



## INVESTIGATING MENTAL FACTORS RELATED TO THE FIRST CHILDBIRTH AND ITS RELATIONSHIP WITH PREFERENCE OF THE KIND OF NEST CHILDBIRTHS IN WOMEN

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### ARTICLE INFO

#### Received:

03<sup>th</sup> Jun 2017

#### Accepted:

29<sup>th</sup> Nov 2017

#### Available online:

14<sup>th</sup> Dec 2017

**Keywords:** *Childbirth, delivery preferences, psychological factors.*

### ABSTRACT

The amount of caesarean section has been increasing despite the lack of relationship with increasing the death and pathogenicity of perinatal period. In this, caesarean section by the mother's request has been estimated about 4-18 percent of total childbirths. Nowadays, the ideas related to health are known as an effective variable in development and progress of hygienic behaviors and treatment capacity and explaining the hygienic problems. The internal position of health control is related to positive awareness and attitude, cognition status, hygienic behaviors and health.

**Material and Methods:** The present study is cross-sectional and descriptive on 320 patients with at least 18 and up to 35 years old and the women were hospitalized after the childbirth in postpartum part of Ghamare Bani Hashem Hospital in Khoy.

**Results:** In the present study the average age of women was  $24.24 \pm 5.10$ . Also there was no meaningful relationship between depression and anxiety and the kind of childbirth. Also there was no meaningful relationship between mental factors at the domain of trusting the doctor and internal health and chance and its effectiveness with the preference of the kind of childbirth.

**Discussion:** there was no meaningful relationship between the kind of women's preferences in childbirth with mental factors but the preferences of the kind of childbirth will change by improving the kind of women's education and their husbands and the kind of job and their income.

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**To Cite This Article:** Asgarlou Zoleykha, Soheila Bani, Shirin Hasanpoor, Mohammad Asghari Jafarabadi, Mohammad Arzanlou, Hanieh Asghariyan, (2017), "investigating mental factors related to the first childbirth and its relationship with preference of the kind of nest childbirths in women", *Pharmacophore*, **8(6S)**, e-1173010.

### Introduction

The amount of caesarean section has been increasing despite the lack of relationship with increasing the death and pathogenicity of perinatal period [1] and is associated with complications such as mothers' death, damage to the urinary tract and hysterectomy [2-4]. More than 6.2 million of unnecessary caesarean sections in the world [1] and 40% are done in Iran every year [5]. In this, caesarean section by the mother's request has been estimated about 4-18 percent of total childbirths [6]. Mother's satisfaction of childbirth experience is greatly effective in her decision about the kind of next childbirths [7, 8 and 9]. In addition to physiological aspects of pregnancy and birth, unique mental, mental-gender and mental-social aspects in pregnant women life experiences should be taken into consideration in choosing the kind of women's childbirth [10]. Nowadays, the ideas related to health are known as an effective variable in development and progress of hygienic behaviors and treatment capacity and explaining the hygienic problems [7, 6]. The ideas related to health or the position of health control

refers to this point that to what extent the individual's health is controlled by the internal factors (self) or external factors (effective and influential people). The internal position of health control is related to positive awareness and attitude, cognition status, hygienic behaviors and health [6].

Based on some studies, understanding the individual's control through the process of childbirth [10, 11, 12]; pregnancy anxiety related to the fear of childbirth [13]; women's negative experiences of childbirth with serious mental problems like appearing the signs of depression after childbirth [14, 15]; painful experiences [10, 16, 17]; nest disorders and stress-making damages [18] is effective in the feeling of satisfaction of childbirth and choosing the kind of next childbirth. In contrast, other studies didn't find any relationship between anxiety, depression [19], experience of high pain [20, 21], previous childbirth [22, 23] and choosing the next childbirth. Not found.

Regarding the contrary findings in the studies, our social and cultural differences with other countries and lack of similar study in Iran, we decided to investigate the mental factors related to the first childbirth and its relationship to the preferences of next childbirths.

#### **Research method**

The present study is cross-sectional and descriptive on 320 patients with at least 18 and up to 35 years old and the women were Hospitalized postpartum part of Ghamare Bani Hashem Hospital in Khoy.

#### **Sampling method**

Sampling method in this study was random. The questionnaire on individual-social information was completed by the researcher of the women who had the criteria to get into the study (the age of 18-35, the ability to fill the questionnaire or do the interview, having satisfaction to get into the study,...). Also, the phone number and the health center where the participants had referred to were taken in this stage and they were invited to fill the next questionnaires in the place of health center through phone calls in 6-8 weeks after childbirth.

#### **Data gathering tools were as follows**

Questionnaire of individual and social factors; this questionnaire made by the researcher included individual and social information like mother's name and last name, age and job of both herself and the spouse, her and her husband's level of education, the amount of monthly income, housing status, behaviors of smoking cigarettes or hubble-bubble or drugs by the spouse, the role of the family and spouse in choosing the kind of childbirth... . This questionnaire was filled by the participants and the researcher 24 hours after the childbirth.

#### **The Edinburgh Postnatal Depression Scale (EPDS)**

this questionnaire is used to measure the depression of pregnancy period and after that. It was made by Kooks et, al. in 1978 and was reviewed in 1994 [24]. This scale has 10 questions that focus on mental aspects of depression especially inability to enjoy [25]. The items of this questionnaire discuss the different symptoms of clinical depression like feeling of guilt, sleeping disorder, reduction of energy, lack of enjoyment and thoughts of suicide [26].

#### **Spielberger state- trait anxiety inventory**

this questionnaire contains two parts of hidden and clear anxiety. Clear anxiety can be considered as a part of an individual's life or in other words, it is positional and is related to tense positions, arguments, losing social positions, threat to the human's health and security. But hidden anxiety is related to the individual's differences in responding to the tense positions with different amounts of clear anxiety [27]. This questionnaire was made in 1983 as a self-measurement tool in two separate forms and includes 40 items that gives the respondents the opportunity to classify their feelings with score of 1 for the absence of anxiety and score of 4 for high anxiety. During recent years, this scale has been used as the most popular test for evaluating anxiety in different researches in and out of the country[25]. The phrases that show absence of anxiety and are weighed in a reverse order are as follows: 1-2-5-8-10-11-15-16-19-20 in the scale of clear anxiety and 21-23-26-27-30-33-34-36-39 in the scale of hidden anxiety [28].

#### **Scoring the clear anxiety**

low anxiety, 20-31; average to low anxiety 43-53; average to high anxiety 54-64, relatively strong anxiety 54-64; strong 65-5 and very strong is higher than 76.

#### **Scoring the hidden anxiety**

low anxiety 20-31; average to low anxiety 32-42; average to high anxiety 43-52; relatively strong anxiety 53-62, strong anxiety 63-72, very strong anxiety is 73[58]. In order to identify the reliability of Spielberger state- trait anxiety inventory, Mahram (1373) did a research about normalization anxiety test of Spielberger in Mashhad on 600 people and reported the stability of the mentioned test through cronbach alpha formula in scale of anxiety 0.94. He used the method of sync. Criterion to investigate reliability that there are meaningful differences based on it in both scales of mode anxiety and feature anxiety at the level of 0.01 and 0.05 [29]. This questionnaire will be completed by the participants (8 weeks after childbirth).

#### **Questionnaire of doctor's reliability**

this questionnaire was stable and reliable by Mahdi Foratiet, al in 1389 and includes 10- 5likert questions that is consisted of 1 meaning completely disagree to 5 completely agree. This questionnaire evaluates the patient's trust to the doctor [30]. This questionnaire includes three aspects of reliability and trust to the doctor, self-esteem in medicine knowledge and skills, secretive and reliability of the received information by the doctor. The items 1, 4, 7 and 11 are weighed in a reverse order while scoring [31]. And the higher scores show the higher reliability [31, 32].

Multidimensional Health LocusControl: this scale was designed by Wallstoneet, al in 1992 and predicts the hygienic behavior based on individuals' beliefs [33]. MHLC scale includes three factors with 6-likert scale and the contraction of words: 1- Internal HLC (IHLC): including the degree of individual's belief to the fact that the internal factors and his/her behavior are responsible for his/her health. 2- Powerful others HLC (PHLC): including the degree of individual's belief to this point that his/her health is identified with other people. 3- Chance HLC (CHLC): including the degree of individual's belief to this point that his/her health depends on chance, fate and destiny. In forms 'a' and 'b' all the items of this questionnaire have 6 alternatives and scored from 1 to 6; therefore, the individual's score will be varied from 6-36 for each component that are not added to each other and are estimated independently.

The formal and content credibility were used in order to identify the credibility of these questionnaires in a way that after translating the questionnaires from English to Persian and correcting any kind of problem in translation, 10 professors of college of nursing and midwifery in medical university of Tabriz investigated the tools and verified them. At the present study the stability was identified in the aspect of repeatability and internal solidarity by doing test again on 20 people. At the certainty level of 95% and cronbakh alpha was calculated to be equal to  $\alpha= 0.89$  for the aspect of clear anxiety and  $\alpha=0.87$  for the aspect of hidden anxiety and  $\alpha=0.77$  for the aspect of depression and  $\alpha= 0.71$  for the aspect of trusting the doctor and  $\alpha=0.85$  and  $\alpha= 0.86$  for the aspects of internal health and chance, respectively. SPSS16 software and Pearson correlation coefficient were used to analyze the data. Stability was 0.77 (cronbach alpha) (8 weeks after the childbirth) and 0.86 (12-14 weeks after the childbirth with the method of measuring internal stability. In addition to this, the stability was dine through test-retest method and the correlation coefficient in the branch was observed as 0.80 [55]. This questionnaire will be completed 8 weeks after the childbirth by the participants.

**The results**

In the present study the average age of women was  $24.24 \pm 5.10$ . (38.4%) the majority of the participants had the education of guidance school and (89.2%) were housewives.

About half of the people (68.7%) declared that their monthly income is enough. Most of them (63.4%) stated their selecting childbirth was natural and also (52.6%) reported that no other relative live with them. Almost half of the women stated that their husbands had free jobs (57.1%) and their husbands' education level was high school education (31.3%) (Table 1).

**Table 1.** Socio-demographic characteristics of participants

Variable	Total (percent)	Variable	Total (percent)
Education wife		Choice of delivery	
Illiterate	16(4.2)	Natural	
Primary	76(20)	Caesarean section	
Guidance	81(21.3)	Education	
High School	119(31.3)	Guidance	146(38.4)
Excellent	88(23.3)	High School	133(35)
Jobs wife		Excellent	98(25.8)
Working	87(22.9)	Jobs	
Employee	56(14.7)	Housewife	339(89.2)
Free	217(57.1)	Student or student	23(6.1)
student	6(1.6)	Practitioner	16(4.2)
Etc	14(3.7)	Living with relatives	
age		Nobody	200(52.8)
mean (SD)		My parents	10(2.6)
5.10±24.24		Parents wife	156(41.2)
		Other cases	13(3.4)

Also there was no meaningful relationship between depression and anxiety and the kind of childbirth. Also there was no meaningful relationship between mental factors at the domain of trusting the doctor and internal health and chance and its effectiveness with the preference of the kind of childbirth.

At the present study, there was a meaningful statistical relationship between the mental factors related to the first childbirth and its relationship to preferring the kind of next childbirths among the women who referred to GhamareBaniHashem Hospital in Khoy city with some demographic characteristics (age, education, job, spouse's age, housing status, and husband's education). (Table 2)

**Table 2.** The relationship between anxiety and depression

Variable	mean	SD	Significant level
Anxiety	0.50	3.09	P>0.005
Depression	0.45	1.93	
Trust your doctor	0.57	2.19	
Internal health	1.03	4.30	
Chance	1.01	3.28	
To be effective	1.12	4.21	

### Discussion

The present study investigates the relationship between the internal factors related to first childbirth and its relationship with selecting the next childbirths in women who referred to GhamareBaniHashem Hospital in Khoy city. The results of the study showed that there was no meaningful statistical relationship between the internal factors (depression and anxiety and trusting the doctor and chance and internal health and also effectiveness) with selecting the kind of childbirth. Also, there was a statistical meaningful relationship between some other demographic features of the women with preferring the kind of next childbirths.

As the results of studies by Mancuso et. al. that were done with the purpose of identifying the individual and social childbirth factors of the women about natural childbirth and cesarean showed that 16.9 % of the women tend to do cesarean that had a meaningful relationship with the age of more than 35, high level of education, history of infertility and smoking. There was not a meaningful relationship between the score of anxiety, depression and the women's tendency to cesarean among these women [34] that is in accordance with the present study.

The study that was done by Bhattacharya et al. in 2005 showed that there is a statistical meaningful relationship between age and job with preferring the kind of childbirth that is in accordance with our study [35].

Study done by Doering et al. showed that in addition to physiologic aspects of pregnancy and birth, there are some mental, physical-mental and social-mental aspects in the pregnant women's experiences that should be taken into consideration in choosing the kind of childbirth [10] that is not in accordance with the present study.

Doering et al reported in a longitudinal study titled, "Evaluation of the Quality of Women's Childbirth Experience" that pain will reduce the quality of childbirth experience but the pleasant experience is more important than the pain [10] that is not in accordance with our study.

Valizade and Bayrami investigated the nulliparous women's experiences of the childbirth pain in Khoy and Marand and resulted that the women will adapt with the childbirth pain in two physiological and mental methods [36] that is not in accordance with the present study.

The findings of study by Mollison and et al shows lack of relationship between condition of cesarean and next childbirth. It was stated in this study that the negative relationship between cesarean childbirth and next pregnancy needs more investigation [22] that is in accordance with the present study.

Also, there was no meaningful relationship between the present childbirth and the kind of next childbirth in the study by Kjerulff and et al in 2013 that is not in accordance with the present study.

In the study by Pang et al., a quarter of participants preferred to change the kind of childbirth after their first childbirth. Also the findings of this study showed that there is a meaningful relationship between cesarean childbirth and the mother's anxiety [23] that is not in accordance with the present study.

Conclusion: there was no meaningful relationship between the kind of women's preferences in childbirth with mental factors but the preferences of the kind of childbirth will change by improving the kind of women's education and their husbands and the kind of job and their income. It shows that the level of awareness is effective in their preference of choosing the kind of next childbirths. So regarding the importance and crucial role of awareness in the society it is possible to have a safer and more stable family and society by increasing it.

### Acknowledgement

This research has been approved and financially supported by Medical University of Tabriz. So hereby, we appreciate health deputy and especially the treatment and educational center of Ghamare Bani Hashem in Khoy and all the participants.

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