

Domestic Violence, Depression and Anxiety During Pregnancy*

Gebelikte Aile İçi Şiddet, Depresyon ve Anksiyete

SEVİL SAHİN**
KEVSER İLÇİOĞLU***
ALAATTİN ÜNSAL****

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ABSTRACT

Introduction: This study was conducted to determine the frequency of domestic violence among pregnant women, to review some variables that are believed to be associated, and to assess depression and anxiety levels.

Methods: This is a cross-sectional study conducted on the pregnant women who presented at the Sakarya Training and Research Hospital Gynecology Polyclinic between 15 January 2013 and 15 July 2013. The study group comprised a total of 817 pregnant women (68.1%) admitted to the gynecology polyclinic of the hospital and agreed to take part in the study. The questionnaire forms prepared by accessing the literature in line with the study objective were completed by the investigators with a face-to-face interview. The women who suffered from a minimum of one form of domestic violence at least once throughout the pregnancy were regarded as having a history of violence during pregnancy. The Beck Depression Inventory was used to assess depression and the Beck Anxiety Inventory was used to assess anxiety level. Data were analyzed with Chi-square test and Mann-Whitney U test.

Results: The age of the women in the study group ranged from 18 to 41 with a mean age of 28.28±4.66 years. In our study, pregnant women reported verbal violence most frequently (32.1%) and physical violence least frequently (1.3%). In the study group, frequency of domestic violence was found to be higher in pregnant women whose education level is secondary school and lower, who have an extended family, whose spouse is drug/substance user, married twice or more, whose first marriage age is 22 or below and whose number of pregnancies is 3 or more (p<0.05 for each). The frequency of suspected depression among pregnant women was determined to be 16.8% (n=137). The scores obtained from the Beck Anxiety Inventory by the pregnant women in the study group ranged from 0 to 51 with a mean score of 14.43±10.13.

ÖZ

Giriş: Bu çalışma, gebeler arasında aile içi şiddet sıklığının saptanması, ilişkili olduğu düşünülen bazı değişkenlerin incelenmesi, depresyon ve kaygı düzeylerinin değerlendirilmesi amacı ile yapılmıştır.

Yöntem: Çalışma, 15 Ocak-15 Temmuz 2013 tarihleri arasında Sakarya ili Eğitim ve Araştırma Hastanesinin kadın doğum polikliniğine başvuran gebe kadınlar üzerinde gerçekleştirilen kesitsel tipte bir araştırmadır. Çalışma süresince hastanenin kadın doğum polikliniğine başvuran ve çalışmaya katılmayı kabul eden toplam 817 gebe (%68.1) çalışma grubunu oluşturmuştur. Çalışmanın amacına uygun olarak literatürden faydalanılarak hazırlanan anket formu, yüz yüze görüşme yöntemi ile araştırmacılar tarafından doldurulmuştur. Gebelik süresince aile içi şiddet türlerinden en az bir tanesine ve en az bir kez maruz kalanlar, gebelikte şiddet öyküsü var olarak kabul edilmiştir. Depresyon değerlendirmesi için Beck Depresyon Ölçeği, anksiyete düzeyinin değerlendirilmesi için ise Beck Anksiyete Ölçeği kullanılmıştır. Verilerin analizleri Ki-kare testi ve Mann-Whitney U testi ile yapılmıştır.

Bulgular: Çalışma grubunu oluşturanların yaşları 18-41 arasında değişmekte olup, yaş ortalaması 28.28±4.66 yıl idi. Çalışmamızda gebelerin en sık sözel şiddete (%32.1), en az ise fiziksel şiddete (%1.3) maruz kaldığı bildirildi. Çalışma grubunda öğrenim düzeyi ortaokul ve altında olanlarda, geniş aile yapısına sahip olan gebelerde, eşi ilaçmadde bağımlısı olanlarda, iki ve daha fazla sayıda evlilik geçirenlerde, ilk evlenme yaşı 22 ve altında olanlarda ve gebelik sayısı üç ve daha fazla olan gebelerde aile içi şiddet görme sıklığı daha yüksek bulunmuştur (her biri için p<0.05). Gebeler arasında depresyon şüphesi sıklığı %16.8 (n=137) olarak saptandı. Çalışma grubundaki gebelerin Beck Anksiyete Ölçeğinden aldıkları puanlar 0-51 arasında değişmekte olup, ortalama 14.43±10.13 puan idi.

Sonuç: Gebelikte şiddet anne ve çocuk sağlığını olumsuz yönde etkile-

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** S Şahin, Yard. Doç. Dr.
Ankara Yıldırım Beyazıt Üniversitesi Sağlık Bilimleri Fakültesi, Ankara
Yazışma Adresi / Address for Correspondence:
Sevil Şahin, Yard. Doç. Dr., Ankara Yıldırım Beyazıt Üniversitesi Sağlık Bilimleri Fakültesi,
Etlik Doğu Kampüsü, Ayvalı Mahallesi, Gazze Caddesi, Keçiören Belediyesi Yüzme Havuzu
Üstü Keçiören / Ankara
Tel.: 0 312 324 15 55-1908 Faks: 0 312 906 29 67
e-posta: sevilshahin1@gmail.com

*** K İlçioğlu, Araş. Gör.
Sakarya Üniversitesi Sağlık Bilimleri Fakültesi, Ebelik Bölümü, Sakarya
**** A Ünsal, Prof. Dr.
Eskişehir Osmangazi Üniversitesi, Halk Sağlığı Anabilim Dalı, Eskişehir

Conclusion: Violence during pregnancy affects maternal and child health negatively and causes important physical and emotional disorders, primarily depression, in women. Accordingly, it is recommended to determine risk groups during pregnancy follow-up and to provide spouses of pregnant women with information on changes that occur during pregnancy in order to prevent violence.

Keywords: Anxiety and depression; domestic violence; pregnant women; Turkey.

Violence during pregnancy is an important health issue affecting both maternal and fetal health adversely. Frequency of violence during pregnancy ranges from 0.9% to 49% in the studies conducted worldwide.^[1-4]

Based on the results of the Survey of Domestic Violence against Women in Turkey, one out of ten women who have become pregnant at least once suffered from spouse or intimate partner(s) physical violence during their pregnancy. The frequency of physical violence during pregnancy was determined to be 9.7% in Turkey.^[5]

There are studies conducted to determine intimate partner violence during pregnancy in Turkey.^[5-8] Although violence during pregnancy is common in all societies and affects pregnancy adversely, it is rarely reported to healthcare professionals.

Violence during pregnancy causes a large number of problems such as preterm labor, miscarriage, placental abruption, hemorrhage before delivery and premature rupture of membrane.^[9-10] Women who experienced violence tend to report late for antenatal care and gain insufficient weight. These women are also more likely to have a history of sexually transmitted disease, have unwanted or mistimed pregnancy, urogenital infection and hemorrhage during pregnancy. Pregnant women who experienced violence also constitute a high risk group for depression during and after the pregnancy.^[11-13] It is difficult to determine women who are victims of abuse without questioning. Healthcare institutions are the only institution that can interact with all women at some point in their lives in most of the countries. Caregivers are therefore the most appropriate persons to determine victims of violence and to help them. Healthcare professionals, particularly nurses, have a chance to identify and change violence factors in women's life, inform women and provide guidance for required sources. Considering the fact that women may experience violence during pregnancy, this situation should be assessed during antenatal controls.^[5]

This study was conducted to determine status of domestic violence among pregnant women, to review some variables that are believed to be associated and to assess depression and anxiety levels.

Methods

This is a cross-sectional study conducted on the pregnant

mekte, kadında başta depresyon olmak üzere önemli fiziksel ve ruhsal bozukluklara yol açmaktadır. Bu doğrultuda gebe izlemleri sırasında risk gruplarının ortaya çıkarılması, şiddetin önlenmesi için gebelerin eşlerine gebelikte ortaya çıkan değişimlerle ilgili bilgi verilmesi önerilmektedir.

Anahtar kelimeler: Anksiyete ve depresyon; aile içi şiddet; gebe kadın; Türkiye.

women who applied to Sakarya Training and Research Hospital and Sakarya Delivery and Children's Hospital pregnancy polyclinic between 15 January 2013 and 15 July 2013.

Total number of pregnant women who applied to Sakarya Training and Research Hospital and Sakarya Delivery and Children's Hospital pregnancy polyclinic was 1616 and 2885, respectively, during the study. Total number of women who applied to both hospitals was 4501 and 817 of these women who agreed to take part in the study constituted the study group.

Written approval was obtained from Sakarya University Faculty of Medicine Ethics Committee in order to conduct the study. After informed verbal consent was obtained from women who applied to Sakarya Training and Research Hospital and Sakarya Delivery and Children's Hospital pregnancy polyclinic, previously prepared questionnaires were completed by the investigators with face-to-face interview method. This procedure lasted for approximately 15-20 minutes. The rules stated in the Helsinki Declaration were complied in the stage of data collection.

The questionnaire prepared using literature in line with the study objective^[14-19] included some socio-demographic characteristics of pregnant women (age, level of education, working status, family income level, family type, personality type), some marital and fertility characteristics (number of marriage, first marriage age, current marriage type, form of marriage, number of pregnancy, chronological order of pregnancy, pregnancy trimester, wanted pregnancy, planned pregnancy, number of birth, number of alive children), some socio-demographic characteristics and habits of their spouse (age, level of education, working status, personality type, smoking-alcohol addiction, drug/substance abuse and gambling addiction), questions about history of domestic violence, types of violence, the Beck Depression Inventory and the Beck Anxiety Inventory.

For the purposes of this study, physical violence was defined as slapping, kicking, punching, dragging, pulling hair, twisting arm, choking, injuring with sharp objects, verbal violence was defined as insulting or swearing, shouting in front of other people, economic violence was defined as giving no money, asking about her expenses, not allowing her to work, psychological violence was defined as acting rude, belittling, humiliating, making pressure on who to see, and sexual

violence was defined as forcing to have sexual intercourse, forcing to do something sexual that she found degrading or humiliating.^[20] The women who suffered from minimum one of these violence types at least once during pregnancy were regarded to have a history of violence during pregnancy.

The Beck Depression Inventory was used to assess depression. Validity and reliability study of this inventory which was developed by Beck et al.^[21] in 1961 was performed by Hisli^[22] in Turkey. The Beck Depression Inventory consists of 21 questions with four answer choices. Individuals were requested to mark the options which were relevant to them in the last 2 weeks based on implementation and assessment type. A value of 0 to 3 was assigned to each answer with a total score of 0 to 63. Individuals obtained a score of 17 and above from this inventory were regarded to have "suspected depression".

The Beck Anxiety Inventory was used to assess anxiety level. This inventory was developed by Beck et al.^[23] in 1988 and its validity and reliability study was performed by Ulusoy et al.^[24] in Turkey in 1998. The inventory consists of 21 questions on a 4-point Likert scale with a total score of 0 to 63. Higher scores denote to increased severity of anxiety.

Family income was assessed by the women as poor, average and high based on their own perceptions. Those who defined themselves as uptight, enthusiastic, hasty in the study group were classified in "Type A personality" and those who defined themselves as quiet, calm, patient and organized were classified in "Type B personality".^[25]

Those who smoke at least 1 cigarette a day were defined as smoker^[26] and those who consume at least 30 g of alcohol a week were regarded as alcohol consumer.^[27]

The data obtained were evaluated in IBM SPSS (version 20.0) statistical package program in computer. Chi-square test and Mann-Whitney U test were used for statistical analyses. Statistical significance was accepted as $p \leq 0.05$.

Results

Ages of women in the study group ranged from 18 to 41 years with a mean age of 28.28 ± 4.66 years; whereas their spouses were aged from 21 to 50 years with a mean age of 32.24 ± 5.53 years. Number of women who suffered from domestic violence during pregnancy was 86 (10.5%) in this study. Distribution of women who experienced domestic violence and no domestic violence during pregnancy by some socio-demographic characteristics of their spouse is given in Table 1.

First marriage age in the study group ranged from 15 to 39 years with a mean age of 22.41 ± 3.85 years. It was first marriage of 792 women (96.9%) and number of women whose first marriage age was below 22 years was 455 (55.7%). 471 pregnant women (57.6%) stated that they had a love marriage. Number of women who had both civil and religious marriage was 609

(74.5%). 347 women (42.5%) had no child. Distribution of women with or without a history of domestic violence in the study group by some marital and fertility characteristics is given in Table 2.

As there were women who experienced more than one type of domestic violence in the study group, distribution of violence types was based on number of violence types instead of number of women. Pregnant women reported verbal violence most frequently (32.1%) and physical violence least frequently (1.3%). Distribution of pregnant women by the types of domestic violence they experienced is given in Table 3.

Frequency of suspected depression among pregnant women in this study was determined to be 16.8% (n=137). Distribution of women with or without suspected depression in the study group by the history of domestic violence is given in Table 4.

The scores obtained from the Beck Anxiety Inventory by the women in the study group ranged from 0 to 51 with a mean score of 14.43 ± 10.13 . Distribution of average scores (median) obtained by the pregnant women with and without a history of domestic violence from the Beck Anxiety Inventory is given in table 5.

Discussion

Although family is considered as a source of love, trust and peace, it may sometimes be the center of conflict and violence. Violence is a fact of life that exists in every society in every period, quantity and quality of which are closely associated with the social change process. Recent data indicate that violence towards women is a major issue. Many studies conducted in the world and Turkey show that women experience violence during pregnancy.^[5,28-33] Ayrancı et al.^[5] found out that 110 women (71.4%) out of 154 in their study suffered from one or more types of violence (psychological/verbal, physical or sexual) in their current or previous pregnancies. In other studies conducted in Turkey, frequency of physical violence during pregnancy ranged from 4.8% to 36.4%, emotional violence during pregnancy ranged from 26.8% to 63.1% and sexual violence during pregnancy ranged from 4.4% to 36.4%, and 8% Turkish women who became pregnant at least once experience physical violence inflicted by their spouse or intimate partner during their pregnancy.^[6,7,8,28,29,34,35] In the studies conducted in developed and developing countries, frequency of physical violence during pregnancy ranged from 4% to 33.8%, emotional violence during pregnancy ranged from 24.8% to 78.3% and sexual violence during pregnancy ranged from 2.7% to 10%.^[12,19,30,35,36] The frequency of domestic violence during pregnancy was determined to be 10.5% in this study. Accordingly, it can be said that women in Turkey and around the world experience any form of violence during pregnancy.

In the U.S., rate of violence during pregnancy is 3.0% to 11.0%

Table 1. Some Socio-Demographic Characteristics of Spouses of Women Who Experienced Domestic Violence and No Domestic Violence During Pregnancy

SOCIO-DEMOGRAPHIC CHARACTERISTICS	DOMESTIC VIOLENCE DURING PREGNANCY			CHI-SQUARE TEST χ^2 ; p
	NO n (%)*	YES n (%)*	TOTAL n (%)**	
Age group				
≤29 years	444 (89.2)	54 (10.8)	498 (61.0)	0.136; 0.712
≥30 years	287 (90.0)	32 (10.0)	319 (39.0)	
Level of education				
Secondary school and below	349 (84.7)	63 (15.3)	412 (50.4)	20.036; 0.000***
High school and above	382 (94.3)	23 (5.7)	405 (49.6)	
Family type				
Nuclear	586 (91.4)	55 (8.6)	641 (78.5)	11.024; 0.001****
Extended	145 (82.4)	31 (17.6)	176 (21.5)	
Working status				
Unemployed	608 (89.7)	70 (10.3)	678 (83.0)	0.069; 0.792
Employed	123 (88.5)	16 (11.5)	139 (17.0)	
Family income				
Poor	11 (68.8)	5 (31.2)	16 (2.0)	25.068; 0.000***
Moderate	494 (87.0)	74 (13.0)	568 (69.5)	
High	226 (97.0)	7 (3.0)	233 (28.5)	
Personality type				
A	363 (87.7)	51 (12.3)	414 (50.7)	2.863; 0.091
B	368 (91.3)	35 (8.7)	403 (49.3)	
Spouse's age group				
≤29 years	236 (87.1)	35 (12.9)	271 (33.2)	2.457; 0.117
≥30 years	495 (90.7)	51 (9.3)	546 (66.8)	
Spouse's level of education				
Secondary school and below	203 (83.9)	39 (16.1)	242 (29.6)	11.406; 0.001****
High school and above	528 (91.8)	47 (8.2)	575 (70.4)	
Spouse's working status				
Unemployed	48 (70.6)	20 (29.4)	68 (8.3)	25.944; 0.000***
Employed	683 (91.2)	66 (8.8)	749 (91.7)	
Spouse's personality type				
Type A	342 (91.4)	32 (8.6)	374 (45.8)	2.843; 0.092
Type B	389 (87.8)	54 (12.2)	443 (54.2)	
Spouse's smoking status				
Non-smoker	301 (90.9)	30 (9.1)	331 (40.5)	1.264; 0.261
Smoker	430 (88.5)	56 (11.5)	486 (59.5)	
Spouse's alcohol consumption				
No	718 (89.3)	86 (10.7)	804 (98.4)	Fisher; 0.381
Yes	13 (100.0)	0 (0.0)	13 (1.6)	
Spouse's substance abuse				
No	731 (90.0)	81 (10.0)	812 (99.4)	Fisher; 0.000
Yes	0 (0.0)	5 (100.0)	5 (0.6)	
Spouse's gambling addiction				
No	721 (89.7)	83 (10.3)	804 (98.4)	Fisher; 0.149
Yes	10 (76.9)	3 (23.1)	13 (1.6)	
Total	731 (89.5)	86 (10.5)	817 (100.0)	

*: Percentages were calculated based on the line total **: Percentages were calculated based on the column total. ***p<0.001; ****p<0.01

Table 2. Some Marital and Fertility Characteristics of Women Who Experienced Domestic Violence and No Domestic Violence During Pregnancy

SOME MARITAL AND FERTILITY CHARACTERISTICS	DOMESTIC VIOLENCE DURING PREGNANCY			CHI-SQUARE TEST χ^2 ; p
	NO n (%)*	YES n (%)*	TOTAL n (%)**	
Number of marriage				
1	712 (89.9)	80 (10.1)	792 (96.9)	Fisher; 0.039***
2 or more	19 (76.0)	6 (24.0)	25 (3.1)	
First marriage age				
≤22 years	398 (87.5)	57 (12.5)	455 (55.7)	4.366; 0.037***
≥23 years	333 (92.0)	29 (8.0)	362 (44.3)	
Current marriage type				
Arranged	194 (82.6)	41 (17.4)	235 (28.8)	19.257; 0.000****
Love	430 (91.3)	41 (8.7)	471 (57.6)	
Elopement/abduction	107 (96.4)	4 (3.6)	111 (13.6)	
Form of marriage				
Civil marriage	193 (92.8)	15 (7.2)	208 (25.5)	2.800; 0.094
Civil and religious marriage	538 (88.3)	71 (11.7)	609 (74.5)	
Number of pregnancy				
1-2	509 (90.9)	51 (9.1)	560 (68.5)	3.807; 0.050***
3 or more	222 (86.4)	35 (13.6)	257 (31.5)	
Chronological order of pregnancy				
First	289 (87.8)	40 (12.2)	329 (40.3)	1.942; 0.379
Second/third	318 (91.1)	31 (8.9)	349 (42.7)	
Fourth or more	124 (89.2)	15 (10.8)	139 (17.0)	
Pregnancy trimester				
1	141 (91.6)	13 (8.4)	154 (18.8)	1.593; 0.451
2	173 (90.6)	18 (9.4)	191 (23.4)	
3	417 (88.3)	55 (11.7)	472 (57.8)	
Wanted pregnancy				
No	38 (92.7)	3 (7.3)	41 (5.0)	Fisher; 0.792
Yes	693 (89.3)	83 (10.7)	776 (95.0)	
Planned pregnancy				
No	125 (80.6)	30 (19.4)	155 (19.0)	14.695; 0.000****
Yes	606 (91.5)	56 (8.5)	662 (81.0)	
Number of birth				
0	281 (87.5)	40 (12.5)	321 (39.3)	4.130; 0.127
1-2	381 (91.6)	35 (8.4)	416 (50.9)	
3 or more	69 (86.2)	11 (13.8)	80 (9.8)	
Number of alive child				
0	307 (88.5)	40 (11.5)	347 (42.5)	1.405; 0.495
1-2	386 (90.6)	40 (9.4)	426 (52.1)	
3 or more	38 (86.4)	6 (13.6)	44 (5.4)	
Total	731 (89.5)	86 (10.5)	817 (100.0)	

*: Percentages were calculated based on the line total **: Percentages were calculated based on the column total ***p<0.05; ****p<0.001

among adult women; whereas this rate is 38.0% among adolescents.^[37] In our study, no difference was found between the age groups with regards the frequency of domestic violence during pregnancy (p>0.05). However, the frequency of

domestic violence during pregnancy is higher in women whose first marriage age was 22 years and below (p < 0.05). Although Gogus et al.^[38] found out that young pregnant women experienced more violence, they reported no statistically

Table 3. Distribution of the Pregnant Women in The Study Group By The Types of Violence They Experienced

TYPE OF VIOLENCE	n*	%
Physical violence	2	1.3
Verbal violence	51	32.1
Economic violence	47	29.6
Psychological violence	41	25.7
Sexual violence	18	11.3
Total	159	100.0

*: Assessed based on number of violence type during pregnancy

significant difference. The findings of the study conducted by Bacchus et al.^[11] were consistent with the findings of our study in terms of age and frequency of violence during pregnancy. Giray et al.^[7] reported no relationship between the marriage age and frequency of domestic violence.

In Guler's^[1] study, low education level of pregnant women and their spouse was regarded as a risk factor increasing all types of violence significantly. Taspınar et al.^[34] reported a similar result. Some studies in various countries also reported consistent results.^[12,39,40] However, there are contradictory results regarding the factors affecting domestic violence during pregnancy in the literature. In a study indicate no relationship between the level of education and frequency of violence.^[5] In the study group, the frequency of domestic violence was significantly higher in pregnant women whose level of education is secondary school and below and in those with a spouse whose level of education is secondary school and below ($p < 0.05$ for both). These results are consistent with the results obtained from other studies.

Having a large family is regarded as a risk factor increasing violence.^[1,12,39,40] Muhajarine and D'Arcy^[41] reported that violence is more frequent in large families. In our study, the frequency of domestic violence was significantly higher in pregnant women having a large family compared to those with a core family ($p < 0.05$).

Guler^[1] suggested that spouse's working status, having health assurance and economic condition were related to four dimensions of violence. In the studies conducted in some countries, low socioeconomic status is considered a factor increasing the risk of violence during pregnancy.^[5,12,35,40] In our study, there was no difference with regards the frequency of domestic violence between the pregnant women with and

without a revenue-generating business ($p > 0.05$) but it was found out that the frequency of domestic violence decreased along with higher family income ($p < 0.05$). The frequency of domestic violence was significantly higher in pregnant women whose spouse has a revenue-generating job ($p < 0.05$).

Nicolaisen and Thorsen^[13] emphasized that spouse's alcohol addiction increases physical and sexual violence and therefore increases maternal and infant death. There was no difference with regards the frequency of domestic violence in pregnant women whose spouse is smoker and those whose spouse is non-smoker ($p > 0.05$). No difference was found with regards the frequency of domestic violence during pregnancy between the women whose spouse consumes alcohol and no alcohol ($p > 0.05$). However, the frequency of domestic violence during pregnancy was higher in women whose spouse is drug/substance dependent ($p < 0.05$).

In our study, no difference was found with regards the frequency of domestic violence during pregnancy between the women having a spouse with and without gambling addiction ($p > 0.05$). Ayrançı et al.^[5] reported that the women who experienced violence had spouse with one or multiple bad habits such as smoking, alcoholism, going out at night, heroine/cocaine, etc. (13.6%).

The frequency of domestic violence during pregnancy was higher in women who had an arranged marriage in our study ($p < 0.05$). Women who had an arranged marriage experienced more physical and economic violence.^[42,43] No study examining the relationship between the marriage type and violence was found in the literature. It may result from the fact that knowing each other takes more time and is more difficult in arranged marriages.

The frequency of domestic violence during pregnancy was higher in women who got pregnant three times or more ($p < 0.05$). While Giray et al.^[7] determined no relationship between the number of children and violence, some studies found out that greater number of pregnancies increased violence during pregnancy.^[39,40] Increased number of pregnancies may cause difficulty in looking after children, which may increase unrest and frequency of domestic violence.

There were investigators who reported that unwanted pregnancies increase the frequency of violence.^[36,43] No difference was found with regards the frequency of domestic

Table 4. Distribution of Pregnant Women With or Without Suspected Depression By the History of Domestic Violence

HISTORY OF VIOLENCE DURING PREGNANCY	DEPRESSION			CHI-SQUARE TEST χ^2 ; p
	NO n (%)*	YES n (%)*	TOTAL n (%)**	
No	635 (86.9)	96 (13.1)	731 (89.5)	$\chi^2=63.329p=0.000***$
Yes	45 (52.3)	41 (47.7)	86 (10.5)	
Total	680 (83.2)	137 (16.8)	817 (100.0)	

*: Percentages were calculated based on the line total **: Percentages were calculated based on the column total. *** $p < 0.001$

Table 5. Distribution Of Average Scores (Median) Obtained by The Women With And Without a History Of Domestic Violence During Pregnancy From The Beck Anxiety Inventory

HISTORY OF VIOLENCE DURING PREGNANCY	n	SCORE OF THE BECK ANXIETY INVENTORY MEDIAN (MIN-MAX)
No	731	12 (0.0-51.0)
Yes	86	17 (0.0-42.0)
Total	817	13 (0.0-51.0)

*z=4.781; p=0.000 *: Mann-Whitney U test

violence during pregnancy between the women who wanted and did not want the current pregnancy ($p>0.05$). However, the frequency of domestic violence was higher in the women who planned their pregnancy compared to those who did not plan their pregnancy ($p<0.05$).

The violence inflicted during pregnancy is predominantly physical violence based on the literature. The intensity of physical violence inflicted during pregnancy does not fall below and even increase above the intensity of usual violence in some cases.^[37,44] In our study, pregnant women reported verbal violence most frequently and physical violence least frequently.

Some studies indicated that various psychological disorders such as anxiety and depression are more frequently reported in those with a history of domestic violence.^[45-48] As domestic violence is a bad and traumatic incident, it is regarded as an important risk factor in psychological disorders. Some studies reported an important relationship between physical violence and mental health problems in women who suffered from partner violence and they had depression, anxiety and stress at a more severe level with a significant decrease in self-respect.^[18,22] A study conducted by Vahip and Doganavsargi^[49] concluded that 63% of female patients presented to a psychiatry polyclinic experienced violence during their childhood and 62% experienced violence during their marriage at least once; whereas depression and anxiety disorder were diagnosed in 73.9% and 6.5% of the women who experienced physical violence, respectively. Our study determined that the frequency of depression was higher in the women with a history of domestic violence during pregnancy ($p<0.05$). Furthermore, the frequency of anxiety level was determined to be higher in the women with a history of domestic violence during pregnancy ($p<0.05$).

Limitations

The limitations of the study may include the facts that it is a cross-sectional study, it was conducted on the pregnant women who presented to hospital and it is not possible to establish definitive diagnosis with the scales used. Another point was that we did not interview with men and examine men's view about the subject. It would be better if the study was conducted on both parts.

Conclusion

Domestic violence is an important problem in pregnant women and a higher frequency of depression and anxiety level was determined in the women with a history of violence. Furthermore, domestic violence is known to be an important health issue in Turkey and around the world. Healthcare professionals should identify violence, know verbal and non-verbal symptoms of violence, factors causing violence, cycle of violence and actions supporting pregnant women who experience violence and have the knowledge and skills of helping victims of violence and their family in order to play an effective and successful role in providing care regarding violence during pregnancy. It is also very critical for healthcare professionals to know their own feelings, ideas and attitudes about violence and their professional role in helping pregnant women who experienced violence in addition to have required knowledge and skills. It would be advantageous to raise awareness on protection from domestic violence during pregnancy and to refer women with suspected depression and high level of anxiety level to specialists.

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REFERENCES

- Guler N. Physical, emotional, sexual, and economic violence by spouse during pregnancy and associated factors (Gebelikte eşi tarafından kadına uygulanan fiziksel, duygusal, cinsel ve ekonomik şiddet ve ilişkili faktörler). DEUHYO. 2010; 3(2):72-77. <http://acikerisim.deu.edu.tr/xmlui/bitstream/handle/12345/4553/72-77.pdf.pdf?sequence=1&isAllowed=y>
- Ezechi OC, Kalu BK, Ezechi LO, Nwokoro CA, Ndububa VI, Okeke GC. Prevalence and pattern of domestic violence against pregnant Nigerian women. Journal of Obstetrics and Gynecology. 2004; 24(6): 652-6. doi:10.1080/01443610400007901
- Stöckl H, Filippi V, Watts C, Mbwanjo JK. Induced abortion, pregnancy loss and intimate partner violence in Tanzania: a population based study. BMC Pregnancy Childbirth. 2012; 5(12):12. doi:10.1186/1471-2393-12-12.
- Howard LM, Oram S, Galley H, Trevillion K, Feder G. Domestic violence and perinatal mental disorders: a systematic review and meta-analysis. PLoS Med. 2013; 10(5): e1001452. doi:10.1371/JOURNAL.PMED.1001452.
- Ayrancı U, Gunay Y, Unluoglu I. (2002). Domestic violence during pregnancy: A study conducted on women presented to primary healthcare institutions (Hamilelikte aile içi şiddet: Birinci basamak sağlık kurumlarına başvuran kadınlar arasında bir araştırma). Anatolian Journal of Psychiatry (Anadolu Psikiyatri Dergisi). 2002; 3:75-87. http://uvf.ulakbim.gov.tr/uvf/index.php?cwid=9&vtadi=TPRJ%2CTTAR%2CTTIP%2CTMUH%2CTSOS%2CTHUK&cc=google&ano=17237_993995432abe9d5e067ca78ac9ac2e47
- Deveci SE, Acik Y, Gulbayrak C, Tokdemir M, Ayar A. Prevalence of domestic violence during pregnancy in a Turkish community. Southeast Asian Journal Tropic Medicine Public Health. 2007; 38:754-760. <http://imsear.li.mahidol.ac.th/bitstream/123456789/36384/3/754.pdf>
- Giray H, Keskinoglu P, Sonmez Y, et al. Domestic violence and associations during pregnancy (Gebelikte aile içi fiziksel şiddet ve etkileyen faktörler). Journal of Continuing Medical Education (Sürekli Tıp Eğitimi Dergisi). 2005; 10:217-220.
- Ministry of Family and Social Policies, investigation of domestic violence against women in Turkey, 2015. <http://kadininstatusu.aile.gov.tr/data/58528516369dc524d057a5fe/Combating%20Violence%20Against%20Women.pdf> Accessed may 6, 2016.
- Boy A, Salihu, HM. Intimate partner violence and birth outcomes: a systematic review. International Journal Fertil Womens Medicine. 2004;

- 49:159-64. <https://www.ncbi.nlm.nih.gov/pubmed/15481481>
10. Coker AL, Sanderson M, Dong B. Partner violence during pregnancy and risk of adverse pregnancy outcomes. *Paediatric and Perinatal Epidemiology*. 2004; 18:260-269. doi:10.1111/j.1365-3016.2004.00569.x
 11. Bacchus L, Mezey G, Bewley S. Domestic violence: prevalence in pregnant women and associations with physical and psychological health. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 2004; 113:6-11. doi:10.1016/S0301-2115(03)00326-9
 12. Malta LA, McDonald SW, Hegadoren KM, Weller CA, Tough SC. Influence of interpersonal violence on maternal anxiety, depression, stress and parenting morale in the early postpartum: a community based pregnancy cohort study. *BMC Pregnancy Childbirth*. 2012; 15(12):153. doi:10.1186/1471-2393-12-153
 13. Nicolaisen M, Thorsen K. Loneliness among men and women – a five-year follow-up study. *Aging & Mental Health*. 2014; 18(2):194-206. doi:10.1080/13607863.2013.821457
 14. Efe YS, Ayaz S. Domestic violence against women and women's opinions related to domestic violence. (Kadına Yönelik Aile İçi ve Kadınların Aile İçi Şiddete Bakışı). *Anatolian Journal of Psychiatry (Anadolu Psikiyatri Dergisi)*. 2010; 11:23-9. http://uvf.ulakbim.gov.tr/uvf/index.php?cwid=9&vtadi=TPRJ%2CTTAR%2CTTIP%2CTMUH%2CTSOS%2CTHUK&rc=google&ano=110351_a8470e631aa3ccf9680e5d6aa8b644ac
 15. Ozyurt C, Devci A. The Relationship between Domestic Violence and the Prevalence of Depressive Symptoms in Married Women between 15 and 49 Years of Age in a Rural Area of Manisa, Turkey (Manisa'da Kırsal Bir Bölgedeki 15-49 Yaş Evli Kadınlarda Depresif Belirti Yaygınlığı ve Aile İçi Şiddetle İlişkisi). *Turkish Journal of Psychiatry (Türk Psikiyatri Dergisi)* 2011; 22(1):10-6. <http://www.turkpsikiyatri.com/pdf/c22s1/010-016.pdf>
 16. Nagassar RP, Rawlins JM, Sampson NR, Zackeralli J, Chankadyal K, Ramasir C, Boodram R. The prevalence of domestic violence within different socio-economic classes in Central Trinidad. *West Indian Med J*. 2010; 59(1):20-5. <http://caribbean.scielo.org/pdf/wimj/v59n1/v59n1a05.pdf>
 17. Flury M, Nyberg E, Riecher-Rössler A. Domestic violence against women: Definitions, epidemiology, risk factors and consequences. *Swiss Medical Weekly*. 2010; 2:140:w13099. doi:10.4414/SMW.2010.13099
 18. Khosla AH, Dua D, Devi L, Sud SS. Domestic violence in pregnancy in North Indian women. *Indian Journal of Medicine Science*. 2005; 79, 59(5):195-9.
 19. Valladares E, Pena R, Persson LA, Hogberg U. Violence against pregnant women: prevalence and characteristics. A population-based study in Nicaragua. *An International Journal of Obstetrics and Gynaecology*. 2005; 112(9):1243-8. doi:10.1111/j.1471-0528.2005.00621.x
 20. García-Moreno C, Jansen HA, Watts, CH, Ellsberg M, Heise L. WHO Multi-country Study on Women's Health and Domestic Violence against Women Study Team. WHO multi-country study on women's health and domestic violence against women: initial results on prevalence, health outcomes and women's responses. Geneva: WHO. 2005. http://apps.who.int/iris/bitstream/10665/43309/1/924159358X_eng.pdf
 21. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory form assuring depression. *Arch Gen Psychiatry*. 1961; 4:561-71.
 22. Hisli N. A study on validity of the Beck Depression Inventory. *Psychol J*. 1988; 6:118-22.
 23. Beck AT, Epstein N, Brown G et al. An inventory for measuring clinical anxiety: Psychometric properties. *J Consult Clin Psychol*. 1988; 56:893-897.
 24. Ulusoy M, Sahin NH, Erkmen H. Turkish version of the Beck Anxiety Inventory: Psychometric properties. *J Cogn Psychother*. 1998; 12:163-172.
 25. Durak Batigun A, Sahin NH. Two Scales for Job Stress and Psychological Health Investigation: Type-A Personality and Job Satisfaction. *Turkish Journal of Psychiatry*. 2006; 17(1):32-45. <http://turkpsikiyatri.com/C17S1/en/twoScales.pdf>
 26. Tolonen H, Wolf H, Jakovljevic D, Kuulasmaa K and the European Health Risk Monitoring Project. Review of surveys for risk factors of major chronic diseases and comparability of the results. *European Health Risk Monitoring (EHRM) Project*. October, 2002. Available at: URL: <http://www.ktl.fi/publications/ehrm/product1/title.htm> (Available date: 09.03.2017)
 27. Tomkin S, Saburova L, Kiryanov N, Andreev E, McKee M, Shkolnikov V, et al. Prevalence and socio-economic distribution of hazardous patterns of alcohol drinking: study of alcohol consumption in men aged 25-54 years in Izhevsk, Russia. *Addiction* 2007; 102:544. doi:10.1111/j.1360-0443.2006.01693.x
 28. Yanikkerem, E., Karadas, G., Adiguzel, B., & Sevil, U. (2006). Domestic violence during pregnancy in Turkey and responsibility of prenatal healthcare providers. *American Journal of Perinatology*. 2006; 23:93-103. doi:10.1055/s-2006-931802
 29. Tezcan S, Yavuz S, Tunçkanat H: Domestic Violence towards Women and Healthcare Results. Republic of Turkey Prime Ministry Women's Status General Directorate: A Study of Domestic Violence towards Women in Turkey, Chapter 5, pp. 71-82. Elma Teknik Basım Printing House Ankara 2009.
 30. Farid M, Saleem S, Karim MS, Hatcher J. Spousal abuse during pregnancy in Karachi, Pakistan. *International Journal of Gynecology and Obstetrics* 2008; 101:141-145. doi:10.1016/j.ijgo.2007.11.015
 31. Tiwari A, Chan KL, Fong D, et al. The impact of psychological abuse by an intimate partner on the mental health of pregnant women. *An International Journal of Obstetrics and Gynaecology*. 2008; 115(3):377-384. doi:10.1111/j.1471-0528.2007.01593.x
 32. Gelaye B, Lam N, Cripe SM, Sanchez SE, Williams MA. Correlates of violent response among Peruvian women abused by an intimate partner. *Journal of Interpersonal Violence*. 2010; 25(1):136-51.
 33. Sahin HA, Sahin HG. An unaddressed issue: domestic violence and unplanned pregnancies among pregnant women in Turkey. *Eur Journal Contracept Reproductive Health Care*. 2007; 8:93-98. PMID:12831606.
 34. Taspinar A, Bolsoy N, Sirin A. Are pregnant women experiencing physical violence? Manisa sample (Gebeler fiziksel şiddete uğruyorlar mı? Manisa örneği). *Turkish Journal of Forensic Psychiatry (Adli Psikiyatri Dergisi)*. 2005; 2:41-47. <http://psikiyatridizini.net/viewarticle.aspx?articleid=2340>
 35. Hedin LW, Janson PO. Domestic violence during pregnancy. *Acta Obstetrica et Gynecologica Scandinavica*. 2000; 79:625-630. PMID:10949224
 36. Gao W, Paterson J, Carter S, Iusitini L. (2008). Intimate partner violence and unplanned pregnancy in the Pacific Islands Families Study. *International American Journal of Obstetrics and Gynecology* 2008; 100:109-115. doi:10.1016/j.ijgo.2007.08.004
 37. Salam MA, Alim MA, Noguchi T. Spousal abuse against woman and its consequences on reproductive health: a study in the urban slums in Bangladesh. *Matern Child Health J*. 2005; 13:1-12. doi:10.1007/s10995-005-0030-6
 38. Gogus T, Yildiz H. Status of violence in pregnancy according to the trimesters, effecting factors and perinatal results (Trimestirlara göre gebelerde şiddet yaşama durumu, etkileyen faktörler ve perinatal sonuçlar). *TAF Prev Med Bul*. 2013; 12(6):657-664.
 39. Das S, Bapat U, ShahMore N, et al. Intimate partner violence against women during and after pregnancy: a cross-sectional study in Mumbai Slums. *BMC Public Health*. 2013; 9(13):817. doi:10.1186/1471-2458-13-817
 40. Kouyoumdjian FG, Calzavara LM, Bondy SJ, et al. Risk factors for intimate partner violence in women in the Rakai community cohort study, Uganda, from 2000 to 2009. *BMC Public Health*. 2013; 10(13):566. doi:10.1186/1471-2458-13-566.
 41. Muhajarine N, D'Arcy C. Physical abuse during pregnancy: prevalence and risk factors. *CMAJ*. 1999; 160(7):1007-1011. PMID:10207339.
 42. Reid AJ, Biringir A, Midmer D, et al. Using the ALPHA form in practice to assess antenatal psychosocial health. *CMAJ*. 1998; 159(6). PMID:9780969.
 43. Crip S M, Sanchez SE, Perales MT, Lam N, Garcia P, Williams MA. Association of intimate partner physical and sexual violence with unintended pregnancy among pregnant women in Peru. *International Journal of Gynecology Obstetrics*. 2008; 100:104-108.
 44. Crempien RC, Rojas G, Cumsille P, Oda MC. Domestic violence during pregnancy and mental health: exploratory study in primary health centers in Peñalolén. *ISRN Obstetrics Gynecology*. 2011; 265817. doi:10.5402/2011/265817
 45. Simsek Z, Ak D, Altindag A, et al. Prevalence of psychological disorders in married women aged 15-49 years in Şanlıurfa Training Health Clinic Region and associated factors. 11. National Public Health Congress Booklet. 2007; pp. 415-6.
 46. Bonomi AE, Anderson ML, Rivara FP, et al. Health outcomes in women with physical and sexual intimate partner violence exposure. *J Women Health*. 2007; 16(7):987-7. doi:10.1089/jwh.2006.0239
 47. Okyay P, Atasoylu G, Onde M, Dereboy C. How is quality of life affected in women in the presence of anxiety and depression symptoms? (Kadınlarda yaşam kalitesi anksiyete ve depresyon belirtilerinin varlığında nasıl etkileniyor? Kesitsel bir alan çalışması) *Journal of Psychiatry (Türk Psikiyatri Dergisi Turkish)*. 2012; 23(3):178-88.
 48. Hyginus E, Chukwuemeka I, Lawrence I, Sunday M. HIV- related intimate partner violence among pregnant women in Nigeria. *Obstetrics Gynaecology of Journal*. 2012; 9(1):29-32. PMID:23120946
 49. Vahip, I. and Avsargil, D. Domestic violence and female patients (Aile içi fiziksel şiddet ve kadın hastalarımız). *Turkish Journal of Psychiatry (Türk Psikiyatri Dergisi)*. 2006; 17(2):107-114.