

Frequency of Depression and its Contributing Factors in Post Menopausal Women

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ABSTARCT

Background: Menopause is defined after twelve months of amenorrhea due to permanent cessation of ovarian function. The mean age of menopause is fifty one year. Factors which predict development of depression in post-menopausal women are Obesity (18.5%), marital status and presence or lack of support from spouse.

Aim: To determine frequency and factors which contribute towards development of depression in post menopausal women.

Study design: Cross sectional observational study.

Place and duration of study: OPD of Sharif medical city, Lahore from December 2018 to February 2019.

Methodology: 260 post-menopausal women between the ages of 45-51yrs, after taking consent, were rated on Hospital Anxiety and Depression Scale for depression. For determining contributing factors like obesity, lack of support from partner and menopausal symptom severity ; Body mass index, Revised Dyadic Adjustment Scale and Menopausal Rating Score was applied respectively. Women with a previous history of depression, hysterectomy, use of hormone replacement therapy and psychotropic medicines were excluded.

Results: The results revealed a significant association between occurrences of depression in the age range of 50-51 yrs. Higher frequency of depression (70.77%) was found in patients who reported severe menopausal symptoms. The frequency of depression in post-menopausal women as rated on HADs scale was 64.6 percent, in which 18.7 percent were suffering from mild depression, 8.7 percent were experiencing moderate depression and 3.3 percent were battling severe depression.

Conclusion: Presence of mood disorders is often ignored in postmenopausal depression. There is a high prevalence of post-menopausal depression. The study revealed that almost 2/3rd patients that is, 65% were clinically depressed. Various possible contributing factors were assessed.

Keywords: Depression, post-menopause, contributing factors.

INTRODUCTION

Menopause is defined after 12 months of amenorrhea due to permanent cessation of ovarian function. The mean age of menopause is fifty one years⁴. Most women spent 1/3rd to 1/2 of their lives in menopause^{4,5}. Transition into menopause and post-menopausal years have been described as window of vulnerability for mood disorders⁽¹⁾. Previously conducted studies suggest that approximately 32% post-menopausal women suffer from depression⁶, depending on patient selection and assessment criteria. Another international conducted in Turkey, suggested that the prevalence of depression in post-menopausal women was 24.7%¹⁰. Local statistics on this topic are not available. According to a study in the year nineteen eighty, about twenty five million women reached menopause, this figure might double by 2020⁶.

Depression is the most common illness worldwide, it is a significant health problem with 350 million people affected currently². WHO declared it to be the 3rd leading cause of disability in the world and the leading cause of health related disability in women. Estimated 17% post-menopausal women suffer from depression in their

lifetime⁽³⁾. Factors which predict the development of depression in post-menopausal women are Obesity (18.5%)¹¹, marital status and presence or lack of support from spouse/partner^{9,7,4}. It has been concluded that 38% middle aged women participating in a study in Malaysia with poor to severe problems in marriage were suffering from depression¹².

Post-menopausal symptoms have been the focus of attention in the developed world, however very little information is available from our region⁶ as mental health resources are difficult to access, in addition health believes about mental disorders in Pakistan hamper patients from utilizing mental health services.

The aim of the present study is to create awareness about post-menopausal depression and to enhance the quality of life of post-menopausal women suffering from depression. This study will also help in local statistics data as no study regarding this topic has been done in our population.

PATIENTS AND METHODS

Post-menopausal women between the ages of 45-51 yrs, after taking consent were included in this study. The study was conducted at Gynecology OPD of Sharif medical city, over 3 months. Patients were rated on HADS for

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depression. Contributing factors like obesity, lack of support from partner and menopausal symptom severity: Body mass index, Revised Dyadic Adjustment Scale and Menopausal Rating Score was applied respectively. Women with a previous history of depression, hysterectomy, use of hormone replacement therapy and psychotropic medicines were excluded from the study. The sample size is 260 cases is using 95% confidence interval, 6% margin of error and taking expected percentage of depression i.e. 32% amongst post-menopausal women. The sampling technique was consecutive non-probability. All the data was entered and analyzed using SPSS version 23.0. Quantitative data like age and HAD scores is presented by mean and standard deviation. Depression, obesity and lack of partner/spouse support is presented as frequency /percentages, data has been stratified for age, menopause rating score to deal with effect modifiers. Post stratification chi-square test was applied. P-value less than or equal to 0.05 were considered significant.

RESULTS

Age range for female patients was set as 45-51 years and the mean calculated aged was 48.3 years with SD of 1.91 (Table 9). According to the results the frequency of post menopause was 36.9% in the age range of 45-47, 29.6% in the age range 48-49 and 33.5(the most) in the age range 50-51 (Table 10). The p value obtained was less than 0.05 thus showing a significant association between occurrence of depression and age range at menopause.

According to Menopausal rating score, 11.15% of the patient were suffering from mild depression, moderate depression was found 14.62% patients and 9.62 % of the patients were going through severe depression, depression being found more in patients with severe menopausal symptoms (70.77%). The frequency of depression in post menopausal women as assessed by HADs scale was 64.6% (Table 1) in which 18.7% had mild depression, 8.7 percent had moderate depression and 3.3 percent had severe depression. The chi square test was applied to see the effect modification of age range and menopausal symptom severity (assessed by menopausal rating score) on the results and p-value obtained was greater than 0.05 for all of them, thus revealing that these variables do not modify the effect on depression.

The frequencies of two contributing factors namely Obesity, Lack of support from spouse/partner were assessed. BMI was used to assess presence of obesity and scores revealed that 47.3% had Obesity, and 52.7% were not obese (Table 3), in which 17.3% obese women had depression (Table 8). Amongst those without obesity, 18% had depression. The mean HAD score was 7.18%, with SD of 4.66 (Table 2). After application of Chi square

test, p-value obtained is 0.42 which is not significant and reveals that depression is not strongly associated with Obesity. The effect modifiers have no association with obesity. The support from spouse/partner was assessed by revised dyadic adjustment scale, the mean revised dyadic adjustment score was 27.11 with standard deviation of 14.0 (Table 5). The results showed that 95.4% patient who had support from spouse/partner, and 4.6% had no support (Table 4), in which 22.31 % had average support, 23.85% had good support and 49.24 % had excellent support. In patients with lack of support from spouse/partner, 2.30% were depressed. In patients with excellent support, 42% were depressed, those with good support, 20% were depressed, and with average support 24% were depressed. Overall, it was seen that 35.3% (Table 8) patients were depressed depending upon level of support. After application of Chi square test correlation between RDAS score and depression revealed a p-value of 0.72, thus proving these 2 variables are not associated. None of the effect modifiers were found to be significantly associated with lack of support from spouse/partner as indicated by a p value greater than 0.05.

Table 1: Frequency and percentages of Depressive Patients amongst post-menopausal women

Depression	Frequency	Percentage
Yes	168	64.6
No	92	35.4
Total	260	100

Table 2: Mean and standard deviation of Depressive Patients amongst post-menopausal women

N = 260 DEPRESSION	
Mean	7.18
Standard Deviation	4.66

Table 3: Frequency and percentages of obesity(assessed by BMI) amongst post-menopausal women

Obesity	Frequency	Percent
Yes	123	47.3
No	137	52.7
Total	260	100

Table 4: Frequency and percentages of lack of support from spouse/partner(assessed by revised dyadic adjustment scale) amongst post-menopausal women

Obesity	Frequency	Percent
Yes	12	95.4
No	248	4.6
Total	260	100

N = 260 RDA SCORES	
Mean	27.11
Standard Deviation	14.0

Table 5: Mean and standard deviation of revised dyadic adjustment scores amongst post-menopausal women

Obese	Depression		Total	P Value
	YES	NO		
Yes	45(17.3%)	78(30.0%)	123(47.30%)	0.453
No	47(18.0%)	90(34.6%)	137(52.6%)	
Total	92(35.3%)	168(64.6%)	260(100%)	

Table 6: The frequency of depression in patients with obesity

Support from spouse/partner	Depression		Total	P Value
	YES	NO		
Yes	86(33.07%)	162(62.30%)	248(95.38%)	0.729
No	6(2.30%)	6(2.30%)	12(4.61%)	
Total	92(35.3%)	168(64.6%)	260(100%)	

Table 7: Frequency of depression in patients with/without support from spouse/partner

N = 260 AGE	
Mean	48.33
Standard Deviation	1.91

Table 8: Mean and standard deviation of age

Age Ranges	Depression		Total	P Value
	Yes	No		
Early Menopausal	36 (13.84%)	60 (23.08%)	96 (36.92%)	0.028
Middle Menopausal	27 (10.38%)	50 (19.24%)	77 (29.62%)	
Late Menopausal	29 (11.15%)	58 (22.31%)	87 (33.46%)	
Total	92 (35.37%)	168(64.63%)	260 (100%)	

Table 9: Association and frequency of depression in different age groups.

Age Ranges	Obesity		Total	P Value
	Present	Not present		
Early Menopausal	50 (19.23%)	46(17.69%)	96(36.9%)	0.296
Middle Menopausal	28 (10.7%)	49 (18.84%)	77 (29.6%)	
Late Menopausal	45 (17.30%)	42 (17.30%)	87 (33.4%)	
Total	123 (47.3%)	137 (52.69%)	260 (100%)	

Table 10: Frequency of obesity in different age groups

Severity of menopausal symptoms	Obesity		Total	P Value
	Yes	No		
Mild	15 (5.76%)	25 (9.61%)	40 (15.38%)	0.189
Moderate	16 (6.15%)	20 (7.69%)	36 (13.84%)	
Severe	92 (35.38%)	92 (35.38%)	184 (70.7%)	
Total	123 (47.30%)	137 (52.69%)	260 (100%)	

DISCUSSION

Despite various studies, we do not know the true prevalence rate of post-menopausal depression. This might be possible due to different means of diagnosing depression i.e. either with various standardized scales or through the use of different criteria's (International Classification of Diseases-11 and Diagnostic and DSM-5). The present study used the rating scale named HAD scale for depression in post-menopausal women, it is a self-administered scale so it had easy applicability and was less time consuming.

Previously conducted studies suggest that approximately 32% post-menopausal women suffer from depression⁶. A study on post-menopausal population in Turkey, calculated the prevalence of depression as 24.7%¹⁰. The results of this study i.e., 64.6%, are higher in comparison. Demographic factors like age and menopausal symptom severity have an important impact on post-menopausal depression. This shows that in a developing country like ours, very few resources are given for reproductive and mental health. Obesity, marital status and lack of support from spouse/husband have major contributions in the emergence of mood symptoms. There is one study by Freeman et al 2010, which did not reveal the association of depression with any contributing factor after menopause. Another study by Lee M.S in 2010 in

North, revealed that depression was the presenting complaints in twenty three percent women. Mild depression in 41.5 percent, whereas 3% women suffered from clinical (moderate to severe) depression. In this study, the relationship between the two contributing factors i.e. obesity and lack of support from spouse/partner was assessed and the results showed that they were not related to symptoms of low mood.

CONCLUSION

Almost two thirds i.e. 65 % of the sample population was found to be suffering from clinical depression. We can recommend regular screening for mood disorders (use of HAD scale) and psycho-social assessment to women belonging to post-menopausal age group as first line assessment tool.

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