Anxiety Level among Primigravida and Multigravida Regarding Minor Discomforts (Comparative Study)

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Abstract

Background: pregnancy accompanied by many changes in the woman's body leads to many discomforts called "minor disorders that occur during the pregnancy and make them very stressful. Respond to this stress by feeling anxious which may be influenced on the woman herself and her baby and require self-care for preserving health and well-being. **The study aimed to** compare anxiety level among primigravida and multigravida pregnant women regarding minor discomforts at the antenatal outpatient clinic at Bani-Suif University Hospital. **Design:** A comparative research design was used for the study. **Sample:** A purposive sample included 500 pregnant women from primigravida and multigravida pregnant women within six months, from May 2018, until October 2018. **Tools:** A structured interviewing questionnaire was used for data collection and Beck Anxiety Inventory (BAI). **Results:** Pregnant women were mostly between 22 < 26 years in primigravida and the same in multigravida, it was observed that more than half of them had severe anxiety level in primigravida and about two thirds in multigravida. There were significant differences between the level of BAI scores regarding minor discomforts among primigravida and multigravida pregnant women at ($p = < 0.001$). **Conclusion:** It was found the majority of multigravida pregnant women have experienced high and severe anxiety and fear scores regarding minor disorders compared to primigravida pregnant women regarding minor discomforts. **Recommendations:** provide pregnant women with instructional guidelines about the minor disorders attended the antenatal clinics to improve their knowledge and practice regarding minor discomforts.

Keywords: Anxiety, minor disorders, primigravida, multigravida.

Introduction

Pregnancy-associated with many changes in the woman's body that lead to many discomforts called "minor disorders. These minor discomforts occur due to hormonal, accommodation, metabolic, and postural changes. Most of these discomforts are not dangerous and can be managed at home. Non-pharmacological therapies should be considered as a first-line treatment before going to pharmacological therapy. However, medication or drugs may be used to ensure, the well-being of the mother and adverse effects to the fetus or sometimes mothers (**Bhuvaneswari, 2018**).

There are many minor discomforts in pregnancy may be physiological discomforts as backache, leg cramps, edema, constipation, fatigue, sleep disturbance, vomiting and nausea, heartburn, and increased urinary frequency, etc.), or psychosocial discomforts as anxiousness, mood swing and lack of family support. Experiences of these changes are varied among pregnant women. These discomforts aren't serious in themselves, but their presence affects and decreases a woman's feeling of wellbeing and comfort and leads to anxiety (**Kokic**, **et al., 2017**).

Anxious pregnant women experience both emotional and somatic symptoms, as well, such as muscle pain, gastrointestinal discomfort, palpitation, worry, and insomnia. It has been suggested that high anxiety levels related to pregnancy may play a role in preterm-birth, postpartum-depression, and cesarean section. Also, it could affect fetal/infant and child development (**Gururani, et al., 2016**).

Anxiety is considered a disorder that accompanies pregnant women during pregnancy and causes stress and leads to many changes that occur during this period. So that women respond to this stress by feeling anxious. And accompanied by mood swings, narrowing of interest, depression, feeling of loneliness and impatience are experienced during the last weeks of pregnancy **(Li and Graham, 2017)**.

Most pregnant women complain some degree of minor discomforts and there is a Difference in anxiety level among primigravida pregnant women versus multigravida pregnant women, as lack of knowledge concerning minor discomfort, worries about childbirth and health of the baby, quality of care during labor, and the level of support from relatives and friends **(Kang, et al., 2016).**

Minor discomforts related to Pregnancy can be managed by proper explanation, simple remedies, and lifestyle pattern modification. Consequently, pregnant women must have basic knowledge of common minor discomforts. Also, they should know how to overcome these discomforts during pregnancy **(Hassan, et al., 2019)**. So that they can avoid the complications related to their minor discomforts of pregnancy and they can maintain their health condition. Providing information about physiology, prevention, and self-care of pregnancy discomforts is very important and can assist in relieving anxiety related to the maternity care is healthy pregnancy with the physically safe and emotionally satisfying outcome for mother, infant, and family **(Almalik and Mosleh, 2017).**

Nurses can play a major role in providing anticipatory guidance and teaching to foster the woman's responsibility for traditional practices, helping to clarify misconceptions and correct any misinformation. Educating the pregnant mother to identify threats to safety posed by her lifestyle or environment and proposing ways to modify them to avoid a negative outcome is important. to reduce the physical and psychological problems, give emotional support by including a pregnant woman and her family, in addition to, provide care and health education about a better pregnancy and

delivery that will take place **(Yeniel, & Kavlak, 2014)**.

Nurses must be aware of the types of health-related activities in which pregnant mothers may be engaged. This awareness is important for the assessment of safety and the interaction of these activities with biomedical care. If the nurse had sufficient knowledge about traditional practices, appropriate referrals may be made that can help pregnant mothers augment their treatments, cope with symptoms and unpleased side effects from treatments, cope with symptoms and unpleased side effects from treatments, maintain and promote their health. Maternity nurses play an important role to improve the quality of antenatal care, which provides pregnant women education &support. At the same time, the nurse provides health promotion, medical & psychosocial services include health education, nutrition, education, counseling, social services assessment& appropriate referral **(Mendoza and Amsler, 2017).**

Significance of the study:

Latha and Indira, (2016) reported that in the early trimester of pregnancy approximately 50%–80% of pregnant women experienced minor discomfort**.** These minor discomforts cause physiologic, anatomic, emotional, and hormonal changes. Anxiety during pregnancy may be associated with many adverse effects and obstetrics complications. Hence, this study aimed to compare anxiety level among primigravida versus multigravida pregnant women regarding minor discomforts.

Aim of the study

This study aimed to compare anxiety level among primigravida versus multigravida pregnant women regarding minor discomforts**.**

Research questions:

1. What is the difference between anxiety level among primigravida and multigravida pregnant women regarding minor discomforts?
2. Is there a relationship between anxiety scores regarding minor discomforts among primigravida and multigravida pregnant women and their socio-demographic characteristics?

Subjects and methods:

Research design:

A comparative research design was used in the current study.

Setting

This study was conducted at the antenatal outpatient clinic at Bani-Suif University hospital in Egypt.

Subjects:

A purposive sample included 500 pregnant women from primigravida versus multigravida pregnant women within six months, from May 2018, until October 2018. The inclusion criteria were: their ages ranged from 18-35 years at gestational ages of between 12 and 36weeks, primigravida and multigravida pregnant women who are available at the time of the study at a selected hospital, not diagnosed with chronic disease, and who are willing to participate in the study.

Tools and techniques of data collection:

Tool (1): A **structured interviewing questionnaire:** It was composed of two parts:

Part (1): It included socio-demographic data related to age, educational level, occupation, and residence.

Part (2): It included the obstetrical history of pregnant women; it contained 3 questions about the gravida, abortion and gestational weeks.

Tool (2): Beck Anxiety Inventory (BAI)

It was used as a data collection device in this study. The **(BAI)** adopted by (**Beck et al., 1988**), which was developed to determine the severity of the anxiety symptoms, this scale consists of 21 questions and total scores range between 0 and 63. It measures the physical, emotional, and cognitive aspects of anxiety and fear of losing control. The score for each item ranges from 0 to 3.The maximum score on the scale. Beck's original version had internal consistency with a Cronbach's Alpha of 0.92, and a retest reliability co-efficiency of $r = 0.75$.

Validity of Beck Anxiety Inventory:

The BAI was moderately correlated with the revised Hamilton Anxiety Rating Scale (.51) and mildly correlated with the Hamilton Depression Rating Scale (.25) **(Beck et al., 1988).**

Scoring of Beck Anxiety Inventory:

The total score is calculated by finding the sum of the 21 items.
The score of 0-21 = mild anxiety
The score of 22-35 = moderate anxiety
A score of 36 and above = sever levels of anxiety

Tool validity:

The content of the data collection tools was submitted to a panel of five experts in the Obstetric & Gynecological nursing, Psychatric health nursing and Community health nursing with more than ten years of experience in the field. Modifications of the tools were done according to the panel judgment on the clarity of sentences, appropriateness of the content, sequence of items, and accuracy of scoring.

Tool Reliability

The tool's reliability was estimated by using the Pearson correlation coefficient test to compare variables. The Pearson correlation coefficient for the variables ranged between ($P. < 0.5$) and ($P. < 0.001$), which indicated a highly significant positive correlation between variables of the subjects, and the Coefficient factor was 89.8%

Ethical consideration:-

An official permit was taken from Sohag University Hospital administrators and the manager of the outpatient clinics. Permission also was obtained from the head nurse of the Gynecology & Obstetric outpatient clinic to gain her cooperation**.** A clear explanation was given about nature, importance, and expected outcomes of the study to administrators. All pregnant women were informed about the aim of the study. The researcher informed them that participation in the study is voluntary; they have the right to withdraw from the study at any time, without giving any

reason, and that their responses would be held confidentially.

Pilot study:

It was carried out on 10 % (50) of the pregnant women, for modification and clarification, and estimation of the time needed for data collection. The designed tool was tested on pregnant women. To fill in the sheets unclear items were clarified, unnecessary items were omitted and new items were added. Those who shared in the pilot study were excluded from the study sample.

Fieldwork:

Data were collected within six months from the beginning of May 2019, until the end of October 2019 after obtaining permission from the authorities (two days/week (Sunday and Tuesday) from 9.00 a.m. to 12.00 p.m. 20 women/week approximately, each study subject was interviewed and assessed individually using study tools. The pregnant women were informed about the purpose of the study, and the confidentiality of data. The time spent for the completion of the questionnaire by women took around 25-30 minutes.

Statistical analysis:

Data collected and analyzed by computer program SPSS" ver. 21" Chicago. Data expressed as mean, standard deviation, and number, percentage, so nonparametric methods were used. Using Chi-Square to determine the significance for non-parametric variables, a person's correlation is used to determine the significance between variables in the same group. N.s P > 0.05 no significant, *P<0.05 significant,**P<0.001 moderate significance and *** p<0.000 highly significance.

Results

Table (1) represented that pregnant women were mostly between 22 < 26 years in primigravida (48%) and their mean age (20.10 ± 8.68) and 36% in multigravida which their mean age (24.10 ± 9. 88). Nearly one third (30%) were university education in primigravida compared to the same percentage (30%) in multigravida were in secondary education, majority of them (83%) were rural residence in primigravida pregnant women compared to (68%) in multigravida.

Figure (1) pointed out that more than half of women (59%) were housewives in primigravida compared to (68%) in multigravida.

Table (2) showed that about two thirds of primigravida pregnant women (62%) compared to (70%) of multigravida were between 12<24.

Table (3): illustrated that more than half of primigravida pregnant women (54%) were had severe anxiety scores regarding minor discomforts compared to about two-thirds (68%) of multigravida pregnant women were had severe anxiety score.

Table (4): showed that there were significant differences between the level of BAI scores regarding minor discomforts among primigravida and multigravida pregnant women (p = < 0.001). And observed that, the BAI average score was (23.70 ± 13.60) in primigravida pregnant women was less

than in multigravida pregnant women (29.650 ± 12.60).

Concerning the relation between socio-demographic characteristics and the BAI average scores among studied women **Table (5):** showed that a statistical significant relation was found in both groups as regard age, women ' education, women' occupation, residence (P= 0.012, p= 0.03, p= 0.001= P= 0.004) respectively.

Table (1): Percentage distribution of studied pregnant women according to their demographic characteristics (n=500)

Item	Primigravida (250)		Multigravida (250)	
	No.	%	No	%
women ' age in years				
- 18 < 21	60	24.0	50	20.0
- 22 < 26	120	48.0	90	36.0.0
- 27 < 30	50	20.0	60	24.0
- 31 < 35	20	8.0	50	20.0
Mean ±Stander deviation	20.10 ± 8.68		24.10 ± 9. 88	
- women ' education				
- Illiterate	12	5.0	32	13.0
-Read and write	55	22.0	63	25.0
-Basic education	50	20.0	38	15.0
-Secondary education	58	23.0	75	30.0
-University education	75	30.0	42	17.0
-Residence				
-Rural	207	83.0	170	68.0
-Urban	43	17.0	80	32.0

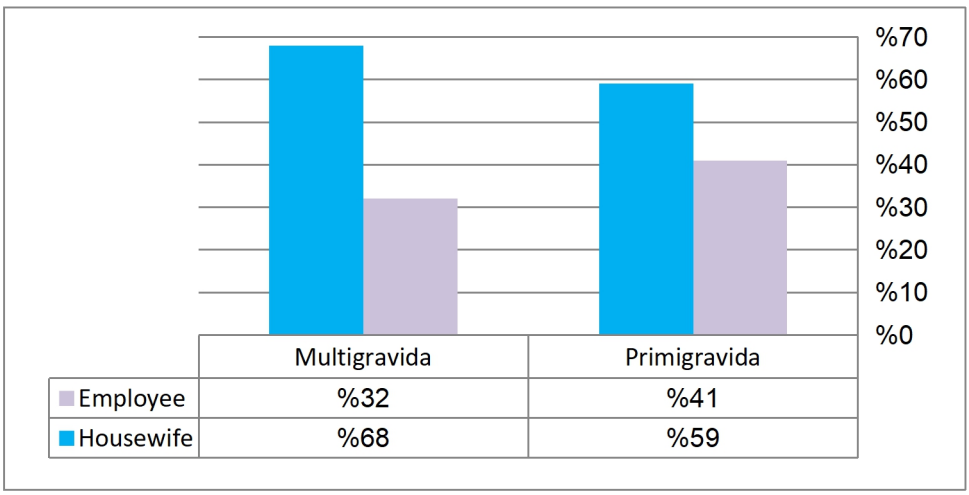

Figure (1): Percentage distribution of studied pregnant women according to their occupation

Table (2): Percentage distribution of pregnant women according to their obstetrical history (n=500)

Item	Primigravida (250)		Multigravida (250)	
	No.	%	No.	%
Gravida				
- Primigravida	250	100.0	-	-
- Multigravida	-	-	250	100.0
Gestational weeks.				
- 12<24	155	62.0	175	70.0
- 24 < 36	95	38.0	75	30.0

Table (3): The relation between BAI anxiety level regarding minor discomforts among Primigravida and Multigravida pregnant women (n=500)

BAI anxiety level	Primigravida (250)		Multigravida (250)	
	No	%	No	%
- Mild	12	5.0	25	10.0
-Moderate	103	41.0	55	22.0
-Sever	135	54.0	170	68.0

Table (4): Relation between the BAI level regarding minor discomforts among primigravida and multigravida pregnant women

Items	Primigravida	Multigravida	p- value
- BAI average Scores	23.70 ± 13.60	29.650 ± 12.60	< 0.001**

Table (5): The relationship between socio-demographic characteristics and the BAI average scores among primigravida and multigravida pregnant women

Socio-demographic characteristics	BAI Average Scores among studied pregnant women											
	Primigravida (250)						Multigravida (250)					
	Mild (n=12)		Moderate (n=103)		Severe (n=135)		Mild (n=25)		Moderate (n=55)		Severe (n=170)	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
- 18 < 21	3	24	15	15	23	17	6	23	5	10	15	9
- 22 < 26	6	50	45	44	70	52	12	47	30	54	97	57
- 27 < 30	2	20	22	21	24	18	4	18	12	21	41	24
- 31 < 35	1	6	21	20	18	13	3	12	8	15	17	10
X2 =0 .69 P= 0.012												
2- women ' education												
- Illiterate	1	10	10	10	15	11	2	8	9	17	12	7
-Read and write	1	12	15	15	27	20	3	13	7	13	15	9
-Primary education	5	40	21	20	41	30	5	19	10	19	24	14
-Secondary education	3	25	36	35	47	35	6	25	18	31	73	43
-University education	2	13	41	40	5	4	9	35	11	20	46	27
X2 = 0. 465 p= 0.03												
3- women ' occupation												
-Employee	7	56	44	43	54	40	8	30	14	25	34	20
-Housewife	5	44	59	57	81	60	17	70	41	75	136	80
X2 = 0.94 P=0.001												
Residence:												
- Urban	4	36	43	42	66	49	6	22	13	23	34	20
- Rural	8	64	60	58	69	51	19	78	42	77	136	80
X2= 31.54 P=0.004												

Discussion

The current study aimed to compare anxiety level among primigravida versus multigravida pregnant women regarding minor discomforts. This aim was significantly approved research's hypothesis that there were significant differences between the level of BAI scores regarding minor discomforts among primigravida and multigravida pregnant women at ($p = < 0.001$). Maintaining the health of pregnant women and fetuses is the primary goal of nursing care during the antenatal period by acquiring knowledge managing the symptoms and discomforts associated with pregnancy and that cause anxiety and fear to them. Also, identifying the signs of anxiety disorders during the antenatal period is very important, Because If not treated, they may have adverse effects on both mother and baby **(Yücel et al., 2013).**

During the period of pregnancy, the woman will undergo a lot of physical, psychological, and hormonal changes but these changes are normal. These changes cause minor discomforts during pregnancy. They are called minor because they aren't life-threatening. A lot of these discomforts may calm-down in this pregnancy progress, but it causes inconvenience and stress to the pregnant women and every system of the body is affected by pregnancy. So it is important to provide information about physiology, prevention, and self-care for pregnant women about pregnancy minor discomforts that can assist in relieving certain anxiety **(Nazik and Eryilmaz, 2014).**

As regarding socio-demographic characteristics of the studied pregnant women the present study finding represented that, mostly between 22 < 26 years in primigravida, Nearly one third were university education in primigravida compared to the same percentage in multigravida were in secondary education, more than half of women were housewives in primigravida compared to more than two thirds in multigravida, majority of them were rural residence in primigravida pregnant women and multigravida. These results are nearly and supported by **AbdElhaliem, et al., (2018)** who found in his study about the Utilization of self-care practice guideline on relieving minor discomforts among new pregnant woman that near to half of the pregnant women had secondary education, more than half were housewives and the majority of them were from rural residence. These findings, Also, the current study finding was agreed by **Aziz & Maqsood, (2018)** in the study about Self-Management among Pregnant Women toward Minor Discomforts in health Care Centers at Erbil City showed that the majority of the study sample was between 18-25 years old, secondary education, and housewives. Also, similar to the study conducted by **Ayoub & Awed (2018)** at Maternal Child Health services Menofia Government, Egypt compare between primigravida and multigravida regarding women's self-care practices for management of selected minor discomfort. Also, these study findings are supported by **Delma et al.,(2014)** in India, who found that the majority of the antenatal mothers

belonged to the age group of 21-25 years, housewives.

The current study showed that about two thirds of primigravida pregnant women compared to most of multigravida were between 12<24. This is explained by that this is considered from the common time of minor discomforts occurrence.

The current study display that, more than half of primigravida pregnant women were had severe anxiety score regarding minor discomforts compared to about two-thirds of multigravida pregnant women were had severe anxiety score. This is related to that multigravida pregnant women were more experienced with minor discomforts and become know the sign, symptoms, and complications of these discomforts that may cause more anxiety level for them than primigravida pregnant women

This is explained by that minor discomforts cause anxiety among all primigravida and multigravida.These results are in the same line with **Ningthoujam et al., (2018)** that makes interviews with 43 primigravida and multigravida pregnant women in 3rd trimester that checkup at Puskesmas and testing the difference in the level anxiety between primigravida and multigravida and indicating that there were differences in anxiety levels between primigravida and multigravida.

The current study revealed that there was a significant difference between the level of BAI scores regarding minor discomforts among primigravida and multigravida pregnant women. This result was in congruence with **Subası et al., (2013)** who found that there was a relation between anxiety level among pregnant women and minor discomforts.

The findings of the current study revealed that a statistically significant relation was found in both groups between socio - demographic characteristics and BAI scores regarding minor discomforts among primigravida and multigravida pregnant women. This appears to be the cause of increased fears about how to deal with minor discomforts due to lack of knowledge related to socio-cultural feedback and educational-level. These findings are following the results of the study done at the Egyptian Public Hospital in Beni-Suef demonstrated that pregnant women's anxiety correlates well with demographic variables include age and educational levels. Pregnant women who are younger and who attain lower education levels may find more challenges in adjusting to a new role and a new set of expectations from themselves and others, and thus they are more likely to manifest anxiety symptoms in early pregnancy **(Indra, 2016).**

This indicates the important role of community nurse in providing health education and counseling for the primigravida and multigravida pregnant women regarding minor discomforts which result and emphasized the readiness among primigravida and multigravida pregnant women to gain more information about minor discomforts and also covered all identified needs and knowledge gaps about the topic among the pregnant women. Because it is considered alarming as it represents insufficient health information as regards this health

topic and inform the need for health counseling to increase health information among primigravida and multigravida pregnant women to be knowledgeable and the importance of psychiatric health nursing in providing emotional support to primigravida and multigravida pregnant women that may decrease anxiety of minor discomforts.

Conclusion:

Majority of multigravida pregnant women are experienced severe anxiety scores regarding minor discomforts compared to primigravida pregnant women. There was a significant relation at the level of ($p = <0.001$) between BAI score among primigravida and multigravida pregnant women regarding minor discomforts.

Recommendation:

- Research can be applied to large samples in a different setting so that the findings can be generalized to a large population.
- Providing awareness-raising programs during the antenatal period by the obstetric & gynecological, psychatric and community health nurses regarding minor discomforts to decrease anxiety that pregnant women experience regarding minor discomforts and offer them counseling in these topics regarding medication, pregnant women's nonpharmacological and traditional self-care practices according to their benefit versus harm.
- Future research about coping strategies to relieve anxiety related to minor discomforts among primigravida and multigravida pregnant women.

References

AbdElhaliem, S., AbdElhady, R., Ibrahim A., M. (2018): Utilization of self-care practice guideline on relieving minor discomfort (ailments) among new pregnant woman, IOSR Journal of Nursing and Health Science (IOSR-JNHS) e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 7, Issue 1 Ver. I. (Jan.- Feb), PP 07-15 www. iosrjournals. orgDOI: 10. 9790/ 1959- 0701010715 www. iosrjournals. org.

Almalik, M., & Mosleh, S. (2017): Pregnant women: What do they need to know during pregnancy? A descriptive study, Women, and Birth: Journal of the Australian College of Midwives, 30(2), 100-106. https:// doi. org/ 10. 1016/ j. wombi. 2016.09.001

Ayoub, G., & Awed, H. (2018): Comparative Study between Primigravida and Multigravida Regarding Women's Self-Care Practices for Management of Selected Minor Discomforts, Madridge J Case Rep Stud., 2(1), 1000111. https:// doi. org/ 10.18689/mjcrs-1000111

Aziz, S. & Maqsood, S. (2018): Self-Management of Pregnant Women Regarding Minor

Discomforts in Primary Health Care Centers in Erbil City, Medical Journal of Babylon; 13(2): 284-293.

Bhuvaneswari K. (2018): Minor ailments of pregnancy and their home remedies. Nightingale Nursing Times December; 6(9): 9-12.

Delma Pinto, Dhilshad, Emily, Honey, Jeethy, Archaprem. (2014): The Knowledge of Minor Ailments of Pregnancy and Its Management among Antenatal mothers: A Descriptive Approach. International Journal of Recent Scientific Research; 5(9): 1550-53.

Gururani L, Kumar A, Mahalingam G. (2016): Minor disorder of pregnancy and its home management. International Journal of Medical Science and Public Health; 5(4): 684-87. Doi: 10. 5455/ ijmsph. 2016. 03082015111

Hassan, H., El-Sadek, A., & Ali, L. (2019a): Effect of Three Different Nursing Interventions on Intestinal Motility and Women's Satisfaction Post-Cesarean Section Birth, American Journal of Nursing Research, 7(6), 932-941. https:// doi. org/ 10. 12691/ajnr-7-6-4

Hassan, H., Sobhy, S., Rakha, E., El-Khayat, I. (2019b): Traditional Practices among Rural Women to Relieve Their Common Pregnancy Minor Discomforts: A Descriptive Study. Medical Science & Healthcare Practice, 3(2), 56-90. https:// doi. org/ 10. 22158/ mshp. v3n2p56

Indra, V. (2016): Effectiveness of Self-Instructional Module (SIM) on Knowledge Regarding Selected Aspects of Safe Motherhood among Primigravida Women in Selected Hospitals, Puducherry, International Journal of Nursing Education and Research, 4(3), 2454-2660. https:// doi. org/ 10. 5958/ 2454-2660.2016.00048.X

Kang, Y., Yao, Y., Dou, J., Guo, X., Li, S., Zhao, C., Li, B. (2016): Prevalence and Risk Factors of Maternal 6, Anxiety in Late Pregnancy in China, Int. J. Environ. Res. Public Health, 13(468), 1-11. https: // doi. org/ 10. 3390/ ijerph13050468.

Kokic IS, Ivanisevic M, Uremovic M, Kokic T, Pisot R, & Simunic B, et al. (2017): Effect of Therapeutic Exercises on Pregnancy-Related Low Back Pain and Pelvic Girdle Pain: Secondary Analysis of a Randomized Controlled Trial. Journal of Rehabilitation Medicine; 49: 251-257.

Latha S, Indira. (2016): Effectiveness of IEC (Information, Education & Communication) package on knowledge regarding minor ailments of pregnancy and its management among antenatal mothers at NMCH, Nellore, A.P. International Journal of

Applied Research; 2(10): 593-596.

Li S., Graham B. (2017): Why are women so vulnerable to anxiety, trauma-related and stress-related disorders? The potential role of sex hormones, Lancet Psychiatry; 4(1):73–82.

Mendoza E, Amsler F. (2017): A randomized crossover trial on the effect of compression stockings on nausea and vomiting in early pregnancy. International Journal of Women's Health; 9: 89-99. Doi: 10.2147/ IJWH.S120809

Nazik, E., & Eryilmaz, G. (2014): Incidence of pregnancy-related discomforts and management approaches to relieve them among pregnant women. Journal of Clinical Nursing, 23(11), 1736-50. https:// doi. org/ 10. 1111/ jocn.12323

Ningthoujam, S., Priyanka, S., Gulista S. and Shital K. (2018): Level of anxiety towards childbirth among primigravida and multigravida mothers, International Journal of Applied Research; 4(5): 221-224

Subaşı, B., Ozcan H., Pekçetin, S., Goker, B., Tunç, S., & Budak, B (2013): The effect of Childbirth Education on Childbirth Fear and Anxiety. Selçuk, Medicine Journal; 29 (4): 165-167

Yucel, P., Cayir, Y., Yucel, M. (2013): Birinci trimester gebelerde depression ve anksiyete bozukluğu. Klinik Psikiyatri; 16:83–87.