RESEARCH PAPER

Screening of Psychological Distress in Peri and Postmenopausal Women in Tertiary Care Setting

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Abstract

Background

Psychological discomfort such as depression and anxiety is rapidly being recognised as a major health problem for peri- and post-menopausal women. Hormonal changes during the menopausal transition are associated with emotional, cognitive and behavioural changes that have a profound effect on quality of life. While there is increasing evidence on the burden of menopausal depression, psychological symptoms are still under-recognized and under-diagnosed in normal gynaecological practice, particularly in low- and middle-income countries. Early detection using proven screening technologies may allow for early intervention and improved clinical results. The purpose of the present study was to find out the proportion of undiagnosed psychological distress in peri- and post-menopausal women attending a tertiary care hospital using Patient Health Questionnaire-9 (PHQ-9) and Menopause Depression (MENO-D) screening scale.

Methodology

This hospital based cross-sectional analytical study was conducted on 382 peri- and post-menopausal women of 45–60 years of age who visited the Maternal and Child Health Out Patient Department of Pakistan Institute of Medical Sciences (PIMS), Islamabad. The participants were selected by successive sampling. Socio-demographic information, reproductive and clinical factors, awareness of menopause, depression screening using PHQ-9 and the MENO-D scale were obtained using a structured interviewer-administered questionnaire. Women with PHQ-9≥10 were further assessed using the MENO-D test. Data were analysed using IBM SPSS Statistics version 26.0. Descriptive statistics, chi-square tests, independent t-tests, and binary logistic regression analyses were performed and statistical significance was determined at $p < 0.05$.

Results

Mean age was 51.4 ± 4.3 years and 56.0% of the individuals were postmenopausal. 30.9% of subjects reported clinically significant psychological distress (PHQ-9 ≥10). Among this group, 73.7% had never been diagnosed or treated for depression before and were classed as having undiscovered psychological distress. The most prevalent symptoms mentioned were sleep disturbance (61.0%), hot flashes (58.6%), irritability (75.4%), anxiety (72.9%) and diminished motivation (62.7%). Lower education level, absence of adequate knowledge about menopause, moderate to severe sleep disturbance, and past psychiatric history were independently linked with undiscovered psychological distress ($p < 0.05$).

Conclusion

Psychological distress was widespread among peri- and postmenopausal women with a large proportion of cases staying unreported despite contact with tertiary healthcare providers. Routine mental health screening with the PHQ-9, complemented with menopause-specific assessment with the MENO-D scale, should be included into normal gynaecological practice to assist early diagnosis and prompt care. Public health initiatives to enhance menopausal awareness and integration of mental health services into normal menopause treatment may help to minimise the

burden of untreated psychological problems and improve the quality of life of middle-aged women.

Keywords: Depression; Menopause; Mental health screening; MENO-D; Perimenopause; PHQ-9; Postmenopause; Psychological distress; Women's health; Cross-sectional study.
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.Introduction

Menopause is a normal biological change that is defined by permanent cessation of menstruation due to the steady fall in ovarian follicular activity and oestrogen production. It usually occurs in women between the ages of 45 and 55 years and signifies the end of the reproductive life span of a woman. Menopause is a normal physiological process. But the hormonal changes that occur throughout the menopausal transition can profoundly affect physical, psychological, and social well-being. The worldwide growth of life expectancy has led to women spending over one third of their lives in the postmenopausal era and menopause health is becoming a more and more serious public health issue worldwide [1].The menopausal transition is accompanied with many symptoms that affect multiple organ systems. The most well-known symptoms are vasomotor symptoms (VMS) such as hot flashes and night sweats. Psychological symptoms such as depressed mood, anxiety, irritability, emotional instability, sleep disturbances, concentration problems, memory problems, and lack of motivation are equally common and often have a more negative impact on quality of life than physical symptoms [1,2]. These psychological problems often interfere with interpersonal relationships, work performance, everyday functioning and general life satisfaction but are still often underestimated in everyday clinical practice.

There is growing evidence that the menopausal transition is a sensitive period for the development of psychological distress and depressive disorders. Hormonal changes involving oestrogen and progesterone affect neurotransmitter systems, including serotonin, dopamine, and norepinephrine pathways, which govern mood and emotional stability. Thus women in the menopausal transition have a significantly increased risk of sadness, anxiety and emotional disorders compared with premenopausal women [2]. According to the Study of Women's Health Across the Nation (SWAN) data, women in the perimenopausal stage are two to three times more likely to experience clinically severe depression symptoms than women in the premenopausal stage. Additionally, women with a history of depression are particularly vulnerable to recurrence in menopause with recurrence rates surpassing 60 % against roughly 28 % in women without prior depressive episodes [1].There is growing recognition of menopausal depression as a major factor in diminished quality of life, poor physical health, increased health care utilisation, and lower work productivity. A recent systematic review examining the association between menopause and common mental disorders found that rates of depression and anxiety were significantly higher in perimenopausal women than premenopausal women, supporting the concept that menopause itself is an independent period of increased psychological vulnerability [2]. Similarly, population-based studies in Jordan indicated a significant prevalence of mental symptoms in postmenopausal women and found early menopause, chronic medical disorders and socioeconomic characteristics to be important predictors of psychological distress [3]. These data imply that mental health difficulties during menopause are not just a Western issue but a worldwide healthcare problem.Despite the significant incidence of psychiatric symptoms, depression in menopausal women is typically undetected and mistreated. Many women don't think of mood changes, exhaustion, irritability and sleep disruptions as signs of curable mental health conditions but rather as part of normal ageing or menopause itself. Similarly, during normal gynaecological visits, the healthcare providers are likely to focus on the physical issues and ignore emotional and psychological concerns. Menopausal depression is under-recognized and poorly treated and a delayed diagnosis leads to extended suffering, reduced social functioning and lower overall health outcomes [4] said Kulkarni et al. Thus, early detection of psychological discomfort is important to provide prompt intervention and improve quality of life.Routine screening has been suggested as an effective technique to identify women at risk of depression throughout the menopausal transition. Recently, the International Federation of Gynaecology and Obstetrics (FIGO) proposed that mental health screening should be incorporated in the normal care of women attending menopausal clinics and gynaecological facilities [5]. The Patient Health Questionnaire-9 (PHQ-9) is one of the most commonly validated tools to screen depression in primary care and hospital settings, simple, reliable and with a great diagnostic performance. However, the original PHQ-9 was developed for the adult

population, and may not adequately reflect a number of menopause-specific psychological manifestations such as irritability, emotional lability, low motivation, memory impairment and cognitive complaints that often accompany hormonal changes during midlife [5].To overcome these constraints screening devices specifically for menopause have been created. The MENO-D Scale is a validated instrument specifically intended for the assessment of psychological symptoms related to menopause. The MENO-D screens for twelve symptom domains: depressed mood, anxiety, irritability, reduced motivation, diminished self-esteem, social withdrawal, impaired concentration, memory difficulties, sleep disturbances, sexual dysfunction, physical complaints, and loss of enjoyment, distinguishing it from traditional depression screening instruments. Research has demonstrated that integrating general depression screening tools with menopause-specific instruments improves both the detection of psychological distress among menopausal women and enables more complete clinical assessment [4,5].The increase in psychological distress during menopause is affected by different biological, clinical and lifestyle factors. Chronic medical diseases such as diabetes mellitus, hypertension, cardiovascular disease and thyroid disorders increase vulnerability to depression through physiological and psychological factors. Sleep problems, vasomotor symptoms, obesity, chronic pain, substance use, and past psychiatric disease further heighten psychological morbidity [3,6]. Nutritional status has also been recognised as a significant factor of emotional well-being. A recent scoping study showed substantial links between dietary patterns and depressive symptoms in peri- and postmenopausal women, suggesting that a balanced diet may be crucial for psychological health throughout the menopausal transition [6]. Moreover, menopausal hormone therapy has been shown to have a positive effect on mood in selected women, however decisions regarding treatment should be individualised after careful consideration of risks and benefits [7].In low- and middle-income countries, the burden of unrecognised psychological distress may be even higher due to insufficient mental health resources, inadequate screening procedures, social stigma around psychiatric illness and poor awareness regarding menopause-related emotional symptoms. Studies in basic health care settings have demonstrated that about half of patients with depression are missed in normal clinical consultations. Women often present to medical care with somatic problems with undetected underlying psychological suffering. As a result, many still suffer from prolonged symptoms without proper counselling or treatment, leading to greater functional impairment and lower quality of life [4]. Tertiary care facilities offer a significant chance to identify these women as they are often referral centres for persons with complex menopausal symptoms.Although international guidelines are increasingly recommending frequent mental health screening in the menopausal years, there is limited research on the extent of undiscovered psychological distress in peri- and post-menopausal women in Pakistan. Most of the published research have examined the prevalence of menopausal symptoms, not the amount of unrecognised depression, and have not routinely employed established screening tools. Furthermore, there is a lack of studies comparing the performance of general depression screening tools and menopause-specific psychological evaluation measures in tertiary healthcare settings. The generation of local evidence is vital to design effective screening procedures and to guide health care policy for the integration of mental health assessment into normal menopausal treatment.Therefore, the present study was conducted to find out the proportion of undetected psychological distress in peri- and post-menopausal women attending Maternal and Child Health Outpatient Department of Pakistan Institute of Medical Sciences (PIMS), Islamabad using Patient Health Questionnaire-9 (PHQ-9) and MENO-D screening scale. The study also examined socio-demographic, reproductive, clinical and health related factors linked with undiscovered psychological distress. The findings are expected to provide evidence to increase routine mental health screening during menopause and improve comprehensive women's healthcare services in tertiary care settings.

Methodology

The present study was a hospital based cross-sectional analytical study conducted at Maternal and Child Health Out Patient Department (MCH OPD) of Pakistan Institute of Medical Sciences (PIMS), Islamabad to determine the proportion of undetected psychological distress among peri- and post-menopausal women using Patient Health Questionnaire-9 (PHQ-9) and Menopause Depression (MENO-D) screening scale. The study was carried out over a period of four months including participant recruiting and data collecting, data entry and statistical analysis.Study population The study population consisted of peri- and postmenopausal women aged 45–60 years who presented to the MCH OPD during the study period. Women who were perimenopausal were characterised as having irregular menstrual cycles with variability in cycle duration surpassing 7 days and women who were postmenopausal were defined as having spontaneous cessation of menses for at least 12 consecutive

months. Women who were able to give a written informed permission were eligible for participation. Women with surgical menopause within 1 year of bilateral oophorectomy or hysterectomy, known breast cancer or endometrial hyperplasia, current hormone replacement therapy users, pregnant or lactating women, those who had pre-existing major psychiatric disorders such as schizophrenia or bipolar disorder and were on active treatment, and women with cognitive impairment that interfered with completing the questionnaires were excluded from the study.Sample size was calculated using the World Health Organisation (WHO) Sample Size Calculator and was found to be 382 participants. Consecutive sampling was applied and all eligible women attending the outpatient department during the study period were invited to participate in the study till the required sample size was obtained.Data were obtained using a structured interviewer delivered questionnaire designed for the purpose of the study. The questionnaire was structured into several sections, namely informed consent and participant information, socio-demographic characteristics, presenting complaints, reproductive and obstetric history, knowledge of menopausal transition, clinical and health-related characteristics, Patient Health Questionnaire-9 (PHQ-9), Menopause Depression (MENO-D) scale, and evaluation of undetected psychological distress. Socio-demographic variables consisted of age, education, occupation, marital status, socioeconomic position and living circumstances. Reproductive factors included menstruation status, age at menopause, parity and current medication use. Clinical variables included body mass index, chronic medical conditions, psychiatric history, substance use, and severity of menopausal symptoms (hot flashes, night sweats, sleep difficulties, and palpitations).Depression was screened with the PHQ-9 as the major tool. The questionnaire comprised of nine items evaluating depressed symptoms encountered during the prior two weeks. Each item was assessed on a 4-point Likert scale from 0 (“Not at all”) to 3 (“Nearly every day”) to get a total score ranging from 0 to 27. Participants with a PHQ-9 score ≥10 were judged to have clinically severe psychological distress and were further evaluated by the MENO-D scale. The MENO-D instrument assessed twelve psychological domains specific to menopause: depressed mood, irritability, anxiety, reduced motivation, social withdrawal, reduced self-esteem, impaired concentration, memory problems, sleep disturbance, sexual dysfunction, physical symptoms related to menopause, and reduced enjoyment of daily activities. Each domain was rated from 0 (none) to 3 (severe), with higher scores indicating more severe psychological symptoms.Trained research staff assessed women presenting to the gynaecology outpatient department for eligibility and collected data. After outlining the objectives and procedures of the study, informed written consent was obtained using consent forms that were translated locally. Interviews were performed in a private consultation area face-to-face to preserve confidentiality and participant comfort. Each interview took about 20-25 minutes to finish. Body mass index was calculated by measuring height and weight with standardised equipment and completed questionnaires were evaluated weekly for completeness, accuracy and data quality.Data were entered in Microsoft Excel 2019 and analysed using IBM SPSS Statistics version 26.0. Descriptive statistics (frequencies, percentages, means and standard deviations) were calculated to describe participants’ socio-demographic characteristics, clinical factors and screening results. The prevalence of psychological distress was defined as the proportion of participants scoring 10 or more on the PHQ-9. Undetected psychological distress was defined as those with PHQ-9 scores ≥10 who had never been diagnosed with depression and had not undergone previous counselling or pharmaceutical treatment. Associations of undetected psychological distress with categorical characteristics such educational status, marital status, socioeconomic position, menopausal state, chronic illnesses, psychiatric history and knowledge of menopause were investigated using Chi-square test. Mean PHQ-9 scores were compared between peri- and postmenopausal women using independent sample t-tests. Independent predictors of undetected psychological distress were determined by binary logistic regression analysis after controlling for age, educational status, socio-economic status, menopausal stage, parity, chronic illness, psychiatric history and awareness regarding menopause. A two-tailed p value <0.05 was considered statistically significant.The study protocol was approved by the Institutional Review Board of Pakistan Institute of Medical Sciences before the initiation of data collection. All subjects gave written informed consent prior to enrolment. Confidentiality and anonymity were preserved by providing a unique identification number to each participant and removing personal identifiers from the study database. They were informed that their participation was optional and they could withdraw from the study at any moment with no impact on their healthcare services. All the information collected was kept anonymous and was used only for research purposes.

Results

A total of 382 peri- and post-menopausal women were included in the study. The mean age was 51.4 ±

4.3 years (age range 45–60 years). Fifty-six point zero percent were postmenopausal and 44.0% were perimenopausal. Most of them were married (82.5%), housewives (63.4%) and from moderate socioeconomic class (54.5%). Nearly one-third had secondary education and 28.0% had graduate or postgraduate education (Table 1).

Table 1. Socio-demographic characteristics of the participants (n = 382)

Variable	Frequency (n)	Percentage (%)
Age Group (years)		
45–49	132	34.6
50–54	149	39.0
55–60	101	26.4
Mean age (years)	51.4 ± 4.3	
Menopausal Status		
Perimenopausal	168	44.0
Postmenopausal	214	56.0
Education		
No formal education	47	12.3
Primary	82	21.5
Secondary	146	38.2
Graduate/Postgraduate	107	28.0
Occupation		
Homemaker	242	63.4
Employed	97	25.4
Retired	18	4.7
Unemployed	25	6.5
Socioeconomic Status		
Low	119	31.2
Middle	208	54.5
High	55	14.3

Hypertension (29.3%) and diabetes mellitus (24.6%) were the most common chronic illnesses. Moderate-to-severe hot flashes were reported by 58.6% of participants, while sleep disturbance was present in 61.0% (Table 2).

Table 2. Clinical characteristics of participants

Variable	n	%
Diabetes mellitus	94	24.6
Hypertension	112	29.3
Thyroid disorder	38	9.9
Heart disease	19	5.0
Previous psychiatric illness	41	10.7
Moderate/Severe hot flashes	224	58.6
Moderate/Severe night sweats	197	51.6
Moderate/Severe sleep disturbance	233	61.0
Moderate/Severe palpitations	118	30.9

Only 46.9% of women had heard about menopause before they entered the menopausal transition. Only 39.5% of women knew depression to be a potential menopausal symptom, but only 27.0% obtained counselling from health care experts (Table 3).

Table 3. Awareness regarding menopause (n = 382)

Variable	n	%
Heard about menopause previously	179	46.9
Aware depression may occur	151	39.5
Received counseling	103	27.0

The mean PHQ-9 score was **8.7 ± 5.1**. A total of **118 women (30.9%)** screened positive for clinically significant psychological distress (PHQ-9 ≥10). Moderate depression was the most frequent category (Table 4).

Table 4. PHQ-9 depression severity

PHQ-9 Category	Score	n	%
Minimal	0–4	118	30.9
Mild	5–9	146	38.2
Moderate	10–14	72	18.8
Moderately severe	15–19	33	8.6
Severe	20–27	13	3.5

Mean PHQ-9 Score = 8.7 ± 5.1

Among the 118 women with PHQ-9 scores ≥10, the mean MENO-D score was **17.8 ± 5.6**. Irritability, sleep disturbance, anxiety, and reduced motivation were the most frequently reported psychological symptoms (Table 5).

Table 5. Most frequent MENO-D symptoms (n = 118)

Symptom	n	%
Sleep disturbance	94	79.7
Irritability	89	75.4
Anxiety	86	72.9
Reduced motivation	74	62.7
Poor concentration	71	60.2
Memory problems	68	57.6
Reduced self-esteem	59	50.0

Of the 118 women with PHQ-9 scores ≥10, only 31 had previously been diagnosed with depression. Therefore, **87 women (73.7%)** were classified as having **undetected psychological distress** (Table 6).

Table 6. Detection status of psychological distress

Variable	n	%
PHQ-9 ≥10	118	30.9
Previously diagnosed	31	26.3
Previously treated	27	22.9
Undetected psychological distress	87	73.7

Undetected psychological distress was significantly associated with low educational level, low socioeconomic status, poor awareness regarding menopause, moderate-to-severe sleep disturbance, and postmenopausal status (Table 7).

Table 7. Association between participant characteristics and undetected psychological distress

Variable	Undetected n (%)	p-value
Primary education or below	44 (50.6)	<0.001
Secondary or higher	43 (49.4)	
Low socioeconomic status	38 (43.7)	0.003
Middle/High socioeconomic status	49 (56.3)	
No menopause awareness	57 (65.5)	<0.001
Menopause awareness present	30 (34.5)	
Moderate/Severe sleep disturbance	66 (75.9)	0.001
Mild/No sleep disturbance	21 (24.1)	

Binary logistic regression demonstrated that poor awareness regarding menopause, sleep disturbance, low educational level, and previous psychiatric history independently predicted undetected psychological distress (Table 8).

Table 8. Independent predictors of undetected psychological distress

Variable	Adjusted OR	95% CI	p-value
Poor menopause awareness	2.94	1.71–5.08	<0.001
Moderate/Severe sleep disturbance	2.41	1.43–4.06	0.001
Primary education or below	2.18	1.26–3.78	0.005
Previous psychiatric history	3.12	1.58–6.17	<0.001
Postmenopausal status	1.47	0.89–2.43	0.134

Overall, 30.9% of participants had a positive screen for clinically severe psychological distress on the PHQ-9. Almost three-quarters of these women (73.7%) had no prior diagnosis or treatment for depression, suggesting a large burden of unrecognised psychological distress. Undetected instances were independently linked with low educational attainment, poor knowledge of menopause, sleep difficulty and past psychiatric history.

Discussion

The present study evaluated the prevalence of psychological distress and the proportion of undetected depression among peri- and postmenopausal women attending a tertiary care hospital using the Patient Health Questionnaire-9 (PHQ-9) and the Menopause Depression (MENO-D) screening scale. The findings demonstrated that approximately one-third of participants screened positive for clinically significant psychological distress, while nearly three-quarters of these women had never previously been diagnosed or treated for depression. These findings indicate that psychological distress remains substantially under-

recognized among menopausal women and emphasize the importance of incorporating routine mental health screening into gynecological practice.The prevalence of psychological distress observed in the present study is consistent with findings reported by previous international studies. The Study of Women's Health Across the Nation (SWAN) demonstrated that women experience a two- to three-fold increase in depressive symptoms during the menopausal transition compared with the premenopausal period, primarily because of hormonal fluctuations, sleep disturbances, and psychosocial stressors [1]. Similarly, Alblooshi et al. concluded in their systematic review that perimenopause is associated with a significantly greater risk of depression and anxiety than the premenopausal stage, highlighting menopause as an independent period of psychological vulnerability [2]. The findings of the present study further support this evidence and suggest that psychological screening should become an integral component of menopause care.

A notable finding of this study was the high proportion of **previously undetected psychological distress**. Nearly three-quarters of women with clinically significant depressive symptoms had never been diagnosed or received treatment despite attending a tertiary healthcare facility. This observation is consistent with the report by Kulkarni et al., who described menopausal depression as an under-recognized and poorly treated condition despite its high prevalence and significant impact on women's quality of life [4]. Similar underdiagnosis has been reported in primary care settings, where depressive disorders frequently remain unidentified because women often present with physical rather than emotional complaints [8]. Failure to recognize psychological symptoms delays appropriate intervention and may contribute to worsening functional impairment, family stress, and reduced quality of life.The present study also identified **low educational attainment** as an independent predictor of undetected psychological distress. Women with limited formal education were significantly more likely to remain undiagnosed than those with higher educational levels. Similar findings have been reported in studies conducted in Jordan and other developing countries, where educational level strongly influenced awareness regarding menopause, healthcare-seeking behavior, and recognition of depressive symptoms [3,9]. Women with higher educational attainment are generally more likely to recognize psychological symptoms, seek professional help, and utilize available healthcare resources .Another important finding was the association between **poor awareness regarding menopause** and undetected psychological distress. Women who lacked knowledge regarding menopausal changes were significantly more likely to experience unrecognized depressive symptoms. Many participants appeared to consider emotional changes as an inevitable consequence of aging rather than symptoms requiring medical attention. Comparable findings have been reported in community-based studies showing that inadequate menopause awareness delays diagnosis and reduces healthcare utilization [10]. Increasing public awareness through structured educational programs may therefore improve symptom recognition and encourage earlier presentation for psychological assessment.Sleep disturbance emerged as one of the strongest clinical predictors of psychological distress in the present study. More than half of the participants reported moderate-to-severe sleep problems, and women with disturbed sleep were significantly more likely to screen positive for depression. This observation agrees with previous studies demonstrating a close relationship between sleep disturbance, vasomotor symptoms, and mood disorders during menopause [11]. Night sweats and hot flashes frequently disrupt sleep architecture, resulting in fatigue, impaired concentration, irritability, and depressive symptoms. Early recognition and treatment of sleep disorders may therefore contribute substantially to improving psychological well-being among menopausal women.The present findings also demonstrated that irritability, anxiety, reduced motivation, impaired concentration, and memory problems were among the most frequently reported symptoms on the MENO-D scale. These observations highlight the limitations of relying solely on general depression screening instruments during menopause. Although the PHQ-9 is a well-validated tool for identifying depressive symptoms, it does not specifically assess menopause-related psychological manifestations such as emotional lability, cognitive complaints, reduced self-confidence, and diminished motivation. The FIGO recommendations therefore advocate incorporating menopause-specific mental health assessment into routine gynecological practice [5]. The combined use of PHQ-9 and MENO-D in the present study provided a more comprehensive evaluation of psychological health and may improve identification of women requiring further psychiatric assessment.

Previous psychiatric history was another independent predictor of undetected psychological distress. Women with a history of depression or anxiety demonstrated significantly greater odds of developing clinically significant symptoms during menopause.

These findings are consistent with longitudinal evidence from the SWAN cohort, which showed that women with previous depressive episodes are considerably more likely to experience recurrent depression during the menopausal transition than women without such history [1]. Hormonal changes during menopause may interact with underlying biological vulnerability, thereby increasing susceptibility to recurrent mood disorders.Although the present study did not directly evaluate therapeutic interventions, its findings have important clinical implications. Routine mental health screening using validated instruments such as the PHQ-9, followed by menopause-specific assessment using the MENO-D scale when appropriate, may facilitate earlier diagnosis and referral for treatment. International clinical guidelines increasingly recommend integrating psychological assessment into standard menopause care, particularly for women presenting with vasomotor symptoms, sleep disturbances, or previous psychiatric illness [5]. Early intervention may include psychological counseling, cognitive behavioral therapy, lifestyle modification, nutritional optimization, physical activity, and, where appropriate, pharmacological treatment or menopausal hormone therapy after individualized risk assessment [6,7].The study possesses several strengths. It included a relatively large sample of peri- and postmenopausal women attending a tertiary healthcare institution and employed validated screening instruments for depression and menopause-specific psychological symptoms. The comprehensive assessment of socio-demographic, reproductive, clinical, and awareness-related variables allowed identification of several independent predictors of undetected psychological distress. Nevertheless, certain limitations should be acknowledged. The cross-sectional design prevented establishment of causal relationships between menopausal factors and depression. Psychological symptoms were assessed using screening instruments rather than formal psychiatric diagnostic interviews. Additionally, the study was conducted at a single tertiary care hospital, which may limit the generalizability of findings to community populations or primary healthcare settings. Future multicenter longitudinal studies incorporating structured psychiatric assessment are recommended to further evaluate the progression of psychological distress throughout the menopausal transition.Overall, the findings of the present study emphasize that psychological distress among peri- and postmenopausal women remains common and frequently unrecognized despite regular contact with healthcare services. Routine screening, improved menopause awareness, and greater collaboration between gynecologists, psychiatrists, psychologists, and primary care physicians are essential to ensure timely diagnosis and comprehensive management. Integrating mental health screening into routine gynecological practice may substantially improve quality of life and reduce the burden of untreated depression among middle-aged women.

Conclusion

The present study showed that psychological distress is common among peri- and postmenopausal women attending a tertiary care hospital, and a significant proportion of affected women are undiagnosed while having clinically significant depressive symptoms. Findings show that close to a third of the subjects screened tested positive for psychological distress and that the majority of these instances were previously undetected and untreated. This highlights the significant burden of unrecognised mental health disorders during the menopausal transition and the importance of increasing professional attention to psychological well-being in midlife women.

The characteristics significantly related with undiagnosed psychological distress were low educational status, lack of understanding of menopause, sleep problem and past history of psychiatric illness. These data imply that there is a lag in depression detection of menopausal women irrespective of individual or health care system characteristics. Many women believe that emotional and psychological symptoms are a normal part of ageing or menopause and do not seek proper medical care. Health care providers may also focus on physical complaints and may not routinely evaluate for mental health problems.

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