المراضة النفسية لدى النساء الحوامل

Psychiatric Morbidity Among Pregnant Women

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الخلاصة

ان خطر الاصابة بالاضطرابات النفسية لدى النساء يكون في اعلى مستوياته بين عمر ١٨ و٤٤ ولهذا فكثير من النساء يعانين المرض النفسي اثناء الحمل.

الاهداف: تهدف هذه الدراسة لمعرفة المراضة النفسية لدى النساء الحوامل وتأثير بعض متغيرات الحمل عليها، كعدد مرات الحمل وفترة الحمل وتاريخ الحمل السابق.

الطريقة: تكونت عينة الحوامل من ١٢٠ امرأة جمعن بصورة عشوائية من مركز الرعاية الصحي في مدينة الصدر والمركز الصحي (اور) في قطاع الشعب، خلال ٩ اشهر للفترة من ١٥ اذار ولغاية ١٥ كانون الاول.

وتكونت عينة السيطرة من ١٢٠ امرأة متزوجة من غير الحوامل ولسن في فترة النفاس. جمعن من مراكز الرعاية الصحية نفسها. وتمت المطابقة من حيث العمر.

شخصت الحالات باستعمال فحص الصحة العامة (٣٠ سؤال) وكذلك استعمال المقابلة شبه المنظمة المبنية عتى اساس الدليل التشخيصي الرابع المنقح للجمعية الامريكية للطب النفسي.

النتائج: كانت المراضة النفسية ٤٠,٨% لدى النساء الحوامل مقابل ٣١,٧% لدى غير الحوامل. وكانت نسب الاكتئاب والقلق هي الاعلى.

الاستنتاج: كانت المراضة النفسية اعلى لدى النساء الحوامل وكانت الكآبة والقلق اكثر انتشارا.

الكلمات المفتاحية: القلق - الإكتئاب - الحوامل - الاضطرابات النفسية

Summary

Background: Most of what is known about psychiatric problems among pregnant woman comes from findings among clinical samples, often without non pregnant control groups. Furthermore, most research in this area has focused on anxiety and depressive symptoms rather than anxiety and mood disorders, and thus has not addressed the relationship between mental disorder diagnoses and perinatal out come.

Aims: This study aims to find psychiatric morbidity among pregnant women and the effect of parity, gestational age, obstetric history, educational level and age of pregnant women on psychiatric morbidity.

Method: The study sample was 120 pregnant women randomly collected from primary health care centre in Alsadr city and(Ur (primary health care centre in Alshab neighborhood in Baghdad from 15th of March to 15th of December.

The control sample was 120 non pregnant, non puerperal married women matched for age and randomly collected from the same care centers.

GHQ-30 and semi structured interview based on DSM-VI TR were used to identify the cases.

Results: Psychiatric morbidity was 40.8 % in pregnant women versus 31.7% in control group and depression and anxiety were the highest.

Conclusion: the psychiatric morbidity was high among pregnant women, and the most frequent disorder were depression and anxiety.

Keywords: Anxiety - Depression - Pregnancy - Mental disorders

Introduction

Most of what is known about psychiatric problems among pregnant women comes from findings among clinical samples, often without non pregnant control groups. Furthermore, most research in this area has focused on anxiety and depressive symptoms rather than anxiety and mood disorders, and thus has not addressed the relationship between mental disorder diagnoses and perinatal out comes (Littleton, Breitkopf, & Berenson, 2007) (James & Alcott, 2009).

Pregnancy is a time of growth and hope but it is also a time when woman is very vulnerable psychologically. Healthy woman often find pregnancy a means of self-realization. Other women use pregnancy to diminish self doubt about feminity or to reassure that they can function as a woman in most basic sense (James & Alcott, 2007).

Various descriptive and exploratory studies suggest that pregnant women may experience specific and intense fears, such as fear of incompetence and concerns about pain and loss of control during delivery, fear of their own life and the life of their baby, and worries about changes in their personal life due to pregnancy and child birth (Dunkel, 1998) (Sjogren, 1997).

During first trimester a women may notice increased emotional liability which may be exacerbated by nausea, breast tenderness and other physical changes typical of early pregnancy.

As pregnancy progress, further bodily changes, alteration in sexual interest and anxieties about delivery may all contribute to mood changes.

Women are at the greatest risk of developing a psychiatric disorder between the ages of 18 and 45 years.

Many women, therefore, may experience a psychiatric illness while they are pregnant or breast-feeding (Weissman & Jensen, 2002).

Women with histories of these disorders are at risk for relapse during pregnancy, particularly if they have experienced two or more relapses of the disorder (Altshuler, Hendrick, & Cohen, 1998).

Late pregnancy may be associated with sleep disturbance, social withdrawal and increased absorption and preoccupation with preparations for delivery and caring for the baby (Eve & Cunningham, 2011).

Approximately 21% of women experience a mood disorder and 30% anxiety disorder at some point in their lives (Kessler, Mc Gonagle, & Zhao, 1994).

Complications of pregnancy

Termination of pregnancy

The psychological effects of termination have been thoroughly explored. Most of those who voluntarily abort suffer no adverse effects, either in the short or long term. There is often relief, even euphoria, and a reduction in anxiety, depression, anger, guilt, and shame. A minority experience regret and self-reproach over the ‘murder' of the baby; some feel like criminals and worry about punishment or the nemesis of sterility or future congenital malformations. A few develop clinical depression (Burke, Burke, Rae, & Regeir, 1991).

Miscarriage

This is a common event, perhaps 40 per cent of all conceptions an ectopic pregnancy is gynaecologically more serious. The emotional consequences of miscarriage are not trivial, Some of the psychological symptoms may resemble post-traumatic stress disorder. There is a sense of failure, guilt, and anger. The incidence of depression is four times the rate found in the general population.

Fetal death in utero, stillbirth, neonatal death, and sudden infant death

Reactions to these events are generally more severe than to miscarriage. When the baby dies in late pregnancy, the mother carries a corpse within her, and must undergo a futile labour. If it dies during labour, the loss is sudden and shock is pronounced, with a strong sense of unreality. When the child dies in the first week, the parents have to endure a period of great anxiety (Gelder & et al, 2003).

Cultural aspect

In Arab culture, infertility within the context of marriage is viewed as a mark of shame rather than a medical condition. It can ultimately be the cause of marital separation due to the level of pressure applied by the couple’s extended families. Family

pressure, similarly, tends to create strong incentive for large numbers of children (Ahmad, 1997).

In Japan culture morning sickness is not usually discussed, even within the woman's family. Pregnant women are usually advised to abstain from any activities which require concentration. They may believe that epinephrine released at the time of maternal mental stress may harm the fetus. Women may not restrict the types of foods they eat. They may not avoid raw fish or stop drinking green tea (despite the risks of bacteria and caffeine), and may not take prenatal vitamins. The importance of following the dietary recommendations for pregnant women should be highlighted. According to Japanese tradition, women in their eighth month of pregnancy should reduce their level of physical activity and move to their maternal home for delivery (Stevens & Lee, 2002).

In India, pregnancy is usually viewed as a normal physiologic phenomenon that does not require any intervention by health care professionals. Only in the event of a problem will pregnant women seek medical advice. Nutrition-related practices during pregnancy are based on a belief that 'hot' foods are harmful and 'cold' foods are beneficial. Because pregnancy generates a hot state, pregnant women are advised to attain balance by eating cold food and avoiding hot food.

Cold foods are recommended in early pregnancy to avoid miscarriage. Hot foods are encouraged during the last stages of pregnancy to facilitate labor.

Fiji-Indians may believe that it is the responsibility of others to satisfy a pregnant woman's cravings. A baby whom dribbles excessively indicates that the mother was not taken care of properly during her pregnancy. Twins and other multiple pregnancies may be viewed as unlucky. Some women may take herbal medicines to promote the development of a male fetus (Bandyopadhyay, 2009) **In African American culture** may believe pregnancy is not an illness and prenatal care unnecessary; encouraged to rest, do minimal work, and eat well. Little or no preparation for birth or baby.

In Russian culture believe pregnant women should be protected from bad news; believe certain activities, such as lifting, heavy exercise, or skipping steps when going downstairs will result in harm to baby (Wintz & Earl, 1989).

Aims

of the Study

This study aims to find psychiatric morbidity among pregnant women and the effect of parity, gestational age, obstetric history, educational level and age of pregnant women on psychiatric morbidity.

Patients and Methods

The sample

The study was conducted during the period from the 15th of March till the 15th of December 2011.

This study is cross sectional study of a cohort of 120 pregnant women. The sample was collected by random selection; by taking every 4th pregnant women from attendants of maternity care unit of the primary health centre in Alsadr city (n= 63) and Ur primary health centre in Alshaab neighborhood in Baghdad (n= 57).

The age range of the sample was between 15 - 44 years

Method

Each pregnant women was screened by GHQ-30 and the semi structured interview (SSI) based on the DSM-IVTR was used.

The GHQ-30 by Goldberg 1972 and semi structured interview were translated by AL-azzawy and used by other researchers (Jasim, 1993). (Abdul-kareem, 1993) (Haki, 1996).

The diagnostic criteria of depression, anxiety and psychotic disorders were applied.

1) True cases (true positive): the pregnant woman who scored 5 or more by GHQ-30 and diagnosed by semi- structured interview (SSI) as psychiatric case.

2) True negative: the pregnant woman who scored less than 5 by GHQ-30 and diagnosed by SSI as normal.
3) False positive: the pregnant woman who scored 5 or more by GHQ-30 and diagnosed by SSI as normal.
4) False negative: the pregnant woman who scored less than 5 by GHQ-30 and diagnosed by SSI as psychiatric case.

The control

120 married non pregnant non puerperal women of the same age group that attend the pediatric care unit of the same primary health centers were randomly selected, by taking every 4th non pregnant women.

Statistical analysis:

SPSS version 18 was used for data entry and analysis. Pearson's Chi square test was used to test for statistical differences between pregnant and control groups for the out-come variable under study. Results are considered significant if P- value < or = 0.05.

Kappa statistics = 0.58 p- value < 0.001, it means that these test – GHQ- 30 and semi structured interview-DSM- IVTR – agreed together in 58 % of results.

Result

Characteristics of sample

Table 1 show that the sample consists of 120 pregnant women The age range was 15-44. With different education levels. The control group consist of 120 non pregnant and non puerperal women. Age range 15-44.

Table 1: Socio-demographic characteristics of the sample

	Pregnant (n=120)		Control (n=120)		P value
	No	%	No	%	
Age 15-24years	64	53.3	47	39.2	0.069
25—34years	43	35.8	52	43.3	

35-44years	13	10.8	21	17.5	
Education Illiterate	8	6.7	11	9.2	0.525
Primary school	39	32.5	37	30.8	
Intermediate school	45	37.5	39	32.5	
Secondary school	20	16.7	18	15.0	
College & Higher	8	6.7	15	12.5	

Table 2 show that the sample consists of 120 pregnant women, 43 of them are primigravidae and 77 are multiparous. 17 in the first trimester, 60 in the second trimester 43 in the third trimester. 35 with bad obstetric history.

Table 2: The obstetrical characteristics of the study group

	No	%
Gravidity Primigravida	43	35.8
Multiparous	77	64.2
Trimester First trimester	17	14.2
Second trimester	60	50.0
Third trimester	43	35.8
Bad Obstetrical history*	35	29.2
Not bad obstetrical history	85	70.8

*infertility, miscarriage, stillbirth, caesarian section.

Table 3 The psychiatric morbidity (true cases) was insignificantly higher in pregnant (40.8%) than control (31.7%).

Table 3: The psychiatric morbidity in pregnant and controls.

Psychiatricmorbidity	Pregnant (n=120)		Control (n=120)		P value
	No	%	No	%	
GHQ-30 Cases	67	55.8	57	47.5	0.197
Not	53	44.2	63	52.5	
SSI † Cases	56	46.7	42	35.0	0.066
Not	64	53.3	78	65.0	
True Cases	49	40.8	38	31.7	0.140
Not	71	59.2	82	68.3	

P value GHO-30 x SSI	0.156	0.049*
P value GHO-30 x True	0.020*	0.012*
P value SSI x True	0.362	0.584

Significant difference using Pearson chi-square test at 0.05 level of significance

† Semi-structured interview DSM-IV TR

1) There is no statistical significant difference in proportion of cases in pregnant women diagnosed by GHQ-30 and SSI (P-value = 0.156) while there is statistical significant difference in proportion of cases in control group diagnosed by GHQ-30 and SSI (P-value= 0.049).
2) There is statistical significant difference in proportion of cases in pregnant women diagnosed by GHQ-30 and true cases (P-value = 0.020), also there is statistical significant difference in proportion of cases in control group diagnosed by GHQ-30 and true cases (P- value= 0.012).
3) There is no statistical significant difference in proportion of cases in pregnant women and control diagnosed by SSI and true cases (P- value = 0.362 & 0.584 respectively.

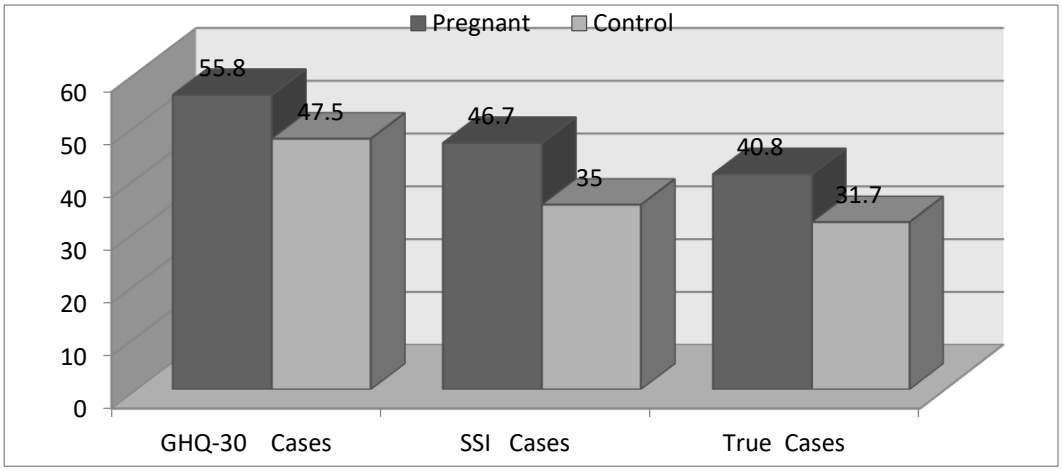

Figure 1: The psychiatric morbidity in pregnant and controls

Table 4 show that depression, anxiety, and mixed anxiety depression are the most common psychiatric disorders in both pregnant and control samples.

Table 4: The distribution of psychiatric disorders (true cases) among pregnant

psychiatric disorders	Pregnant (n=120)		Control (n=120)		P value
	No	%	No	%	
Depression	24	49.0 (20%/total)	20	52.6	0.341
GAD*	11	22.5 (9.2%/total)	9	23.7	0.469
Mixed depression & anxiety	7	14.3	6	15.8	0.606
Phobia	3	6.1	2	5.3	0.549
OCD**	3	6.1	1	2.6	0.258
Psychosis	1	2.0	-	-	-
Total	49	40.8%	38	31.7%	0.140

Significant difference using Pearson chi-square test at 0.05 level of significance.

*Generalized anxiety disorder

** Obsessive compulsive disorder

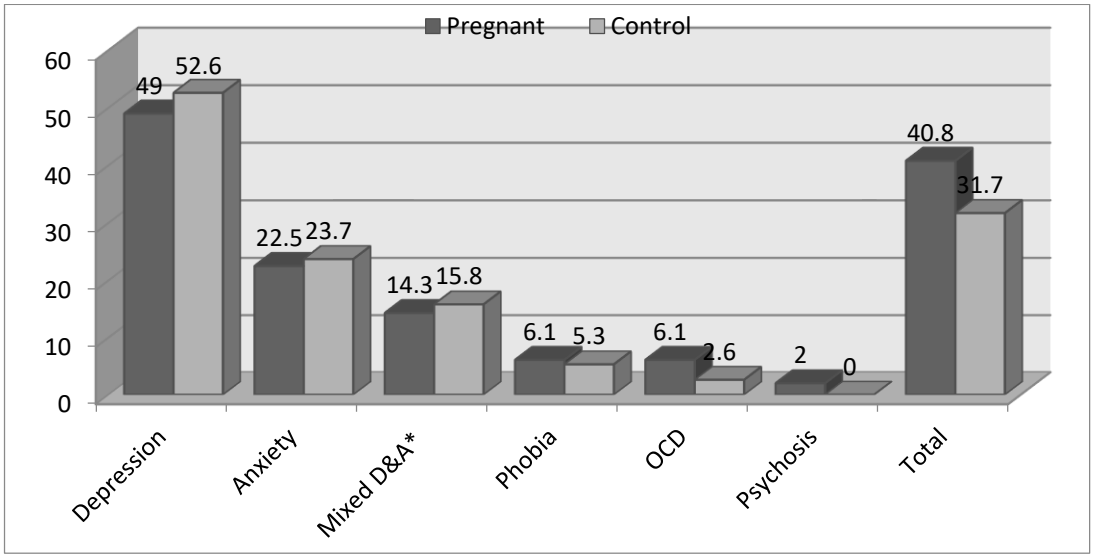

Figure 2: The distribution of psychiatric disorders (true cases) among pregnant

*Mixed anxiety and depression

Table 5 show that psychiatric morbidity is insignificantly higher in first trimester than second trimester and the third was intermediate.

Table 5: The psychiatric morbidity among pregnant according to trimester of pregnancy

Psychiatric morbidity	First trimester (n=17)		Second trimester (n=60)		Third trimester (n=43)		P value
	No	%	No	%	No	%	
True Cases	11	64.7	21	35	17	39.5	0.087
Not	6	35.3	39	65	26	60.5	
Total	17	100%	60	100%	43	100%	

Significant difference using Pearson chi-square test at 0.05 level of significance.

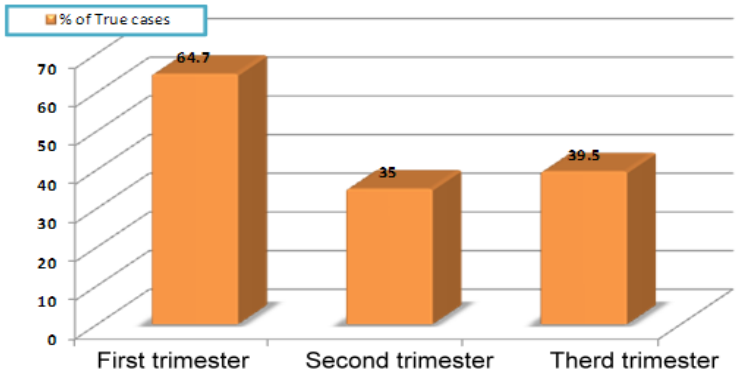

Figure 3: The psychiatric morbidity among pregnant women according to trimester of pregnancy

Table 6 show that depression and anxiety were mostly in first trimester while mixed anxiety depression is in the second trimester.

Table 6: The distribution of psychiatric disorders (true cases) among pregnant women according to trimester of pregnancy

psychiatric disorders	First trimester (n=17)		Second trimester (n=60)		Third trimester (n=43)		P value
	No	%	No	%	No	%	
Depression	6	54.5	10	47.6	8	47.1	0.103
GAD	3	27.3	5	23.8	3	17.6	0.177
Mixed depression&anxiety	1	9.1	5	23.8	1	5.9	0.480
Phobia	1	9.1	1	4.8	1	5.9	0.343
OCD	-	-	-	-	3	17.6	-
Psychosis	-	-	-	-	1	5.9	-
Total	11	64.7%	21	35%	17	39.5%	0.087

Significant difference using Pearson chi-square test at 0.05 level of significance.

Table 7 show that psychiatric morbidity was insignificantly higher in Primigravidae than in multiparous.

Table 7 the psychiatric morbidity among pregnant women according to gravity

Psychiatric morbidity	Primigravida (n=43)		Multiparous (n=77)		P value
	No	%	No	%	
True Cases	19	44.2	30	38.9	0.577
Not	24	55.8	47	61.1	
Total	43	100%	77	100%	

Significant difference using Pearson chi-square test at 0.05 level of significance.

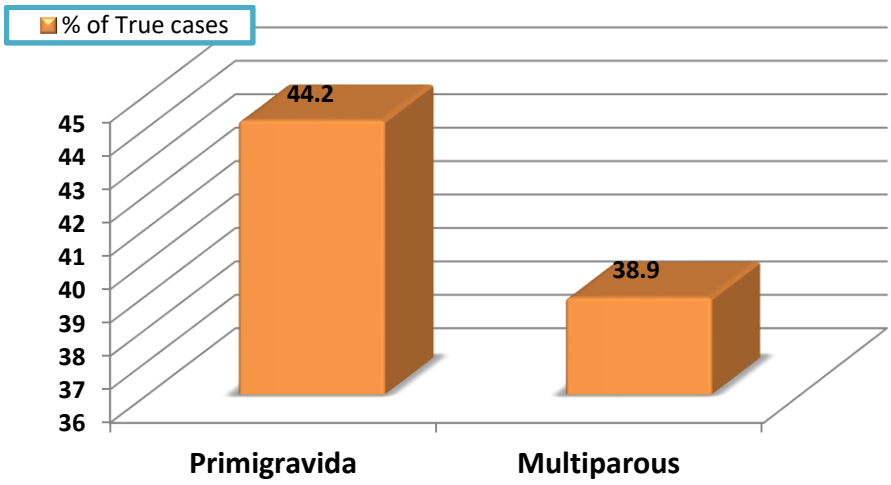

Figure 4: The psychiatric morbidity according to gravidity

Table 8 show that depression was higher in multiparae while anxiety was significantly higher in primigravidae

Table 8: The distribution of psychiatric disorders (true cases) among primigravida and multiparous

psychiatric disorders	Primigravida (n=43)		Multiparous (n=77)		P value
	No	%	No	%	
Depression	6	31.5	18	60.0	0.423
GAD	8	42.1	3	10.0	0.014*
Mixed depression & anxiety	3	15.8	4	13.3	0.631
Phobia	1	5.3	2	6.7	0.987

OCD	1	5.3	2	6.7	0.987
Psychosis	-	-	1	3.3	-
Total	19	44.2%	30	38.9%	0.577

Significant difference using Pearson chi-square test at 0.05 level of significance

Table 9 show that psychiatric morbidity was significantly higher in pregnant women with Bad obstetric history.

Table 9: The psychiatric morbidity according to obstetrical history.

Psychiatricmorbidity	Bad obstetrical history (n=35)		No obstetrical history (n=85)		P value
	No	%	No	%	
True Cases	24	68.6	25	29.4	0.0001*
Not	11	31.4	60	70.6	
Total	35	100%	85	100%	

Significant difference using Pearson chi-square test at 0.05 level of significance.

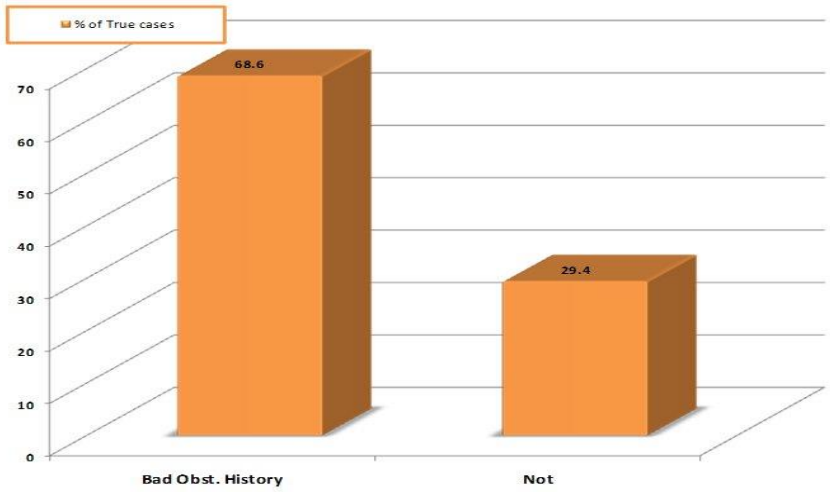

Figure 5: The psychiatric morbidity according to obstetrical history.

Table 10 show that depression, anxiety and phobia were significantly higher in pregnant women with Bad obstetric history.

Table 10: The distribution of psychiatric disorders (true cases) according to obstetrical history

psychiatric disorders	Bad obstetrical history (n=35)		No obstetrical history (n=85)		P value
	No	%	No	%	
Depression	11	45.8 (31.4%/total)	13	52.0 (15.3%/total)	0.002*
GAD	7	29.2 (20%/total)	4	16.0 (4.7%/total)	0.0001*
Mixed depression & anxiety	2	8.3	5	20.0	0.376
Phobia	2	8.3 (5.7%/total)	1	4.0 (4.7%/total)	0.023*
OCD	1	4.2	2	8.0	0.412
Psychosis	1	4.2	-	-	-
Total	24	68.6%	25	29.4%	*o.ooo1

Significant difference using Pearson chi-square test at 0.05 level of significance.

Table 11 show that psychiatric morbidity was higher in illiterate and university group and psychiatric disorders were insignificantly distributed through different educational levels as shown in table 12.

Table 11: The psychiatric morbidity according to level of education.

Psychiatric morbidity	Illiterate (n=8)		Primary school (n=39)		Intermediate school (n=45)		Secondary school (n=20)		College & Higher (n=8)		P value
	No	%	No	%	No	%	No	%	No	%	
True Cases	5	62.5	17	43.6	14	31.1	9	45.0	4	50.0	0.425
Not	3	37.5	22	56.4	31	68.9	11	55.0	4	50.0	
Total	8	100%	39	100%	45	100%	20	100%	8	100%	

Significant difference using Pearson chi-square test at 0.05 level of significance.

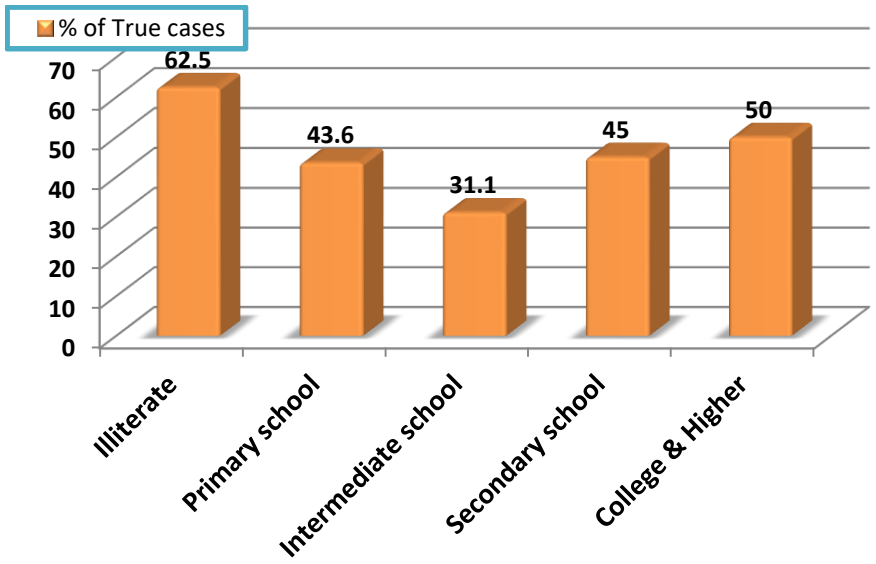

Figure 6: The psychiatric morbidity according to level of education.

Table 12: The distribution of psychiatric disorders (true cases) among pregnant according to level of education

psychiatric disorders	Illiterate (n=8)		Primary school (n=39)		Intermediate school (n=45)		Secondary school (n=20)		College & Higher (n=8)		P value
	No	%	No	%	No	%	No	%	No	%	
Depression	2	40.0	12	70.6	3	21.4	5	55.6	2	50.0	0.101
GAD	2	40.0	4	23.5	2	14.3	2	22.2	1	25.0	0.298
Mixed depress.&anxiety	1	20.0	1	5.9	4	28.6	1	11.1	-	-	0.571
Phobia	-		-		2	14.3	-	-	1	25.0	0.281
OCD	-		-		2	14.3	1	11.1	-	-	0.787
Psychosis	-		-		1	7.1	-	-	-	-	-
Total	5	62.5%	17	43.6%	14	31.1%	9	45.0%	4	50.0%	0.425

*Significant difference using Pearson chi-square test at 0.05 level of significance.

Table 13 show that psychiatric morbidity was higher in age group (15-24) than age group (25-34)and age group (35-44) is the lowest

Table 13: The psychiatric morbidity among pregnants according to age

Psychiatricmorbidity	15-24years (n=64)		25--34 (n=43)		35-44years (n=13)		P value
	No	%	No	%	No	%	
True Cases	28	43.8	17	39.5	4	30.8	0.670
Not	36	56.2	26	60.5	9	69.2	
Total	64	100%	43	100%	13	100%	

Significant difference using Pearson chi-square test at 0.05 level of significance

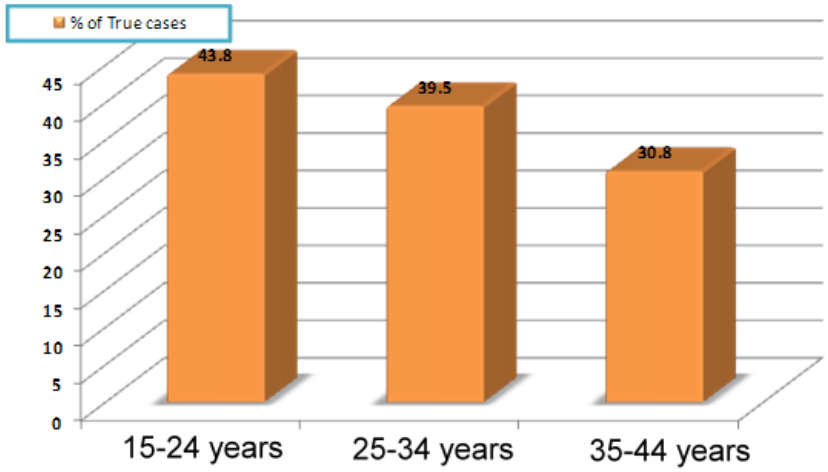

Figure 7: The psychiatric morbidity among pregnant according to age

Table 14. depression and anxiety were higher in age group (15-24) and age group (25-34)

Table 14: The distribution of psychiatric disorders (true cases) among pregnant according to age

psychiatric disorders	<25years (n=64)		25--34 (n=43)		=>35years (n=13)		P value
	No	%	No	%	No	%	
Depression	16	57.1	5	29.4	3	75	0.332
GAD	8	28.6	2	11.8	1	25.0	0.385
Mixed depression&anxiety	2	7.1	5	29.4	-	-	0.137
Phobia	1	3.6	2	11.8	-	-	0.398
OCD	1	3.6	2	11.8	-	-	0.398
Psychosis	-	-	1	5.9	-	-	-

Total	28	43.8%	17	39.5%	4	30.8%	0.670

Significant difference using Pearson chi-square test at 0.05 level of significance.

Discussion

In the present study the psychiatric morbidity in pregnant women was 40.8% is higher than control group 31.7%

This is also the pattern of previous studies like Haki who found psychiatric morbidity was 34.3% in pregnant sample and 27% in control group (Haki, 1996). The difference in the result between this study and the present study may be due to the low socioeconomic status of the region of the present study.

Cox studied two **hundred and sixty three pregnant Ugandan women and 89 non-pregnant, non-puerperal women were interviewed using a semi-structured psychiatric questionnaire. Comparison of psychiatric morbidity between the control group and matched pregnant women showed an increased frequency of psychiatric morbidity in pregnant women** (Cox, 1979).

In the present study the psychiatric morbidity is similar to different previous studies:

Patel, Rodrigues, De Souza, 2002 in India (sample size 270) the pshchiatric morbidity was 42 % (GHQ>5) (Patel, Rodrigues, & DeSouza, 2002)
Rochat et al, 2006 in South Africa (sample size242) the psychiatric morbidity was41 % EPDS > 13 (Rochat & et al, 2006)
Appelby found that psychiatric morbidity was 43.3% (Appelby & et al, 1989)

A retrospective study in a group of women with bipolar mood disorder reported rates of relapse of approximately 50 %. The strongest risk factor for depression during pregnancy is a history of depression. Kielholz attribute that depression occurring during the initial stage of pregnancy is a physiological phenomenon (Viguera & al, 2000) (Dietz, et al., 2007) (Kielholz, 1997).

In the present study 49% of pregnant women with positive psychiatric diagnosis were having depression which is equal to 20% of pregnant sample, these results are

nearly similar to that of Appelby who reported 43% of diagnosed cases (Appelby & et al, 1989) and very similar to Sheila study who reported depression in 20% of his sample (Sheila, 2003).

Limlomwongse, 2006 in Thailand reported depression in 20.5% of his pregnant sample, Fareeha Hamid 2008 in pakistan reported 18% in her pregnant sample (Limlomwongse & Liabsuetrakul, 2006) (Hamid, ASif, & Haider, 2008).

Anxiety disorders are among the most common psychiatric disorders and are more prevalent in women than in men it is therefore probable that a significant number of women suffering from an anxiety disorder will experience a pregnancy in the course of their illness (Kessler & et al, 1994) (Anisa, 2003).

In the present study 22.5% of pregnant women with positive psychiatric diagnosis were having anxiety which is the second most common psychiatric disorder in this study.

Significant correlations between some negative thoughts and anxiety were also obtained. The implication of these results supports the idea that negative cognitive attitudes and beliefs may result in depression or anxiety disorders (Shaugah, 1994).

This study show that mixed anxiety and depression is also common which represent 14.3% of pregnant women with positive psychiatric diagnosis.

Most of the evidence available on obsessive-compulsive disorders in pregnancy is gathered from retrospective studies or case reports (Eve & Cunningham, 2011).

In this study 6.1% of pregnant women with positive psychiatric diagnosis were having obsessive-compulsive disorders.

Yiu reported 4% of his positively diagnosed pregnant women were having obsessive-compulsive disorders (Yiu & et al, 2009).

In this study 2% 0f pregnant women with positive psychiatric diagnosis were having psychosis (schizophrenia)

Yiu reported 8 %of his positively diagnosed pregnant women were having schisophrenia (Yiu & et al, 2009).

Psychiatric disorder is more common in the first and third trimesters of pregnancy than in the second and the third is intermediate (Gelder, 2006).This similar to the result of present study. And this was also the pattern in the studies of Tanks (Tanks, 1976), and Kumar and Robson (Kumar & Robson, 1984).

In the first trimester unwanted pregnancies are associated with anxiety and depression. In third trimester there may be fears about the impending delivery or doubts about the normality of the fetus (Gelder, 2006).

More mothers moved above the threshold for depression between 18 weeks and 32 weeks of pregnancy than between 32 weeks of pregnancy and 8 weeks postpartum (Evans, 2001). This is nearly similar to the pattern of depression in present study in which it is common in second trimester and few weeks before and after it.

Miscarriage may be associated with grief reaction, anxiety and depression at rates four times the norm. For most women, these symptoms are greatest in the first 6 months and resolve spontaneously thereafter (Eve & Cunningham, 2011). This is also similar to present study.

In the present study depression, anxiety and mixed anxiety and depression are higher in first 6 months of pregnancy.

In this present study psychiatric morbidity is significantly higher in primigravidae than multiparous and anxiety is significantly higher in primigravidae. This is also the pattern of the study by Pela who found significantly higher psychiatric morbidity rates in the primigravidae than in the multiparous women, and related it to the anxiety of expecting first baby and lack of experience (Pela, 1981).

Abiodun et al found that psychiatric morbidity was found to be significantly associated with being primigravid (Abiodon, 1993), and this is the pattern of study by SurapoJ Wingwontham (Wingwontham, 2008).

Haki found the morbidity is non significantly higher in primigravidae than multiparous (Haki, 1996), while shafieg found the anxiety disorder is significantly

higher in multiparous (Hussein, 2006) and Zahra ***Alipour*** found that no association was found in psychiatric morbidity during pregnancy and parity (Alipour & Lamyian, 2011).

Loss events specific to pregnancy like infertility, miscarriage, termination of pregnancy, and stillbirth are associated with increase psychiatric morbidity in pregnancy (Eve & Cunningham, 2011). The rate of psychiatric morbidity after spontaneous abortion is four times higher than in the general population of women. Many women showed typical features of grief. Depressive symptoms were significantly associated with a history of previous spontaneous abortion, and less so with childlessness (Friedman, 1889).

In the present study psychiatric morbidity is significantly higher in women with bad obstetric history than those without such history.

This is also the pattern in study of O.A. Abiodun et al who found that psychiatric morbidity was significantly associated with previous history of induced abortion (Abiodon, 1993).

present study show that the psychiatric morbidity according to educational level was non significantly distributed and it is higher in illiterate and college groups than other groups, while Hussein found that the psychiatric morbidity was lower in illiterate and college groups than other groups.

This study shows that the psychiatric morbidity decreases with increasing age of pregnant women; the explanation of this is that the primigravidae is more in young pregnant women.

Abiodun et al found that psychiatric morbidity was associated with younger age (less than 24 years) (Abiodon, 1993).

Hussein found that psychiatric morbidity was decreasing after the age of 30 years (Hussein, 2006).

Conclusions

The psychiatric morbidity was higher in the study group (40.8%) than control groups (31.7%) and Depression, anxiety, and mixed anxiety depression are the most common.

The psychiatric morbidity was higher in first trimester, Primigravidae and younger age group.

The psychiatric morbidity especially depression, anxiety and phobia were significantly higher in pregnant women with bad obstetric history.

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Appendices

Appendix (A)

(GHQ30): استبيان الحالة الصحية العامة

وضع هذا الاستبيان من اجل معرفة حالتك الصحية العامة في الاسابيع القليلة الماضية، واذا ما كانت لديك مشاكل طبية يرجى الإجابة على الأسئلة المدونة على الصفحات الآتية كافة وذلك بوضع خط تحت الجواب المناسب لك. تذكر بأننا نود التعرف إلى الشيء الذي تشكو منه خلال الفترة الماضية، وليس ما كنت تشكو منه في السابق. من المهم أن تحاول الإجابة على الأسئلة كافة، وشكرا جزيلا لحسن تعاملك معنا.

الاسم: **العمر:** **التاريخ:**

محل السكن: **التحصيل الدراسي :** **الحالة الزوجية:**

المهنة: **عدد الأطفال:**

أسم الزوج: **المهنة:**

الوضع الأسري (الأب): □ موجود □ متوفى □ غائب.

الوضع الأسري (الأم): □ موجود □ متوفى □ غائب.

عدد الإخوة والأخوات: **تسلسل المريض:**

تاريخ آخر دورة : **G: P: A:**

١- هل تتمكن من التركيز في كل ما تفعله	أفضل من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
٢-هل قلَّ نومك بسبب الـحَسْبات	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
٣- هل حصلت لك ليالي من الاضطراب وعدم الراحة	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
٤- هل تمكنت من الاستمرار في اشغال نفسك	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
٥- هل خروجك من الدار استمر كالمعتاد	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد

٦- هل تستطيع تدبير أمورك كالآخرين	أحسن من الآخرين	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
٧- هل أنت راض عما أنجزته من أعمال	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
٨- هل تشعر بالرضى بطريقة انجازك لعملك	أكثر قناعة	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
٩- هل تشعر بحرارة العاطفة تجاه من هُم قريبون منك	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
١٠- هل تجد من السهولة انسجامك مع الآخرين	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
- هل تقضي وقتاً طويلاً بالسهر مع الآخرين11	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
١٢- هل تشعر أنك تلعب دوراً نافعاً في الأمور	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
١٣- هل تشعر انك قادر على اتخاذ القرارات في أمورك	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
١٤- هل تشعر انك تحت تأثير الإجهاد المستمر	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
١٥- هل تشعر بعدم القدرة على تجاوز مصاعبك	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
١٦- هل تشعر أنَّ الحياة جهاد ومعاناة مستمرة	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
١٧- هل تشعر بالسعادة في فعالياتك اليومية الاعتادية	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
١٨- هل تتناول الأمور بجدية	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
١٩- هل تشعر بالخوف والرعب من أشياء لا تستوجب ذلك	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
٢٠- هل تستطيع مواجهة مشاكلك	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
٢١- هل تشعر أن الأمور تباغتُك	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
٢٢- هل تشعر بعدم الفرح والكآبة	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
٢٣- هل تشعر بفقدان الثقة بالنفس	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
٢٤- هل تفكر في انك شخص عديم الفائدة	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد

٢٥- هل تشعر أنَّ الحياة لا أملَ فيها	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
26- هل تشعر بالأمل في مستقبلك	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
٢٧- هل تشعر انك على العموم مرتاح	أكثر من المعتاد	كالمعتاد	اقل من المعتاد	اقل كثيراً من المعتاد
٢٨-هل تشعر بالانفعال والتوتر طوال الوقت	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
٢٩- هل شعرت أنَّ الحياة لاتستحق أن تُعاش	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد
٣٠- هل وجدت انك في بعض الأوقات لا تستطيع القيام باي عمل لان اعصابك متعبة	كلا إطلاقاً	ليس أكثر من المعتاد	أكثر من المعتاد	أكثر كثيراً من المعتاد

Appendix (B)

المقابلة شبه المنظمة وفق الميزان

DSM-IV

الفصام والاضطرابات الذهانية الأخرى.*(Schizophrenia and psychotic disorders)*:

١. هل تشعر بأنك كنت تحت سيطرة قوة خارجية؟ وهل تستطيع هذه القوى أن تسير حركاتك من دون إرادتك أو تستطيع أن تستخدم صوتك ؟ وكم استمر ذلك؟
٢. هل كان هنالك من يحاول إيذائك، أشخاص معينون أو جهة معينة؟ وكم استمر ذلك؟
٣. هل كنت تشعر بأنك مراقب؟ ومن قبل من؟ وكم استمر ذلك؟
٤. هل كنت تشعر أن الناس أو أجهزة التلفزيون أو الراديو تلمح إليك أو تقصدك؟ وكم استمر ذلك؟
٥. هل كنت تعتقد ان أفكارك معروفة للآخرين أو منتشرة بينهم؟ وكم استمر ذلك؟
٦. هل كان هنالك من يستطيع أن يقرأ أفكارك؟ وكم استمر ذلك؟
٧. هل كنت تعتقد ان هنالك قوة أو شخص معين استطاع سلب الأفكار من دماغك؟ وكم استمر ذلك؟
٨. هل كنت تعتقد ان أفكار معينة وضعت أو زرعت في رأسك وأنت تعرف إنها ليست ملكك؟ ومن أين أتت تلك الأفكار ؟ وكم استمر ذلك؟
٩. هل حدث ان شعرت أن أفكارك توقفت فجأة ومن دون سابق إنذار بحيث تركت دماغك فارغا؟ وكيف؟ وكم مرة حدث هذا؟ وكم استمر ذلك؟
١٠. هل حدث لك ان سمعت اصواتا لشخص أو أكثر؟ كانوا يتكلمون عليك او يعقبون على تصرفاتك أو يأمروك؟ وهل كنت تنفذ أوامرهم ؟ وكم استمر ذلك؟
١١. هل تلك الأصوات نابعة من خارج دماغك أم من داخلة ؟
١٢. هل تراءت لك صورة أو أشكال لأشخاص أو وجوه أو أشياء أخرى؟ وكم استمر ذلك؟
١٣. هل إن تلك الصور اوالأشكال تراها بعينك أم بخيالك؟ وهل كنت في كامل يقظتك؟
١٤. هل كان الآخرون يسمعون ما تسمع أو يرون ما كنت ترى من تلك الصور والأشكال؟
١٥. هل سبق ان شعرت باحساسات غريبة على جلدك، وما هي وكم استمر ذلك؟
١٦. هل حدث ان شممت مرة رائحة معينة ولكن الاشخاص من حولك لم يشموها؟ ومتى كان ذلك؟
١٧. هل شعرت بمذاق خاص او غريب في فمك؟ ومتى كان ذلك؟

Mood Disordersاضطرابات الوجدان

الاكتئاب(Depressive disorders):

١. كيف كان مزاجك خلال تلك الفترة؟ وهل كان يتغير خلال اليوم الواحد؟ وكيف كان يلاحظ الاخرون؟ وكم استمر ذلك؟
٢. هل كنت تجد متعة في الفعاليات التي كنت تمارسها يوميا؟ وهل كان لديك اهتمام بها؟
٣. هل حصل ان زاد او نقص وزنك؟ وكم هو مقدار الزيادة والنقصان؟ وما هي الفترة التي استغرقها؟
٤. هل حصل ان زادت او قلت شهيتك للطعام؟ وهل لاحظ الاخرون ذلك؟ وكم استغرق ذلك؟
٥. هل كان هناك تغيير في نومك؟ وكيف كان التغيير؟ وهل كان يحصل يوميا؟ وكم استمر ذلك؟
٦. هل كان يحصل لك تهيُّج او بطء نفسي وحركي؟ وهل لاحظ الاخرون ذلك؟ وكم استمر ذلك؟
٧. هل لديك شعور بعدم جدوى الحياة؟ وهل كنت تعشر بالذنب؟ وما هو؟
٨. هل حصل وان قلت قدرتك على التفكير او اتخاذ القرارات؟ وهل حصل ذلك يوميا؟ وكم استمر ذلك؟
٩. هل كانت تراودك افكار الموت او افكار انتحارية؟ وهل حاولت الانتحار او كانت لديك خطة للانتحار ؟ وما هي؟
١٠. هل حصل ان فقدت شخصا او شيئا عزيزا قبل حدوث هذه التغييرات؟

اضطرابات القلق (Anxiety disorders):

١. هل كانت لديك توقعات ناشئة عن الخوف او مرتبطة به؟
   a. هل كنت شديد الانفعال او حاد الطبع.
   b. هل كان لديك تحسس من الضوضاء؟
   c. هل كنت تشعر بعدم الاستقرار والسكنية؟
   d. هل كانت أفكارك قلقلة ومضطربة؟

٢. هل حصل أن شعرت بالأعراض الآتية:

صعوبة في البلع، انزعاج في منطقة المعدة، ريح البطن، خروج البطن اللين والمتكرر، جفاف الفم، ضيق في الصدر، صعوبة في استنشاق الهواء، زيادة في معدل التنفس، خفقان القلب، تبول اضطراري او متكرر، فشل في انتصاب القضيب، اضطراب الدورة الشهرية، ارتعاش اليد، طنين في الاذن، دوار، صداع، الم العضلات، رعب في إثناء النوم).

٣. هل كانت الاعراض في الفقرة (١و٢) تحدث باستمرار او في فترة محدودة؟ وهل هي مرتبطة بظروف او مواقف معينة؟ وهل تقوم بتجنب المواقف التي تثير هذه الاعراض؟

الرهاب **(phobia):**

١. هل لديك خوف من شيء معين ؟
٢. هل هذا الخوف غير مبرر بالنسبة للحدث ؟
٣. هل هذا الخوف يجعلك تهرب من الشيء الذي تخاف منه ؟
٤. هل لديك خوف من الاماكن المزدحمة و الاسواق و الاماكن المرتفعة ؟

الوساوس القهرية (**Obsessive-compulsive disorder**):

١. أ: هل تجد أن أفكار سخيفة أو غير معقولة تتردد في ذهنك

ب: هل تحاول أن تستجيب أو تقاوم هذه الأفكار

ج: هل هذه الأفكار خاصة بك

٢. هل هذه الأفكار تضطرك لعمل معين وعندما تقوم به تشعر بالراحة ، هل تعرف أن عملك غير معقول ، هل تجد نفسك تراجع الأعمال التي قمت بها مرارا ً دون سبب.

خلال المقابلة مع المريض يتم ملاحظة ما يأتي من قبل الفاحص:

١. اضطراب الأفكار ويتضمن تداخل أو تفكك الأفكار، فقر محتوى الكلام، فقدان القدرة على التجريد، تطاير الأفكار.
٢. اضطراب السلوك اللفظي أو النطقي ويتضمن:
   a. المواظبة (نفس الإجابة لمختلف الأسئلة)
   b. استعمال لفظة جديدة ذات معنى خاص
   c. الترديد المرضي لما يقوله الآخرون.

d. كثير الكلام ووجود دافع وضغط لكي يتكلم.
e. كلام مشوش ومسهب وكثير الاستعارات والتشبيهات المتحذلقة.

٣. هل من السهولة صرف انتباه المريض بواسطة منبهات خارجية غير مهمة وليس لها علاقة بالموضوع.
٤. تصرفات المريض وهيأته الخارجية؟ وهل يبالغ أو لا يستطيع تنسيق ملابسه؟ وهل ان حركاته غير اعتيادية؟ وهل يتكلم مع نفسه؟
٥. ملاحظة الأعراض السلبية: تبلد الوجدان؟ انعدام العاطفة أو الانفعال، عاطفة غير متناغمة، البطء الحركي.
٦. والفكري، الانعزال الاجتماعي.