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Predictors of childbirth fear among pregnant Chinese women: A cross-sectional questionnaire survey

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ABSTRACT

Objective: to examine childbirth fear and identify its predictors among pregnant Chinese women.
Design and Setting: a cross-sectional descriptive questionnaire survey was conducted in a regional teaching hospital in Guangzhou, China, between October and November 2013.
Participants: 353 pregnant Chinese women who were at least 18 years old, with a singleton fetus, in the third trimester of pregnancy, not at high risk for complications of pregnancy, and not having had a previous caesarean section.
Measurements: a social-demographic data sheet; the Chinese version of the Childbirth Attitude Questionnaire and the Spielberger's State-Trait Anxiety Inventory; and the short form of 32-item Chinese Childbirth Self-Efficacy Inventory.
Findings: the pregnant Chinese women reported moderate levels of childbirth fear. The pregnant Chinese women who were younger, with lower educational level, not satisfied with their husbands' support, and with previous experience of miscarriage reported higher level of childbirth fear. Pregnant women's childbirth self-efficacy, state anxiety and trait anxiety were correlated with childbirth fear. The best-fit regression analysis revealed four variables that explained 28% of variance in childbirth fear: trait anxiety, state anxiety, age and previous experience of miscarriage.
Conclusion: this study highlighted the connection between childbirth fear, state and trait anxiety, childbirth self-efficacy, age, education and previous miscarriage among pregnant Chinese women.
Implications for practice: the CAQ was an appropriate method to measure childbirth fear in pregnant Chinese women. The health-care professionals should be sensitive toward issues that could affect levels of childbirth fear in pregnant Chinese women, including age, education and previous miscarriage.

Introduction

Childbirth is a significant life event which is potentially threatening because of the likelihood of pain and the potential risk of injury for mother and child. It is not uncommon for pregnant women to experience childbirth fear. It is estimated that 20% of the pregnant women might experience moderate childbirth fear and 6–13% of the pregnant women would experience severe and disabling fear of childbirth (Poikkeus et al., 2006; Rouhe et al., 2009).

Childbirth fear has been described as a very negative feelings toward childbirth (Waldenström et al., 2006), a negative cognitive assessment of the anticipated childbirth (Ryding et al., 1998a, 1998b), feelings of fear and anxiety when facing birth (Eriksson et al., 2006), and 'tokophobia', the pathological dread and avoidance of childbirth (Hofberg and Brockingtong, 2000). Childbirth fear has also been characterised as a continuum, with women experiencing no fear at one end and those with severe or disabling fear at the other (Wijma et al., 1998).

The most frequent fears cited were fear for the infant's health and fear of pain (Geissbuehler and Eberhard, 2002). Fear of not receiving sufficient support and fear of loss of autonomy and control are also commonly reported childbirth fears (Sercekus and Okumus, 2009; Lyberg and Severinsson, 2010).

Childbirth fear is manifested by symptoms of stress, nightmares, and physical symptoms (Melender, 2002; Eriksson et al.,

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2006). Childbirth fear may overshadow the entire pregnancy; complicate labour; lead to difficulties in the mother-infant relationship, and to postpartum depression. It was reported that women with childbirth fear had a significant more use of psychotropic drugs (Nordeng et al., 2012); a higher risk of prolonged or protracted childbirth (Laursen et al., 2009; Adams et al., 2012; Sydsjö et al., 2013); and more negative birth experience (Waldenström et al., 2006). Women with childbirth fear who have a negative birth experience have been found to suffer from postpartum depression, symptoms of post-traumatic stress disorder, and delayed bonding with their infant (Hofberg and Brockingtong, 2000).

Moreover, childbirth fear has been demonstrated in several studies as a common reason for caesarean section on maternal request (McCourt et al., 2007; Hildingsson, 2008; Fenwick et al., 2010). A systematic review of 38 studies indicated that across a range of countries approximately 16% of women prefer caesarean section as mode of childbirth (Mazzoni et al., 2011). A more recent World Health Organization (WHO) study indicated that China has the highest rate of caesarean section of 46.2% in Asia (Lumbiganon et al., 2010) and caesarean section on maternal request was regarded as one of the predominant contributors to the high caesarean section in mainland China (Song et al., 2010). The WHO states that no region in the world is justified in having a caesarean section rate greater than 10–15%. Rates higher than 15% have been shown to be associated with more harm than good (Althabe and Belizán, 2006).

Childbirth fear has been indicated to be related with childbirth self-efficacy. Childbirth self-efficacy, or confidence in one's own ability to cope with labour, is considered as an important factor affecting pregnant women's motivation for vaginal childbirth and their interpretation of childbirth outcomes (Lowe, 1993). The women with higher childbirth self-efficacy reported lower level of childbirth fear (Lowe, 2000; Tanglakmankhong et al., 2011).

It is conceivable that anxiety is linked with childbirth fear. Spielberger (1972) distinguished conceptually and operationally between anxiety as a transitory state (state anxiety) and as a relatively stable personality trait (trait anxiety). State anxiety is characterised by subjective feelings of tension, apprehension, nervousness and worry and by activation or arousal of the autonomic nervous system. On the other hand, trait anxiety is described as a personality trait that indicates relatively stable individual differences in anxiety-proneness. Trait anxiety implies differences between individuals' disposition to respond to stressful situations with varying amounts of state anxiety (Spielberger et al., 1983). Lazarus (1991) claims that states and traits are closely related and that the former can be described as 'figure', 'being provoked in a specific context' and the latter as 'background', i.e. influencing this provocation. The evidence indicated that women with state anxiety are more likely to fear childbirth than women without anxiety (Spice et al., 2009; Storksen et al., 2012). Moreover, Trait anxiety or the relatively stable disposition to be anxious, has also been linked to childbirth fear (Spice et al., 2009; Jokić-Begić et al., 2014). The previous study indicated that trait anxiety had an important role in predicting childbirth fear in nulliparous women (Jokić-Begić et al., 2014).

In terms of social issues, research demonstrates that women who are young, have a low educational level are more likely to be affected by childbirth fear (Laursen et al., 2008). Lack of social support or expressed dissatisfaction with one's partner is also predictive of childbirth fear. The more dissatisfaction with the partnership, and lack of social support the women reported, the more they showed childbirth fear (Saisto et al., 2001).

Given the growing evidence of childbirth fear and its devastating effects, it is important for the health-care professionals to understand, recognise and address childbirth fear. The predictors of childbirth fear will be helpful for health-care professionals to detect pregnant women at high risks of childbirth fear and initiate or refer to appropriate services in pregnancy. However, few researchers have examined the predictors of childbirth fear among pregnant Chinese women. Thus the aim of this study was to examine childbirth fear and its predictors among pregnant Chinese women. The objectives were to:

(1) determine the level of childbirth fear, childbirth self-efficacy, state anxiety and trait anxiety of pregnant Chinese women;
(2) examine the differences in childbirth fear among different socio-demographic subgroups of pregnant Chinese women;
(3) examine the relationships between childbirth fear and other continuous variables among pregnant Chinese women; and
(4) identify the predictors of childbirth fear among pregnant Chinese women.

Methods

Design

A cross-sectional descriptive study was conducted.

Setting and participants

Guangzhou is a sub-provincial city located in southeastern China. It is the capital of Guangdong Province and has a population of approximately 16 million. The study was conducted between October and November 2013. The participants were recruited from one of the regional teaching hospitals in Guangzhou, where the birth rate is over 5000 babies per year. The sample inclusion criteria were age over 18 years old, pregnant with a singleton fetus, in the third trimester of pregnancy, not at high risk for complications of pregnancy, and not having had a previous caesarean section. The pregnant women who had planned elective caesarean section at the time of recruitment were excluded from the study.

Measures

The Childbirth Attitude Questionnaire (CAQ) (Lowe, 2000; Kish, 2003) was used to measure childbirth fear in this study. The CAQ is a measure adapted from Harman (1988) and Areskog et al. (1982) to measure childbirth fear. The CAQ is a 16-item questionnaire with a Likert response scale of 1–4. Possible scores range from 16 to 64. Higher total scores indicate more severe childbirth fear. The original CAQ has good reliability and validity (Lowe, 2000). The Chinese version of the CAQ has been validated in pregnant Chinese women. Reported internal consistency was 0.91; significant correlations with measures of anxiety and childbirth self-efficacy demonstrated its construct validity (Liu, 2014).

The short form of 32-item Chinese Childbirth Self-Efficacy Inventory (CBSEI-C32) (Gao et al., 2011) was used in this study to measure childbirth self-efficacy among pregnant Chinese women. The CBSEI-C32 has two parallel subscales: Outcome Expectancy Subscale (OE-16) and Efficacy Expectancy Subscale (EE-16). The two subscales, which consist of the same 16 items measuring coping behaviour for childbirth, such as breathing and coughing exercises, distraction, and relaxation, were adopted for measuring women's perceived self-efficacy in coping with the whole labour process. The respondents to the short-form CBSEI are asked to rate the helpfulness and the certainty of exercising the coping items on a 10-point self-report scale from 1-'*not at all helpful*' to 10-'*very helpful*' for the OE-16, and from 1-'*not at all sure*'