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Research Paper

Relationship between demographic characteristics, stress and anxiety before and after cesarean section in pregnant women

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Background and Aim: *Stress and anxiety can have adverse effects for the mother and baby. Proper prevention requires identifying the predisposing factors for these disorders. Due to the lack of information on stress and anxiety related factors in Iran, this study aimed to determine the relationship between demographic characteristics with stress and anxiety before and after cesarean section in pregnant women referring to Besat Hospital in Sanandaj.*
Materials and Methods: *This descriptive correlational and cross-sectional study on 180 pregnant women undergoing elective cesarean section was performed in 2018. Samples were selected by convenience sampling from referring women to Besat Hospital in Sanandaj. Data were collected using a two-part demographic and midwifery questionnaire and Dass 21 stress and anxiety questionnaire. Data were analyzed using SPSS software version 16, descriptive and analytical statistics.*
Results: *The results showed that there was a significant relationship between age, educational level, income level, history of surgery and cesarean section, marital satisfaction and gender satisfaction of infant with stress and anxiety before and after cesarean section ($p < 0.05$).*
Conclusion: *Factors affecting the level of stress and anxiety in this study can help screening pregnant women at risk of stress and anxiety, assisting physicians, health care providers, and treatment staff. It is also recommended to design supportive and preventive programs for pregnant women.*
Key word: *Demographic characteristics, Stress, Anxiety, Cesarean section*

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I. INTRODUCTION

Cesarean section means the exit of one or more newborns, or rarely, a dead fetus through the incision in the mother's abdominal wall and the uterus (1). Caesarean section is one of the most common gynecological surgeries around the world (2). However, it may cause mental and physical complications in the mother. Physical complications associated with cesarean section include intra- and postoperative bleeding, surgical site infections, intra-abdominal adhesions, deep vein thrombosis (DVT) and pulmonary embolism (3), hysterectomy due to uncontrollable bleeding, brain hazards, increased risk of wound opening, maternal death(4).

Anxiety and stress are also considered psychological complications affecting mothers undergoing cesarean section (5). Stress is a reaction of a person to external pressures or inappropriate conditions and anxiety is one of its common side effects (6). Anxiety is a very unpleasant sensation and appears in the form of severe fear or distress or suspicion for an unknown factor (7). Stress and anxiety caused by surgery by stimulating the sympathetic, parasympathetic and endocrine systems make the body abnormal and cause symptoms such as high blood pressure, palpitations, shortness of breath, tremors, palm sweating, and flare-ups. Decreased saliva, dry mouth, high blood sugar, increased gastric and intestinal motility and urinary incontinence (8).

10-30% of hospitalized patients experience stress even without the need for surgery, but this figure reaches 60-80% in patients in need of surgery (9). Stress affects not only pregnant women but also the fetus (10). Maternal stress reduces blood supply to the placenta and fetus through epinephrine secretion and uterine

contractility. Epinephrine also reduces the ability of fetal brain cells that are responsible probe for hypoxia by increasing maternal and fetal blood glucose, and thus, fetal brain cells are damaged (11). Stress can increase postpartum hemorrhage by inhibiting the release of oxytocin (12).

The prevalence of preoperative anxiety varies from 11% to 80%. Age, gender, culture, level of the individual's awareness of surgery, history of previous surgery, type and duration of surgery, and individual characteristics in stressful situations are some factors that can affect the level of anxiety suffered by patients (7). Anxiety results in difficulty in accessing the patient's veins increased the need for anesthetics, and also the increased chance of pain, nausea, and vomiting during the postoperative period (13). Preoperative anxiety, if not controlled or prolonged, may result in reduced wound healing, increased risk of infection, and changes in sleep patterns, which can prolong hospitalization, the patient's delayed discharge, and increased care costs (14).

Causes of preoperative stress include patients visiting unfamiliar environments, observing the operating bed and its high lights, different and unfamiliar devices, cold air, inadequate ventilation, and noise from operating room personnel (15). Some of the main causes of preoperative anxiety include the fear of surgery, entering the unfamiliar environment, being away from the family, lack of knowledge and awareness about the way surgery is done and its possible consequences (16). Pain, stress, and anxiety are also reported to be the most common problems reported during the postoperative period. Anxiety and stress during the postoperative period are caused by pain and related physical changes (17).

The results of Alipour et al study showed that there was no significant relationship between maternal age and anxiety in pregnancy (18), while in the study of Gourounti et al, With increasing maternal age, his anxiety increased(19). Navidian et al Did not find a relationship between maternal employment status and postpartum stress in their study (20), but the study by Hung et al Reported a significant relationship between employment status and stress in pregnant women (21). Rubertsson et al Reported that income levels were associated with pregnancy anxiety(22), while Babanzari and Kafi did not report any association between pregnant women's anxiety and their socioeconomic level (23).

Therefore, due to the effects of stress and anxiety, contradictory results in the relationship between demographic characteristics and stress and anxiety, insufficient attention to the psychological effects of cesarean section and due to lack of knowledge in this field among women under cesarean section, this study aims to determine the relationship between demographic characteristics. With the stress and anxiety of pregnant women and cesarean section in pregnant women referred to Besat Hospital in Sanandaj was designed.

II. METHODOLOGY

This cross-sectional, descriptive-correlational study was conducted on 180 pregnant women referring to Besat Hospital in Sanandaj to undergo cesarean section. The inclusion criteria included willingness to participate in the study, being at the age of 18 to 45, having full consciousness, planned pregnancy, having a natural course of pregnancy, being healthy in terms of hearing and speech, lack of mental retardation in the mother, lack of history of infertility, lack of education in medicine and paramedics, lack of history of known mental illness, and other illnesses affecting the psychological state and surgical outcomes, not taking anti-anxiety and anti-stress drugs in the preoperative period, having no significant event other than pregnancy in the past 9 months, no having a disable spouse or child, non-use of tobacco and drugs, and for the post-cesarean section, in addition to the above, the birth of a seemingly healthy child was also a criterion for entering the study. The exclusion criteria were the unwillingness to continue cooperation, tubectomy or hysterectomy during surgery, postpartum complications such as bleeding, eclampsia, fever and other postpartum complications, the death of the baby after birth, and the baby's hospitalization in the neonatal intensive care unit.

After obtaining permission from the Ethics Committee of Kurdistan University of Medical Sciences (IR.MUK.REC.1397.029) and obtaining a letter of introduction from the research deputy of the Faculty of Nursing and Midwifery and presenting it to the head of Besat Hospital, the researcher recoursed for collecting information on consecutive days in the morning to the postpartum section of Besat Hospital And presented to pregnant women who were referred for preparation for cesarean section and had criteria for entering the study, provided an explanation of the purpose of the study. Pregnant women willing to participate in the study using the available sampling method were selected and after signing the consent form, questionnaire for demographic and midwifery information and anxiety DASS 21 in the pre-cesarean section and the DASS 21 anxiety questionnaire in the post-cesarean section were completed by the researcher for the selected samples.

The demographic information questionnaire including questions about age, level of education, and occupation of the women and her husband, family income level, and midwifery characteristics such as questions about marital satisfaction, number of parity, history of surgery and cesarean section and satisfaction with the baby's gender.

To assess maternal stress and anxiety, the DASS 21 questionnaire (abbreviated form of the main 42-item scale) was used. This questionnaire includes 21 questions on depression, stress and anxiety, and the share of each is 7 questions, and the final score of each of the three scales is obtained by summing the scores of the

questions related to that section. In this study, the questions of stress (questions 1-6-8-11-12-12-14-18) and anxiety (questions 2-4-7-9-15-15-20) were used. The questions in this questionnaire are on a Likert scale and have four options at all (zero score), low (score 1), medium (score 2) and high (score 3).

After summing up seven questions for each section to become a 42-question form, the final score of each of these subscales should be multiplied by 2, and depending on the score obtained, the severity of the symptoms can be determined. -14: Natural, 15-18: Mild stress, 19-25: Moderate stress, 26-33: Severe stress and ≥33 score Very severe stress sign. For the Anxiety Scale, the score is 0-7: normal, the score is 8-9: the mild anxiety, the score is 10-14: the average anxiety, the score is 15-19: the severe anxiety, and the 20-20 score is very intense anxiety. The validity and reliability of this questionnaire has been confirmed in various studies in the country (24) and abroad (25).

After completing the questionnaires in the pre-cesarean section, the researcher provided the samples with the necessary information about the time and how to check the stress and anxiety after the cesarean section. In order to assess the stress and anxiety after cesarean section on the 7th day after cesarean section, the researcher completed the DASS 21 questionnaire again for them during a telephone call with the samples (if the samples were desired). Data analysis was performed using Spss software version 16, descriptive and analytical statistics.

III. RESULTS

The mean age of the respondents was 30.51 ± 6.32 and that of their husbands was 34.87 ± 6.78. Most of the respondents (85.6%) were housewives and 92.8% of their husbands were employed. 73.3% of them had a sufficient level of income and the majority of the respondents and their husbands held a high school diploma (37%). Most of the respondents (86.7%) Satisfied with their marital life. Besides, 16.6% of mothers did not have a history of delivery. Only 24.4% of mothers had a history of surgery and the majority of the respondents (83.9%) were satisfied with their baby's gender.

The study findings also showed that the rate of stress in the majority of the studied units before cesarean section (63.9%) and after cesarean section (86.1%) was in the range of 0-14 points, which indicates the level of natural stress and. The rate of anxiety in the majority of the studied units before cesarean section (41.1%) and after cesarean section (80.5%) was in the range of 0-7 points, which indicates the level of natural anxiety. The overall rate of stress and anxiety before cesarean section was 36.1% and 58.9%, respectively, and in the post-cesarean stage, it was 13.9% and 19.4%, respectively.

The results of the statistical analysis of variance and Tukey's follow-up test showed a significant difference between the mean stress level and anxiety before and after cesarean section with income level, education level and number of births in the studied units ($P < 0.05$). This means that people with lower incomes had higher levels of stress and anxiety before and after cesarean section, and women with higher education and women with a history of three or more births had higher levels of stress and anxiety. It was less before and after cesarean section.

The results of the T-statistical test also showed a significant difference between the mean of stress and anxiety before and after cesarean section with marital satisfaction, surgical history, history of cesarean section and satisfaction with the sex of the infant ($P < 0.05$). This means that people who were satisfied with their married life and the sex of their baby and reported previous surgery and cesarean section had lower levels of stress and anxiety before and after cesarean section. But the results did not show a significant difference between the mean stress level and anxiety in both housewives and employees.

The Pearson correlation test showed a significant negative correlation between age with stress and anxiety before and after cesarean section ($P < 0.001$). The values of the correlation coefficient indicate the intensity and direction of this relationship. According to these coefficients, this correlation is negative and strong, ie with increasing female age, the amount of stress and anxiety before and after cesarean section has decreased.

Table (1): Age-related correlation with stress and anxiety before and after cesarean section

	anxiety after cesarean section	**anxiety before cesarean section**	**stress after cesarean section**	**stress before cesarean section**	Variable
Correlation coefficient	-/039	-/093	-0/29	-/086	Female age
p-value	0/001	0/001	0/001	0/001	

IV. DISCUSSION AND CONCLUSION

Findings showed a negative and significant relationship between marital satisfaction and anxiety and stress before/ after cesarean section.this findings is aligned with results of Noorbala's research and colleagues ,that experssed the marital satisfaction has a significant relationship to mental health (26), and also with Barjesteh' study and colleagues ,that stated if marital satisfaction is higher, the rate of anxiety and stress of pregnant women is lower (27).

marital satisfaction affects on the quality and the amount of mental health, satisfaction with life, loneliness and the amount of sexual pleasure (28). A stressful relationship or harassment by husband can increase the risk of mental health in a pregnant woman. one of the most important influences in the adoption of pregnant women with mental pressure of this period is the emotional support of the spouse and the safety of the marital environment, in general, the disorder in marital relations can increase anxiety, dislike of pregnancy and therefore, reduce the mental health of pregnant women (27).

Other findings of the study show a significant statistical relationship between the baby's gender with stress and anxiety before/ after cesarean section. Satisfaction with baby's gender was lower in the studied sample of stress and anxiety before / after cesarean section.the findings are aligned with results of Gandomi et al study, that reported a significant relationship between mother's stress and baby's gender(29) and also Navidian et al study, that stated relation between baby's gender and stress after childbirth (20), but it doesn't aligned with Sadeghi's study and colleagues, did not find a relationship between the obvious and hidden anxiety in mother and baby's gender (30) and also Abedian et al study,that stated no relation between stress after childbirth and satisfaction of baby's gender (31).

this finding is justifiable in light of the dominant culture on a particular society and family tendency towards a gender (boy or girl).bias in particular gender can cause high anxiety in pregnant women (29). Dissatisfaction of the baby's gender, especially when it is a girl, plays a role in postpartum mental disorders (20).

Findings showed that there is a negative and significant relationship between mother's age and anxiety and stress before /after cesarean section ($P < 0.05$). this finding is aligned with Barjesteh et al study results and colleagues, that stated the anxiety increase in pregnant women with a lower age (27), and also lles et al study and colleageues, that reported a negetive relationship between mother's age and postpartum stress (32), but it doesn't aligned with Alipoor 's study that did not report a significant relationship between mother's age and anxiety in pregnancy (18), courounti's study and colleagues reported that anxiety increased with increasing mother's age (19), and Bastany's study and colleagues, that reported preganant women' stress increase with increasing age (33).

The finding suggestes that age is a threatening factor for the mental health of pregnant women. A person that is still dependent on others fails in supplying her newborn needs. Developmental experts believe that pregnant teenagers have not yet reached emotional and cognitive maturity, are unable to make decisions for the future, and they are with high-risk from different mental disease. It will cause double feelings about the baby and experience of anxiety and psychological agitation (23).

Another finding of the study was a significant statistical relationship between the surgical history and the history of cesarean with anxiety and stress before / after cesarean section ($P < 0.05$). so that the amount of stress and anxiety before / after the cesarean were lower in women with prior surgery and cesarea. This finding is consistent with the findings of Ghaneai et al study (4) and Guo and their colleagues (34).

Individuals with past surgical history are aware of issues related to before the surgical concerns (such as fear of surgery, fear of anesthesia, fear of nausea and vomiting, postoperative pain), how to obligation, and service by operating room staff (Such as the using of medical terms and anesthetic injections), the surgical procedure (such as shaving the area of operation and banning the use of fluids and foods) and the physical environment of the operating room, and this awareness can reduce the patient stress by increasing the frequency of surgery. The recovery experience after surgery in past surgical operations can also cause the satisfaction and less anxiety for patients who have already been surgery (35). Those who had prior surgerial experience,they would also experience less anxiety at once least (36).

there were significant relation between income with stress and anxiety before/after cesarean)$p < 0.05$),so the amount of stress and anxiety before / afrer cesarean was more in individuals with lowr incomes.the findings is aligned with Sadeghy's study and colleagues (37), which stated The low economic situation is associated with the mental health in women and the prevalence of mental disorders in this women' group is higher and also Nasreen's and colleagues study (38),which stated income relates to pregnancy anxiety.

other findings of the research were significant statistical relationship between level of education with stress and anxiety befor/after cesarean section(p. 0.05). the amount of stress and anxiety before/after cesarean was lower in women with college educations.the finding is aligned with Harpham's and colleagues study (39) which reported people with higher education had better mental health and It is not aligned Babanazari and Kafi's study stated anxiety was lower in low-educated pregnant women (23).

Education has an effect on health, disease, and other aspects of life by contributing to essential changes in the awareness (40) and individuals' attitude and with increasing confidence in people and increasing social connections, it can reduce stress and anxiety and ultimately lead to their desirable psychological health (33). High education helps to a set of intermediaries and also improves mental health in every period of life,and subsequently, increases emotional, cognitive and intellectual skills to deal with stress and problems and changes of life, extends the individual's social network and reduces the risk of developing mental illnesses such as anxiety in different situations. Therefore, by using the mentioned skills ,educated pregnant women can be expected to face with pregnancy changes and also will experience less stress during pregnancy (23).

Findings showed a significant statistical relationship between the number of births, stress and anxiety before and after cesarean section ($p < 0.05$). the amount of stress and anxiety before /after the cesarean was lower In women with history of three and more than three previous childbirth.the finding is aligned with Hung's study (41) according to which nulliparuos mothers stress is higher than mutiparuos and the Nieminen and Stephansson study (42) and Gandomi's et al study, which stated the amount of fear and anxiety is higher in nuliiparuos mothers.nulliparuos mothers are more anxious beacause they have not already experience the pregnancy and child birth, and due to fear of childbirth, the fear of changes in matrimonial relations,fear of changes in temperament and its consequences on baby, lack of familiarity with pregnancy and childbirth and pastpartum issues such as caring for the child (29).

in this study, there was no meaningful relation between the mother's job (housewife and employed) with stress and anxiety before /after the cesarean. the finding is aligned with Navidian and colleagues' study (20) which they did not report meaningful relation between mother's job and pastpartum stress. It may be possible to say that the employment situation in itself does not cause stress and anxiety, but other causes, such as poor marital satisfaction, dissatisfaction of baby's gender and age and low education may affect the stress and anxiety of pregnant women.

V. CONCLUSION

according to the findings,it is recommened people that become pregnant at a younger age,had a low level of education and income, did not mention previous surgery and cesarean section and are not satisfied with marital life and baby's gender should pay more attention in precautionary programs of stress.the findings stated that the awareness of healthcare personnel in the screening field, diagnosis and management of stress and anxiety before / after cesarean section and other gynecological surgeries should be measured in light of effects of stress and anxiety on mother and baby and their prevalence,and if necessary training courses should held to raise the personnel's awareness of the above cases and support and preventive programmes are designed for pregnant women.

REFERENCE

[1]. Petrou S, Khan K. An overview of the health economic implications of elective caesarean section. Applied health economics and health policy. 2013;11(6):561-76.

[2]. Chaudhary R, Raut KB, Pradhan K. Prevalence and Indications of Cesarean Section in a Community Hospital of Western Region of Nepal. Journal of the Nepal Medical Association. 2018;56(213):871-4.

[3]. Gass C. It is the right of every anaesthetist to refuse to participate in a maternal-request caesarean section. International journal of obstetric anesthesia. 2006;15(1):33-5.

[4]. Ghanei RG, Rezaei K, Mahmoodi R. The Relationship between Preoperative Anxiety and Postoperative Pain after Cesarean Section. The Iranian Journal of Obstetrics, Gynecology and Infertility. 2013;15(39):16-22.

[5]. Kushnir J, Friedman A, Ehrenfeld M, Kushnir T. Coping with preoperative anxiety in cesarean section: physiological, cognitive, and emotional effects of listening to favorite music. Birth. 2012;39(2):121-7.

[6]. Salari P, Alavian F, Habibi Rad A, Tara F. The relationship between stress, anxiety and pain with salivary cortisol levels in first stage of labor in primiparous women. The Iranian Journal of Obstetrics, Gynecology and Infertility. 2013;16(55):14-21.

[7]. Bansal T, Joon A. A comparative study to assess preoperative anxiety in obstetric patients undergoing elective or emergency cesarean section. Anaesthesia, Pain & Intensive Care. 2019:25-30.

[8]. Cakir G, Gursoy A. The Effect of Pre-Operative Distress on the Perioperative Period. JAICM. 2017;2(3):001-3.

[9]. Jalali R, Dehghan F. The effectiveness of individual counseling on preoperative perceived stress in patients with cholelitiasis surgery. Iran Journal of Nursing. 2017;30(108):1-10.

[10]. Chuang L-L, Lin L-C, Cheng P-J, Chen C-H, Wu S-C, Chang C-L. The effectiveness of a relaxation training program for women with preterm labour on pregnancy outcomes: A controlled clinical trial. International Journal of Nursing Studies. 2012;49(3):257-64.

[11]. Mirghafourvand M, SehhatieShafaie F, Vosoughi-Niri J. The Effect of Non-Pharmacological Methods of Labor Pain Relief on Mothers' Perceived Stress: ARandomized Controlled Trial. Journal of Ardabil University of Medical Sciences. 2014;14(4):398-411.

[12]. Fu DY, Jiang JN, Wang BC, Guo WJ. The Impact of Collaborative Care on Intraoperative Stress in Patients Undergoing Cesarean. Nursing Care 2015;14(1):524-33.

[13]. Nigussie S, Belachew T, Wolancho W. Predictors of preoperative anxiety among surgical patients in Jimma University specialized teaching hospital, South Western Ethiopia. BMC surgery. 2014;14(67):1-10.

[14]. SalehMoghaddam A, Mazloum SR, Zoka A. The effect of educational videose on preoperation anxiety among patients before undergoing open heart surgery without pump. The J Urmia Nurs Midwifery Fac. 2016;14(7):648-57

[15]. Nazari-Vanani R, Rahimi-Madiseh M, Drees F. Evaluation of preoperative anxiety and stress, and ways to modify it, the patients in Kashani hospital operating room in 2013. Journal of Clinical Nursing and Midwifery. 2014;2.

[16]. Dehghani H, Dehghani K, Nasiriani K, Banaderakhshan H. The effect of familiarization with cardiac surgery process on the anxiety of patients undergoing coronary artery bypass graft surgery. JMC. 2013;10(4):257-63.

[17]. Beiranvand S, Noparast M, Eslamizade N, Saeedikia S. The effects of religion and spirituality on postoperative pain, hemodynamic functioning and anxiety after cesarean section. Acta Medica Iranica. 2014;52(12):909-15.

[18]. Alipour Z, Hajizadeh E, Lamyian M. Anxiety during pregnancy: A risk factor for neonatal physical outcome? The Journal of Urmia Nursing and Midwifery Faculty. 2011;9(1):30-8.

[19]. Gourounti K, Anagnostopoulos F, Sandall J. Poor marital support associate with anxiety and worries during pregnancy in Greek pregnant women. Midwifery. 2014;30(6):628-35.

[20]. Navidian A, Kermansaravi F, Navabirigi S, Saber S, Saeedinegad F. Correlation between postpartum stress and social support in nulliparous women. JHPM. 2016;5(1):40-9.

[21]. Hung CH, Lin CJ, Stocker J, Yu CY. Predictors of postpartum stress. Journal of clinical nursing. 2011;20(5-6):666-74.

[22]. Rubertsson C, Hellström J, Cross M, Sydsjö G. Anxiety in early pregnancy: prevalence and contributing factors. Archives of women's mental health. 2014;17(3):221-8.

[23]. Babanazari L, Kafi M. Relationship of pregnancy anxiety to its different periods, sexual satisfaction and demographic factors. Iranian journal of psychiatry and clinical psychology. 2008;14(2):206-13.

[24]. Jamshidi N, Abaszade A, Najafi-Kaliani M. Stress, anxiety and depression of patients before coronary angiography. Zahedan Journal of Research in Medical Sciences. 2012;13(10):29-.

[25]. Chinchai P, Marquis R, Passmore A. Functional performance, depression, anxiety and stress in people with spinal cord injuries in Thailand: A transition from hospital to home. Asia Pacific Disability Rehabilitation Journal. 2003;14(1):30-40.

[26]. Noorbala AA, Malek Afzali H, Abedinia N, Akhbari M, Moravveji A, Vaseghi F, et al. Mental Health Status and Marital Satisfaction of Pregnant Women Referring to Health Centers in Kashan, Iran. Journal of School of Public Health and Institute of Public Health Research. 2018;16(3):279-94.

[27]. Barjasteh S, Moghaddam Tabrizi F. Antenatal anxiety and pregnancy worries in association with marital and social support. The J Urmia Nurs Midwifery Fac. 2016;14(6):504-15.

[28]. Yoo H, Bartle-Haring S, Day RD, Gangamma R. Couple communication, emotional and sexual intimacy, and relationship satisfaction. Journal of Sex & Marital Therapy. 2014;40(4):275-93.

[29]. Gandomi N, Sharifzadeh G, Torshizi M, Gandomi F, Malaki Moghadam H, Norozi E. An enquiry into pregnancy anxiety and associated factors among pregnant women in Birjand in 2016. Journal of Health Sciences and Technology. 2017;1(2):55-63.

[30]. sadeghi N, Azizi S, Molaeinezhad M. Anxiety status in pregnant mothers at third trimester of pregnancy and its related factors in referrals to Bandar Abbas Hospitals in 2012. The Iranian Journal of Obstetrics, Gynecology and Infertility. 2014;17(122):8-15.

[31]. Abedian Z, Soltani N, Mokhber N, Esmaeily H. The Prevalence of Post Traumatic Stress Disorder after Childbirth Pre-Eclampsia and Related Factors. The Iranian Journal of Obstetrics, Gynecology and Infertility. 2013;16(78):16-24.

[32]. Iles J, Slade P, Spiby H. Posttraumatic stress symptoms and postpartum depression in couples after childbirth: the role of partner support and attachment. Journal of Anxiety Disorders. 2011;25(4):520-30.

[33]. Bastani F, Pourmohammadi A, Haghani H. Relationship between perceived stress with spiritual health among older adults with diabetes registered to the association of diabetes prevention and control in Babol, 2013. Journal of hayat. 2014;20(3):6-18.

[34]. Guo P, East L, Arthur A. A preoperative education intervention to reduce anxiety and improve recovery among Chinese cardiac patients: a randomized controlled trial. International Journal of Nursing Studies. 2012;49(2):129-37.

[35]. Ravangard R, Bastani P, Moradi A, Ahmadzadeh M. Factors affecting the preoperative anxiety from the patients ' perspective. Daneshvar Medicine. 2016;23(124):61-70.

[36]. Jafar MF, Khan FA. Frequency of preoperative anxiety in Pakistani surgical patients. Journal of the Pakistan Medical Association. 2009;59(6):359-63.

[37]. Sadeghi R, Zareipour MA, Akbari H, Khan- Beygi M. Mental Health and Associated Factors amongst Women Referred to Health Care Centers. Journal of Health and Care. 2011;13(4):1-9.

[38]. Nasreen HE, Kabir ZN, Forsell Y, Edhborg M. Prevalence and associated factors of depressive and anxiety symptoms during pregnancy: a population based study in rural Bangladesh. BMC women's health. 2011;11(22):1-9.

[39]. Harpham T, Grant E, Rodriguez C. Mental health and social capital in Cali, Colombia. Social science & medicine. 2004;58(11):2267-77.

[40]. Jalaei T, Salari N, Rahmati M, Astanegi S. The surve of perceived social support status and its relation to fear and anxiety of cabg candide patient's in Imam Ali's Hospital of Kermanshah. The J Urmia Nurs Midwifery Fac. 2018;16(5):354-63

[41]. Hung C-H. The psychosocial consequences for primiparas and multiparas. The Kaohsiung journal of medical sciences. 2007;23(7):352-60.

[42]. Nieminen K, Stephansson O, Ryding EL. Women's fear of childbirth and preference for cesarean section–a cross-sectional study at various stages of pregnancy in Sweden. Acta obstetricia et gynecologica Scandinavica. 2009;88(7):807-13.