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Sociodemographic criteria and quality of life among pregnant women with anxiety prior to childbirth

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Abstract

Aim: To determine the sociodemographic criteria, quality of life and its relation to level of anxiety prior to childbirth. **Study design:** Was a descriptive analytical study. A sample size of 162 was estimated to be necessary to achieve a power of 80%. **Setting**: The data collected from childbirth ward at Women's Health Hospital from February 2015 to May 2015.**Tools of the study:** Three tools were used 1) Demographic & clinical data 2) Anxiety scale by El- Hams (2010), and 3) Quality of life questionnaire by El- Hams (2010)**. Results:** The total number of participants was 162 with mean age 26.7+6.6. More than fifty percent of participants were had severe anxiety related to vaginal examination, and the relation between quality of life and childbirth anxiety confirmed that there was a statistically significant difference. **Conclusion**: Anxiety level in our study confirm a higher level than comparable studies which reflected an achievement of supposed hypothesis that anxiety level might be thirty percent or greater. **Recommendations:** The women's health facilities should include anxiety level test as one of childbirth procedures and providing family support system for mother during childbirth process

Keywords: Anxiety level, Childbirth, Quality of life, Sociodemographic

INTRODUCTION

Pregnancy's anxiety is an emotional status that is akin to anxiety status but distinct because it's particularly imbedded in concerns amongst pregnant women within the context in their pregnancies. Primarily based on the common explanation of anxiety as a poor emotional status that outcomes from perspectives of hazard, the anxiety associated pregnancy known as a terrible emotional status this is tied to issues approximately the qualification and well-being of a newborn, the imminent childbirth, of hospital and care providers (including one's own healthiness and survival in pregnancy), childbirth and postpartum, and role of parenting or maternity (Dunkel, 2012).

According to Alderdice & Lobel, 2012, therefore, pregnancy's anxiety has been assessed through self-record devices utilized in interview and questionnaire formats that were advanced particularly to capture particular to pregnancy. There are more than dozen of various being pregnant-precise anxiety measures within the literature by one count.

In a study of Waldenstrom and his colleagues which found that the tenth Sweden women is so affected with their anxiety and anxiety prior to childbirth that they seek expert assist (Waldenstrïom, et al 2006). Moreover, Melender stated the subsequent factors which women are terrified of being pregnant and childbirth due to the anxiety of the type childbirth manner, mother and newborn health, performing of professionals' health care, and circle of relatives lifestyles results. Even though, anxiety motives may be anxious tales via others' experiences of various issues associated with childbirth. Also, anxiety appeared in the form of stress and effects on day by day existence as to avoid pregnancy and childbirth and a desire to have a caesarean (Melender, 2002).

Quality of life defines as the individual's awareness verification balance between the physical, psychological and social aspects to achieve satisfaction with life and enjoy it and being positive. The quality of life express the psychological adjustment as expressed happiness and satisfaction with life as a product of the conditions of life of living for individuals and the self-perception of life, in terms of quality of life and self-perception linked to the lives of the fact that this perception affects the individual assessment of the substantive aspects of life such as education, employment, standard of living and social relations on the one hand, and the importance of these topics for an individual at a certain time and under certain circumstances on the other hand (Craig, 2010).

It's much impossible to fully realize the influence of adverse outcomes of pregnancy on the subsequent pregnancies. Though, some measurements tools may confirm a relation of quality of life to those outcomes. Some of the significances of preceding pregnancies loss on the following pregnancy are reflected in the results from the SF-36 domains. A study by Jomeen &Martin in 2005 investigated the psychometric properties of the Short form (SF-36) questionnaire in relation to the index pregnancy confirmed that this tool could be used in clinical practice to measure quality of life on eight subscales during early pregnancy.

Study Aim:

The study aims to determine the Sociodemographic criteria, quality of life and its relation to level of anxiety prior to childbirth

Study questions

Is there a relation between childbirth anxiety and pleasant of existence?

Is the high-risk pregnancy effect on the anxiety level during childbirth?

METHODOLOGY

Study design: was a descriptive analytical study

Study Subjects:

Subjects of the study comprised available pregnant women in the end of 9^{th} month. the sample size was chosen by simulating repeated data sets when the Kruskall-Wallis test at type I error Alfa < 0.05 achieved more than 80% power. A sample size of 162 was estimated to be necessary to achieve a power of 80% with null hypothesis supposed to discover 30 % minimum required sample size 153 so our sample qualified enough based on previous studies which reported that anxiety with childbirth recorded around 20% (Eriksson et al., 2006; García Rico et al., 2010; Grant et al., 2008; Mohammad et al., 2011 & Hall et al., 2009).

Study setting:

The data collected from childbirth ward at Women's Health Hospital in Assiut University Hospitals which introduce health services in Upper Egypt Governorates (Sohag, Qena &Aswan). This hospital affiliated to Assiut governorate, in the period from February 2015 to May 2015.

Tools of the study: *Data collected through using a 3 assessment tools*

Tool I. Demographic Data Structured Interview & clinical data:-

a-Demographic Data Include woman's demographic data developed by the researcher after reviewing the related literatures as age, residence, type of family, mother's education level, and Occupation.

b- clinical data include Obstetric history as type of pregnancy" natural or artificial", any medical problem with pregnancy

Tool II, Anxiety Scale by El- Hams (2010)

This scale was designed to identify the level of anxiety and its relation to the process of birth. It was developed by El-Hams consisted of 31 items. It was divided into two dimensions: - The first dimension of the physiological symptoms (physical) concern of birth anxiety which include sentences 1-11. The second dimension of psychological symptoms of anxiety birth and include sentences 12-31. Responses to the test consists of severe = 3, moderate= 2, a few (mild) = 1. This scale was valid and reliable for total subscale by α Cronbach's Co- efficient (0.705) and reliability by split- half technique by using Spearman equation – Brown, so the reliability became coefficient at 0.81

Tool no III: Quality of Life questionnaire by El- Hams (2010)

This scale was developed by El-Hams, It's evaluated one's quality of life experienced by women. It's composed of 15 items which describes the women's condition. It's divided into 2 dimensions, the first dimension distribution level of satisfaction 1-8 item and consists of scalable or gradual answers were determined by, not happy at all = 1, not satisfied = 2, not satisfied nor dissatisfied = 3, satisfied =4 ,very satisfied = 5 . The second dimension, distribution level of enjoyment 9-15 items consists of gradual answers were determined by, Not have at all = 1, little = 2, medium= 3, much =4, excessive = 5. Level of quality of life interpreted by poor = 0-25, Mild= 26-50, and good=51-75. This scale was valid and reliable for total subscale by α Cronbach's Co- efficient (0.70).

Methods of data collection:

1- Official permissions obtained in the form of a written approval from the faculty of nursing and hospital responsible administrative authority to collect the necessary data.

2- Informed consent (oral) was obtained from every participated women after explanation of the study aim.

3- Women who fulfilled the criteria were invited by the investigator to participate voluntarily in the study and interviewed orally using a structured questionnaire.

4- Each interview took about 20 minutes and was carried out in women's admission room before childbirth. Initially, the investigator collected sociodemographic variables: maternal age, residence, marital status, and education, type of family, mother's education, the number of previous pregnancies, type of pregnancy "natural or artificial" and any chronic diseases associated with her pregnancy.

5- Then the investigator measured anxiety level of the participant through a number of questions, and finally, her level of satisfaction and enjoyment due to the quality of life which measured too through a number of questions.

Ethical consideration:-

Research proposal were approved from ethical committee in the faculty of nursing, Assiut University on January 2015 (registration no. 215). There was no risk for study subject during application of the research. The study was following common ethical principles in clinical research. Privacy was providing during data collection. Confidentiality and anonymity were assured and women had the rights to refuse to participate of the study without any rational.

Data Analysis

Data was collected and coded then entered into IBM compatible computer, using SPSS (Statistical Package for the Social Sciences) version 20. Frequency tables used to express of number and percentage in addition to Chi-square (X^2) test was used for paired comparison of dichotomous variables and P. value considered a significant if it less than 0.05.

Results

The total number of participants was 162 with mean age 26.7$\pm$6.6 and their ages ranging from 14-45 years old with the mean of parity 1.93$\pm$1.78 (0-9).

Figure 1: illustrated that Sociodemographic characteristic of the participants. The most of the women of the sample have been extended family 61.0%. Regarding mothers' education, 35.8% of individuals have been diploma or secondary education level. The majority 85.8 % of them have been a housewife. The vast majority 97.5% had a normal pregnancy without diabetes & hypertension for 96.3% and 85.8 % respectively and the majority of them 83.3% know the fetus gender before delivery. The Chi-rectangular used to check statistical relation of women's parity

and level of anxiety. It contemplated a statistical significant of family type and anxiety signs and symptoms at P. value < 0.036.

According to the distribution of anxiety symptoms among study sample figure (2), two-thirds 66% of them reported a mild anxiety in the form of chest pain, observed by means of a coldness in their palms and feet 60.49 % and 56.79% respectively. There is no statistical huge of parity and symptoms of anxiety.

Table (1) confirmed that 59.26% of participants were had severe anxiety related to vaginal examination followed 58 % worried about obstructed childbirth and pain of childbirth was the third 57.41 % level in their worries.

Table (2) clarifies that 63.58 % of participants had been satisfied with the quality of their personal life, followed by 57.41% had been satisfied with their living condition and 55.56% of them had been satisfied with their health status. There is no statistical significant of parity and satisfaction level about their quality of life.

Table (3) illustrated that the majority of the sample 63.58% have been had medium degree in money to providing their needs and 61.11% of the studied sample mentioned that medium level within the ability to concentration. There is a statistical significant at P. value < 0.063 of the sort of family and enjoyment level. In addition to a statistical significant too among parity and enjoyment level P. value < 0.0.5 and there's a statistical significant of women's knowledge of fetal gender and enjoyment stage at P. value < 0.001.

Table (4) clarifies that there is a statistical significant difference between the educational level and childbirth anxiety.

Table (5) confirmed that there has been a statistically significant difference between quality of life and childbirth anxiety among the participants at P. value < 0.001**

Figure (1) demographic characteristic of the study sample

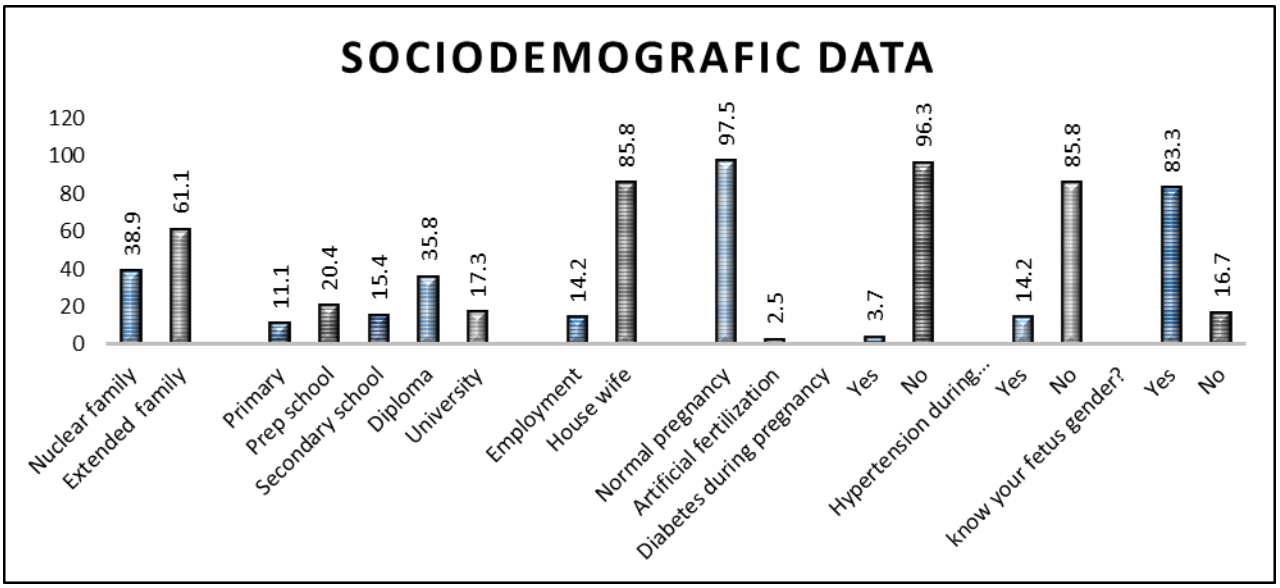

Figure 2: Distribution of anxiety symptoms among women

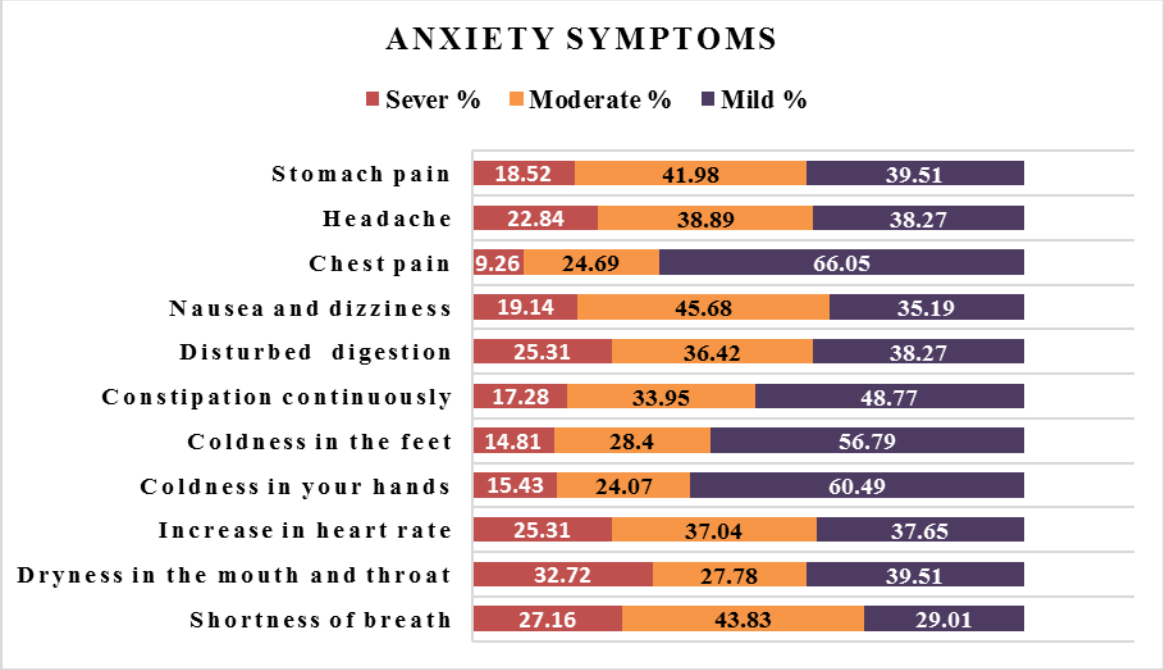

Table 1: Distribution of anxiety level regarding to childbirth circumstances/procedures

	Severe		Moderate		Mild	
Anxiety Statement " worried of"	No.	%	No.	%	No.	%
Bleeding	70	43.21	43	26.54	49	30.25
Lack of staff attention	52	32.10	68	41.98	42	25.93
Obstructed childbirth process	94	58.02	39	24.07	29	17.90
Vaginal examination	96	59.26	42	25.93	24	14.81
Stitches after birth	84	51.85	44	27.16	34	20.99
Loss of the sense of fetal movement	86	53.09	50	30.86	26	16.05
Pains with childbirth	93	57.41	45	27.78	24	14.81
lack of amniotic fluid	64	39.51	58	35.80	40	24.69
Descent of the fetus by breech position	42	25.93	62	38.27	58	35.80
Tension make me sweating	41	25.31	67	41.36	54	33.33
Deterioration of my health	50	30.86	71	43.83	41	25.31
Loss ability to concentrate	44	27.16	73	45.06	45	27.78
Restlessness	65	40.12	68	41.98	29	17.90
Weak concentration	40	24.69	80	49.38	42	25.93
The future	40	24.69	47	29.01	75	46.30
Temper is tense	54	33.33	70	43.21	38	23.46
Nightmare	29	17.90	49	30.25	84	51.85
Irritability and confusion	47	29.01	64	39.51	51	31.48
Sleep disturbances	52	32.10	67	41.36	43	26.54
The unknown	36	22.22	57	35.19	69	42.59

Table 2: Distribution of satisfaction level among women due to quality of life

	Not satisfied at all		Not satisfied		Not satisfied nor dissatisfied		Satisfied		Very satisfied	
Satisfaction statement	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Evaluate the quality of private life	2	1.2	11	6.79	30	18.52	103	63.58	16	9.88
Satisfaction health	1	.6	18	11.11	43	26.54	90	55.56	10	6.17
Satisfaction sleep	5	3.1	47	29.01	59	36.42	50	30.86	1	0.62
Satisfaction of daily activities	1	.6	25	15.43	56	34.57	72	44.44	8	4.94
Satisfaction of ability to work	2	1.2	23	14.20	75	46.30	54	33.33	8	4.94
Satisfaction of personal relationship	4	2.5	7	4.32	42	25.93	84	51.85	25	15.43
Satisfaction of family support	8	4.9	10	6.17	43	26.54	82	50.62	19	11.73
Satisfaction of living condition	3	1.9	4	2.47	49	30.25	93	57.41	13	8.02

Table 3: Distribution of enjoyment level among study women.

	Not have at all		Little		Medium		Much		Excessive	
Enjoyment level statement	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Do you enjoy your life	4	2.47	19	11.73	98	60.49	38	23.46	3	1.85
Do you feel your life meaningful	3	1.85	14	8.64	87	53.70	53	32.72	5	3.09
Are you able to concentrate	1	0.62	28	17.28	99	61.11	32	19.75	2	1.23
Are you feeling that your life is safe	2	1.23	17	10.49	85	52.47	52	32.10	6	3.70
Do you have a healthy environment	6	3.70	16	9.88	79	48.77	58	35.80	3	1.85
Do you have the money to provide your needs	5	3.09	14	8.64	103	63.58	36	22.22	4	2.47
Do you have enough energy for your daily activities	2	1.23	16	9.88	97	59.88	43	26.54	4	2.47

Table (4): Relation between childbirth anxiety and sochiodemographic data among studied women

Demographic data	Anxiety level						P. value
	Mild		Moderate		Severe		
	No.	%	No.	%	No.	%	
Family type							
Nuclear family	4	36.36	39	42.39	20	33.90	0.570
Extended family	7	63.64	53	57.61	39	66.10	
Mother education							
Primary	4	36.36	5	5.43	9	15.25	0.024*
Preparatory	1	9.09	21	22.83	11	18.64	
Secondary	5	45.5	50	54.3	28	47.5	
University	1	9.09	16	17.39	11	18.64	
Mother work							
Employment	0	0.00	14	15.22	9	15.25	0.377
Unemployment	11	100.00	78	84.78	50	84.75	
Pregnancy type							
Normal pregnancy	10	90.91	91	98.91	57	96.61	0.230
Artificial pregnancy	1	9.09	1	1.09	2	3.39	
Do you have diabetes during pregnancy?							
Yes	0	0.00	4	4.35	2	3.39	0.761
No	11	100.00	88	95.65	57	96.61	
Do you have hypertension during pregnancy?							
Yes	1	9.09	12	13.04	10	16.95	0.704
No	10	90.91	80	86.96	49	83.05	
Do you know the fetus gender?							
Yes	8	72.73	79	85.87	48	81.36	0.476
No	3	27.27	13	14.13	11	18.64	

Table (5): Relation between quality of life and childbirth anxiety

Levels of Quality of life	Childbirth anxiety levels						P. value
	Mild		Moderate		Severe		
	No.	%	No.	%	No.	%	
Poor	0	0.0	3	3.3	35	59.3	<0.001**
Mild	2	18.2	69	75.0	19	32.2	
Good	9	81.8	20	21.7	5	8.5	

DISCUSSION

The anxiety of childbirth is a serious problem for women since it results in avoidance of pregnancy, maternal and fetal stress (Saisto and E. Halmesm, 2003). Childbirth anxiety is unique to the woman. Approximately one-fifth of low-risk pregnancies in western nations reported an extreme childbirth anxiety and six to ten percentages are significantly incapacitated by childbirth anxiety (Eriksson et al., 2006). So the purpose of our study was to define the impact of Sociodemographic condition on childbirth method, assessment of anxiety level during childbirth, and the effect of quality of life on childbirth.

Anxiety level in our study ranged from 25.93% to 59.26% in childbirth occasions. This level of anxiety pointed in our null hypothesis which supposed that anxiety level may be 30% or greater. This outcome matching with outcomes reported by Rondo et al., 2003 which ranged 22.1 to 52.9% and just like findings (25%) stated by Hall et al., 2009. However, our findings were greater than findings (20%) reported by Eriksson et al., 2006, similar to findings (19%) reported by Mohammad et al., 2011. Further to research by Garcia-Rico et al., 2010; Grant et al., 2008 which suggested 21% anxiety disorder.

Demographic characteristics in our study with regards to anxiety prior to childbirth reflected a statistical significant associated with education level that's matching with some studies displaying that more education was associated with lower childbirth anxiety as Arch, 2013. However in research of DunkelSchetter, 2013; Robbins & DunkelSchetter, 2011 the findings contemplated higher childbirth anxiety which accomplished with our study at the secondary level of education. Our findings were inconvenient with Levin study in 1991 which reflected no affiliation.

Our study showed that there no a statistical significant between number of childbirths and anxiety degree that is pondered inconvenience with studies of Saisto et al., 2001 and Gurung et al., 2005 which stated that women who've given birth before are typically lower in pregnancy related anxiety. Further, Finland study showed that women who have never given birth before are much more likely to be scared of childbirth, which may additionally contribute to the higher levels of anxiety with pregnancy among those women (Rouhe, Salmela-Aro, Halmesmïki & Saisto, 2009). The same findings confirmed that primigravida women scored higher anxiety of childbirth by Laursen et al 2008, Størksen et al 2012.

The unemployment status considers as one of socio-economic elements that would be linked with insecurity which intend to increase anxiety prior to childbirth and mirrored by 84.75 % on this study. These findings pass consistent with Finland study by Satisio 2001 as their findings agree with our findings and suggesting that general well-being and individual characteristics play a crucial role within the life.

Pregnancy and the childbirth techniques may be intolerable for women with anxiety of childbirth. In our study the most source of severe anxiety for participants were vary and generally they had extreme anxiety in all circumstances prior to childbirth. These findings matching with variety of studies (Alipour et al., 2012; Eriksson et al., 2006; Fenwick et al., 2009; Grant et al., 2008; Hall et al., 2009 ; Körükcü et al., 2010). Stated that the most severe of anxiety is in the third trimester prior to childbirth anxiety.

Regarding circumstances or processes are completed prior to childbirth, our findings had been suggested that the maximum frequent anxieties have been associated with vaginal examination followed by obstructed childbirth manner and pain of childbirth become on the third level in their anxieties. In addition to their severe anxiety due to loss of the sense of fetal movement and thirty percent only anxious about their health. These findings are consistent with comparable research of Geissbuehler and Eberhard in 2002 which analyzing the intensity and type of childbirth anxieties, anxiety for the child's health and anxiety of pain were located to be the maximum common anxieties. In our study 57.41% of participant have been affected by severe anxiety of pain during childbirth and fifty three of them had severe anxiety related to missing their fetus/ fetal movement.

Comparable findings reported by Guardino&Schetter study in 2014 which showed that anxiety of pain during childbirth was 60% and missing the fetus 50%.

Regarding the quality of life and its relation to anxiety level, our study findings confirmed a statistically significant difference between the quality of life and childbirth anxiety among the participants at P. value < 0.001. those findings were matching with El-Hams study "master thesis, 2010' as his study showed the same significance and refer to that the degree of anxiety related to childbirth might be related to different factors as physical, psychological and quality of life and those factors lead continuous anxiety from childbirth technique. The participants of our study similar to that study due to comparable race as both of them belonged to Arab countries.

Conclusion

Anxiety level in our study confirm a higher level than comparable studies which reflects an achievement of supposed hypothesis. Moreover, the most source of severe anxiety for studied women is fluctuating and they has extreme anxiety in many circumstances prior to childbirth. However, the most anxiety has been associated with vaginal examination. Finally, the quality of life has a significant relation to level of anxiety and confirm a statistically significant difference.

Recommendations

- To relief anxiety prior to childbirth, the health facility should include anxiety level test as one of childbirth procedures.
- Quality of life among pregnant women is consider an important factor in increasing their anxiety prior to childbirth so, further researches needed in this point.
- women's health facilities should regulate/permit a family support for mother during childbirth process " to decrease their anxiety"

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