge. In our study, the degree of anxiety was the highest in women over 30 years of age ($p = 0.00422$). In 2013, the median age of women giving birth in Poland was 29.2 years and shows a continuous upward trend. The problem of tocophobia stops concerning young women only. Fear of pain (85%) and of child's health (76.6%) were two most important components of labor anxiety in the studied population. Eriksonn et al. [2] emphasize the relevance of creating special (*fear of childbirth teams*) consisting of a doctor, midwife and psychologist to identify pregnant women with tocophobia and implement appropriate therapeutic and prophylactic management. Appropriate ante-natal education, apart from providing women with reliable knowledge, should also include elements of working with one's emotions, teach how to cope with pain and instruct about relaxation methods. Secondary tocophobia can be prevented by paying attention to the quality of childbirth, taking into account the subjectivity of the woman in labor and humanization of childbirth.

No preparation for childbirth (50%) and the lack of proper knowledge about the course of labor (36.7%) were other factors determining the occurrence of labor anxiety in the studied population. According to current Polish standards concerning obstetric care in the case of physiological pregnancy, each pregnant woman has the right to participate in meetings with a primary care midwife free of charge from week 21 to 31 of gestation once a week and from week 32 until delivery twice a week. The aim of these meetings is to prepare for childbirth, postpartum period and breastfeeding (Regulation of the Minister of Health from 2012) [20]. Among the tested women, only 20% did participate in such meetings. It can be suspected that the level of preparation for childbirth in these women is insufficient. The participation in ante-natal classes has an influence on proper preparation for a family-assisted childbirth, including an active attitude of the father who provides emotional support and his role in relieving fear and eliminating anxiety associated with pregnancy, childbirth and postpartum period [21–24]. Over a half of the tested women (56.7%) did not participate in ante-natal classes, and of those who took part in such classes (43.3%) merely 12.5% attended them with their partner. Only 4% of the tested women who undertook actions aiming to minimize labor anxiety indicated ante-natal classes as the method of combating labor anxiety. This could be associated with the current tendency to gain information through various types of Internet forums. That is why ante-natal classes should be promoted as a professional way of preparation of future parents for pregnancy and labor.

CONCLUSIONS

The occurrence of tocophobia among pregnant women is a common and complex phenomenon that requires individual diagnosis. Primiparas and women over 30 years of age experience high levels of fear significantly more frequently.

Fear of labor pain and the lack of proper preparation for childbirth determine the occurrence of tocophobia. Ante-natal classes and prenatal education based on standards of obstetric care should be promoted in order to reduce or eliminate fear of natural labor. It is indicated to continue studies on this issue.

REFERENCES

1. Huizink AC, Mulder EJH, Robles de Medina PG, et al. Is pregnancy anxiety a distinctive syndrome? Early Hum Dev. 2004; 79(2): 81–91, doi: 10.1016/j.earlhumdev.2004.04.014, indexed in Pubmed: 15324989.
2. Eriksson C, Jansson L, Hamberg K. Women's experiences of intense fear related to childbirth investigated in a Swedish qualitative study. Midwifery. 2006; 22(3): 240–248, doi: 10.1016/j.midw.2005.10.002, indexed in Pubmed: 16603282.
3. Bewley S, Cockburn J. Responding to fear of childbirth. Lancet. 2002; 359(9324): 2128–2129, doi: 10.1016/S0140-6736(02)09113-4, indexed in Pubmed: 12090975.
4. Hofberg KM, Brockington IF. Tokophobia – a morbid dread of childbirth. Its presence in Great Britain and Grand Cayman, British West Indes. J Psychosom Obstet Gynaecol. 2001; 22: 96.
5. Hofberg K, Ward MR. Fear of pregnancy and childbirth. Postgrad Med J. 2003; 79(935): 505–510, indexed in Pubmed: 13679545.
6. Cekański A. Tokofobia — lęk przed porodem naturalnym, prośba o cięcie cesarskie. Przegląd Ginekologiczno-Położniczy. 2009; 9: 31–33.
7. Billert H. Tokophobia — a multidisciplinary problem. Ginekol Pol. 2007; 78(10): 807–811, indexed in Pubmed: 18200974.
8. Andersson L, Sundström-Poromaa I, Wulff M, et al. Implications of antenatal depression and anxiety for obstetric outcome. Obstet Gynecol. 2004; 104(3): 467–476, doi: 10.1097/01.AOG.0000135277.04565.e9, indexed in Pubmed: 15339755.
9. Martini J, Knappe S, Beesdo-Baum K, et al. Anxiety disorders before birth and self-perceived distress during pregnancy: associations with maternal depression and obstetric, neonatal and early childhood outcomes. Early Hum Dev. 2010; 86(5): 305–310, doi: 10.1016/j.earlhumdev.2010.04.004, indexed in Pubmed: 20547016.
10. Suchocki S. Jak ograniczyć epidemię cięć cesarskich (How to reduce the cesarean sections epidemic)? GinPolMedProject. 2012; 2(24): 9–16.
11. Chestnut DH. Cesarean delivery on maternal request: implications for anesthesia providers. Int J Obstet Anesth. 2006; 15(4): 269–272, doi: 10.1016/j.ijoa.2006.06.009, indexed in Pubmed: 16949271.
12. Nerum H, Halvorsen L, Sørlie T, et al. Maternal request for cesarean section due to fear of birth: can it be changed through crisis-oriented counseling? Birth. 2006; 33(3): 221–228, doi: 10.1111/j.1523-536X.2006.00107.x, indexed in Pubmed: 16948722.
13. Hanley J. Zaburzenia psychiczne w ciąży i połogu. Sidorowicz S. Red. Elsevier Urban & Partner. ; 2012: 13–25.
14. Reid H, Power M, Cheshire K. Factors influencing antenatal depression, anxiety and stress. British Journal of Midwifery. 2009; 17(8): 501–508, doi: 10.12968/bjom.2009.17.8.43643.
15. Di Renzo GC. Tocophobia: a new indication for cesarean delivery? J Matern Fetal Neonatal Med. 2003; 13(4): 217, doi: 10.1080/jmf.13.4.217.217, indexed in Pubmed: 12854919.
16. Putyński L, Paciorek M. Kwestionariusz Lęku porodowego (KLP II) Wersja Zrewidowana — konstrukcja i właściwości psychometryczne. (Labor anxiety questionnaire (KLP II) — revised — the construction and psychological validation). Acta Universitatis Lodziensis. Folia Psychologica. 2008; 12: 129–133.
17. O'Connell M, Leahy-Warren P, Khashan A, et al. Tocophobia — the new hysteria? Obstet Gynaecol Reprod Med. 2015; 25(6): 175–177, doi: 10.1016/j.ogrm.2015.03.002.
18. Saisto T, Halmesmäki E. Fear of childbirth: a neglected dilemma. Acta Obstet Gynecol Scand. 2003; 82(3): 201–208, indexed in Pubmed: 12694113.
19. Melender HL. Experiences of fears associated with pregnancy and childbirth: a study of 329 pregnant women. Birth. 2002; 29(2): 101–111, indexed in Pubmed: 12051188.
20. Dziennik Urzędowy Rzeczypospolitej Polskiej z dnia 4 października 2012r. poz. 1100. Rozporządzenie Ministra Zdrowia z dnia 20 września 2012r. w sprawie standardów postępowania medycznego przy udzielaniu świadczeń zdrowotnych z zakresu opieki okołoporodowej sprawowanej nad kobietą w okresie fizjologicznej ciąży, fizjologicznego porodu, połogu i opieki nad noworodkiem.
21. Sioma-Markowska U, Poręba R, Skrzypulec-Plinta V. The model of active participation of the father in childbirth, based on the preferences of the parturient women. Neuro Endocrinol Lett. 2015; 36(4): 374–379, indexed in Pubmed: 26454494.
22. Sioma-Markowska U, Poręba R, Machura M, et al. Paternal engagement during childbirth depending on the manner of their preparation. Ginekol Pol. 2016; 87(9): 639–643, doi: 10.5603/GP.2016.0059, indexed in Pubmed: 27723071.
23. Gebuza G, Kaźmierczak M, Gierszewska M, et al. Lęk przed porodem w III trymestrze ciąży i jego powiązania ze stanem noworodka. (Fear of childbirth in the third trimester of pregnancy and its relationship with the state of newborn). Medycyna Ogólna i Nauki o Zdrowiu. 2015; 21(1): 39–44.
24. Müldner-Nieckowski Ł, Cyranka K, Smiatek-Mazgaj B, et al. Psychotherapy for pregnant women with psychiatric disorders. Psychiatria Polska. 2015; 49: 49–56, doi: 10.12740/pp/31493.