



PREVALENCE OF DEPRESSION IN GYNECOLOGICAL OUTPATIENTS IN BASRA CITY

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ABSTRACT

Background: Depression is an important mental health problem that may be underrecognized among women presenting with gynecological complaints. This study aimed to determine the prevalence of depressive disorder among women attending gynecological outpatient clinics and assess its association with selected sociodemographic characteristics. **Methods:** A case-control study was conducted at gynecological outpatient clinics of Al-Basra General Hospital and Al-Basra Obstetric and Pediatric Hospital from May to August 2011. The study included 150 gynecological patients and 150 age-matched controls. Depression was assessed using the International Diagnostic Checklist for ICD-10. Data were analyzed using SPSS version 17, with a P value ≤ 0.05 considered statistically significant. **Results:** Depression was identified in 46.6% of gynecological patients compared with 18.7% of controls. Among depressed patients, 28.6% had mild, 34.3% moderate, and 37.1% severe depression. Depression was not significantly associated with age or educational level. However, higher frequencies were observed among unemployed, single or divorced/widowed, and rural-residing patients. Reduced energy (94.4%), depressed mood (91.2%), and sleep disturbance (90.0%) were the most frequent symptoms among depressed patients. **Conclusion:** Depression was common among gynecological outpatients and was associated with employment, marital status, and residence. Greater attention to recognition and assessment of depression in gynecological outpatient settings is warranted.

KEYWORDS: Depression; Gynecological outpatients; Prevalence; Sociodemographic factors.**INTRODUCTION**

Depression is a major public health concern and represents an important cause of morbidity, disability, impaired functioning, and increased healthcare utilization worldwide.^[1,2] Depressive disorders encompass several clinical conditions, including major depression, atypical major depression, dysthymia, and minor depression, which differ in their severity, duration, and clinical manifestations.^[3,4] Major depressive disorder may occur as a unipolar condition or as the depressive phase of bipolar disorder and is characterized by persistent low mood, loss of interest or pleasure, and associated cognitive, behavioral, and somatic symptoms that can substantially interfere with daily functioning.^[3] Depression has particular importance among women because major depressive disorder occurs approximately

twice as frequently in women as in men, and women may experience more recurrent and prolonged depressive episodes.^[5,6] Several biological and psychosocial mechanisms have been proposed to explain this difference, including hormonal influences, reproductive events, psychosocial stressors, and differences in social circumstances.^[5,7] Female-specific or predominantly female risk factors include limited social support, lower educational attainment, caring for young children, unemployment, marital instability, feelings of helplessness, and coexisting anxiety or somatization disorders.^[8] Women may be particularly vulnerable to depressive symptoms during specific stages of the reproductive life cycle, including adolescence, the premenstrual period, pregnancy, the postpartum period, and the menopausal transition.^[10] The lifetime

prevalence of major depressive disorder among women has been estimated at 10–25%.^[11] Depression during pregnancy has also been reported in both developed and lower-income settings, while postpartum depression represents another important reproductive-related mental health problem.^[11] During perimenopause, fluctuations in reproductive hormones, vasomotor symptoms, sleep disturbance, changes in libido, and other physical and psychosocial changes may contribute to increased vulnerability to mood disturbances.^[12] Gynecological clinics therefore provide an important setting for identifying depression among women. Obstetric and gynecological practice routinely addresses emotionally sensitive issues, including contraception, infertility, pregnancy, childbirth, pregnancy loss, menstrual disorders, and menopause.^[13] Psychiatric disorders, especially depressive disorders, have consequently been reported frequently among women attending gynecological services.^[14] For many women, particularly younger and lower-income women, obstetric and gynecological services may also represent an important source of primary healthcare.^[15] Despite its clinical importance, depression frequently remains unrecognized and untreated. Approximately 30–50% of depressed outpatients may not be identified^[16], partly because depression can present through nonspecific somatic complaints such as fatigue, headache, dizziness, pain, palpitations, or menstrual-related complaints.^[17] Improving recognition of depressive disorders in gynecological settings is therefore important for timely diagnosis and appropriate management. Accordingly, this study aimed to determine the prevalence of depressive disorder among women attending gynecological clinics and to examine its relationship with age, marital status, occupation, educational level, and residence.

METHODS

Study Design and Setting

A case-control study was conducted among women attending the gynecological outpatient clinics of Al-Basra General Hospital and Al-Basra Obstetric and Pediatric Hospital, Basra, Iraq. Data collection was carried out from May 1 to August 31, 2011.

Study Population and Sampling

The study included 300 women divided into two groups. The case group comprised 150 women attending the gynecological outpatient clinics, while the control group consisted of 150 age-matched women from the general population who were recruited from relatives accompanying children attending pediatric clinics during the same study period. Participants were aged >15 years. Cases were selected using systematic sampling, whereby every third woman attending the gynecological clinic was invited to participate.

Women aged >15 years attending either of the two gynecological outpatient clinics were eligible for

inclusion. Women with depression secondary to an organic disorder or substance abuse and those diagnosed with hypomania or mania were excluded.

Assessment of Depression

All participants were interviewed after obtaining informed consent. Depression was assessed using the International Diagnostic Checklist based on the International Classification of Diseases, 10th Revision (ICD-10). The questionnaire was translated into Arabic by Dr. Akeel Al-Sabbag and Dr. Qaiser Al-Naddawi, a psychiatrist at Al-Basra Teaching Center.

According to the ICD-10 criteria, participants were classified as having no, mild, moderate, or severe depression. Participants with fewer than four depressive symptoms were classified as having no major depressive disorder. Mild depression required at least four symptoms, including at least two of the three core symptoms. Moderate depression required at least six symptoms, including at least two core symptoms, whereas severe depression required at least eight symptoms, including all three core symptoms.

Statistical Analysis

Data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS), version 17.0. Categorical variables were summarized using frequencies and percentages. Associations between categorical variables were examined using the chi-square test, where appropriate. Statistical significance was defined as a two-sided P value ≤ 0.05 .

RESULTS

Table 1 presents the sociodemographic characteristics of the study groups. Younger women constituted a relatively large proportion of both groups, with 25.3% of patients and 24.0% of controls aged 15–23 years. More than half of both patients (56.0%) and controls (58.7%) were married. Primary education was the most frequently reported educational level among patients (34.7%), whereas university/institute education predominated among controls (41.3%). Most participants lived in urban areas, although rural residence was more frequent among patients than controls (38.0% vs. 18.0%).

Table 1: Sociodemographic characteristics of gynecological patients and controls.

Characteristic	Patients (n=150), n (%)	Controls (n=150), n (%)
Age group (years)		
15–23	38 (25.3)	36 (24.0)
24–32	37 (24.7)	30 (20.0)
33–41	34 (22.7)	29 (19.3)
42–50	23 (15.3)	28 (18.7)
≥51	18 (12.0)	27 (18.0)
Marital status		
Married	84 (56.0)	88 (58.7)
Single	44 (29.3)	50 (33.3)
Divorced/widowed	22 (14.7)	12 (8.0)
Educational level		
Illiterate	27 (18.0)	13 (8.7)
Primary	52 (34.7)	22 (14.7)
Intermediate	22 (14.7)	26 (17.3)
Secondary	28 (18.7)	27 (18.0)
University/institute	21 (14.0)	62 (41.3)
Occupation		
Employed	69 (46.0)	51 (34.0)
Unemployed	66 (44.0)	69 (46.0)
Student	15 (10.0)	30 (20.0)
Residence		
Urban	93 (62.0)	123 (82.0)
Rural	57 (38.0)	27 (18.0)

Values are presented as number (percentage).

Depression was identified in 46.6% of women attending gynecological outpatient clinics compared with 18.7% of controls. Among depressed patients, severe depression was the most frequent category (37.1%), followed by moderate (34.3%) and mild depression (28.6%). Among

depressed controls, moderate depression was most frequent (42.9%). Overall, moderate-to-severe depression accounted for 71.4% of depression among gynecological patients. As in table 2.

Table 2: Prevalence and severity of depression among gynecological patients and controls.

Depression status	Patients, n (%)	Controls, n (%)
Overall depression		
Depression present	70 (46.6)	28 (18.7)
No depression	80 (53.4)	122 (81.3)
Severity among depressed participants	n=70	n=28
Mild	20 (28.6)	9 (32.1)
Moderate	24 (34.3)	12 (42.9)
Severe	26 (37.1)	7 (25.0)

The prevalence of depression among gynecological patients was highest in the youngest age group (52.8%) and lowest among women aged ≥51 years (38.9%). A similar numerical pattern was observed among controls; however, age was not significantly associated with

depression in either group ($P=0.10$). Depression also tended to be more frequent among women with lower educational attainment, but educational level was not significantly associated with depression ($P=0.10$). as in table 3.

Table 3: Association of age and educational level with depression among patients and controls.

Variable	Patients with depression, n/N (%)	Controls with depression, n/N (%)
Age group (years)		
15–23	20/38 (52.8)	9/36 (25.0)
24–32	17/37 (45.9)	6/30 (20.0)
33–41	16/34 (47.3)	5/29 (17.2)
42–50	10/23 (43.5)	4/28 (14.3)
≥51	7/18 (38.9)	4/27 (14.8)
P value	0.10	0.10

Educational level		
Illiterate	14/27 (51.9)	7/30 (23.4)
Primary	26/52 (50.0)	8/34 (23.5)
Intermediate	9/22 (40.9)	6/27 (22.2)
Secondary	13/28 (46.4)	4/31 (12.9)
University/institute	8/21 (38.1)	3/28 (10.7)
P value	0.10	0.10

P values are the chi-square results reported in the original study.

Depression varied according to occupation, marital status, and residence. Among gynecological patients, depression was more frequent among unemployed women (55.2%) than employed women (28.2%), with a reported $P=0.05$. Depression was also more frequent among single (54.1%) and divorced/widowed women

(53.3%) than married women (41.8%), with $P=0.05$. The strongest association was observed for residence: 63.2% of rural patients had depression compared with 36.6% of urban patients ($P=0.001$). Among controls, depression was likewise more frequent among rural than urban women (55.6% vs. 10.6%, $P=0.001$). as in table 4.

Table 4: Association of occupation, marital status, and residence with depression.

Variable	Patients with depression, n/N (%)	Controls with depression, n/N (%)
Occupation		
Employed	11/39 (28.2)	6/51 (13.5)
Unemployed	53/96 (55.2)	17/69 (24.5)
Student	6/15 (40.0)	5/30 (16.7)
P value	0.05	0.05
Marital status		
Married	39/94 (41.8)	16/88 (18.2)
Divorced/widowed	8/15 (53.3)	7/32 (21.9)
Single	23/41 (54.1)	5/30 (16.6)
P value	0.05	0.05
Residence		
Urban	34/93 (36.6)	13/123 (10.6)
Rural	36/57 (63.2)	15/27 (55.6)
P value	0.001	0.001

Reduced energy and sleep disturbance were the most frequently reported symptoms in the overall gynecological sample, each occurring in 76.0% of patients. Among women classified as depressed, reduced energy was the most frequent symptom (94.4%), followed by depressed mood (91.2%) and sleep

disturbance (90.0%). Appetite disturbance was reported by 77.1%, while suicidal thoughts or acts were reported by 44.3% of depressed patients. Low self-confidence was the least frequently reported symptom (15.7%). As in table 5.

Table 5: Frequency of depressive symptoms among gynecological outpatients.

Depressive symptom	All patients (n=150), n (%)	Depressed patients (n=70), n (%)
Depressed mood	96 (64.0)	64 (91.2)
Loss of interest	59 (39.3)	40 (57.1)
Reduced energy	114 (76.0)	66 (94.4)
Low self-confidence	11 (7.3)	11 (15.7)
Guilt/self-blame	42 (28.0)	27 (38.6)
Suicidal thoughts/acts	45 (30.0)	31 (44.3)
Poor concentration/indecisiveness	71 (47.3)	42 (60.0)
Psychomotor agitation/retardation	69 (46.0)	41 (58.6)
Sleep disturbance	114 (76.0)	63 (90.0)
Appetite disturbance	96 (64.0)	54 (77.1)

Among all controls, sleep disturbance was the most frequently reported symptom (40.0%), followed by reduced energy (36.0%) and appetite disturbance (30.0%). Among controls classified as depressed, reduced energy (92.3%), depressed mood (88.5%), and sleep disturbance (84.6%) were the predominant

symptoms. Low self-confidence was the least frequently reported symptom (11.5%). As in table 6.

Table 6: Frequency of depressive symptoms among controls.

Depressive symptom	All controls (n=150), n (%)	Depressed controls*, n (%)
Depressed mood	31 (20.7)	23 (88.5)
Loss of interest	11 (7.3)	9 (34.6)
Reduced energy	54 (36.0)	24 (92.3)
Low self-confidence	3 (2.0)	3 (11.5)
Guilt/self-blame	16 (10.7)	12 (46.2)
Suicidal thoughts/acts	11 (7.3)	10 (38.4)
Poor concentration/indecisiveness	26 (17.3)	9 (34.6)
Psychomotor agitation/retardation	35 (23.3)	17 (65.4)
Sleep disturbance	60 (40.0)	22 (84.6)
Appetite disturbance	45 (30.0)	17 (65.3)

*Verification required: the original manuscript reports 28 controls with depression, but the percentages in this column appear to use a denominator of 26 (e.g., 23/26 = 88.5%). These values should be checked against the original dataset before publication.

DISCUSSION

The present study demonstrated a high burden of depressive disorder among women attending gynecological outpatient clinics, with a prevalence of 46.6%, compared with 18.7% among controls. This finding indicates that depressive symptoms are considerably more frequent among women presenting with gynecological complaints. The observed prevalence is comparable to the 45% reported by Miranda et al.^[18], but higher than the 26% reported by Chaturvedi et al.^[13] and the 27% reported by Sundström et al.^[14] Differences between studies may reflect variations in study populations, sample size, clinical setting, and instruments used to identify depression. Screening instruments incorporating somatic manifestations may produce higher estimates because symptoms such as fatigue, sleep disturbance, and appetite changes can overlap with gynecological complaints. This overlap may also increase the possibility of false-positive screening results and emphasizes the importance of appropriate clinical assessment following a positive screen.^[19] Another important finding was the severity of depression among affected gynecological patients. Approximately 71.4% of depressed patients had moderate-to-severe depression, whereas only 28.6% had mild depression. This suggests that depression among women attending gynecological clinics may represent clinically important morbidity rather than only minor psychological distress. Miranda et al.^[18] reported severe depression in approximately 48% of affected patients. Differences in severity across studies could be related to differences in socioeconomic circumstances, healthcare access, study populations, and diagnostic methods. No statistically significant association was observed between depression and either age or educational level. Nevertheless, depression was numerically highest among patients aged 15–23 years and tended to decrease in older age groups. Slade et al.^[20] similarly reported greater psychological morbidity among younger gynecological patients. Although women with lower educational attainment in the present study generally showed higher proportions of depression, the association did not reach statistical significance. This differs from Rickert et al.^[21], who reported an association between lower educational attainment and depressive

symptomatology. The lack of statistical significance in the present study may partly reflect the relatively limited sample size. Occupation, marital status, and residence showed stronger relationships with depression. Depression was reported in 55.2% of unemployed gynecological patients compared with 28.2% of employed patients. This pattern is consistent with Rickert et al.^[21] and may reflect the potential psychological and social benefits associated with employment, including independence, social interaction, and a sense of competence. Depression was also more frequent among single (54.1%) and divorced/widowed (53.3%) patients than among married women (41.8%). This finding is consistent with reports by Slade et al.^[20] and Surtees et al.^[22], suggesting an association between marital circumstances and psychiatric morbidity. Furthermore, rural residence showed a particularly strong association with depression: 63.2% of rural gynecological patients were depressed compared with 36.6% of urban patients. This finding agrees with Chaturvedi et al.^[13], who also reported greater depressive morbidity among women from rural areas. Regarding the clinical presentation, reduced energy was the most frequent symptom among depressed gynecological patients (94.4%), followed by depressed mood (91.2%) and sleep disturbance (90.0%). These findings are consistent with the symptom patterns described by Sundström et al.^[14] Overall, the findings emphasize the substantial burden of depression among gynecological outpatients and support greater attention to recognition of depressive symptoms in gynecological clinical settings.

CONCLUSION

The study demonstrated a high prevalence of depressive disorders among women attending gynecological outpatient clinics. Depression was more frequently observed among unemployed, single or divorced/widowed, and rural-residing women, highlighting the association of employment status, marital status, and residence with depression. These findings emphasize the importance of early recognition and appropriate assessment of depressive symptoms in gynecological outpatient settings, where depression may otherwise remain underrecognized and untreated.

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