

Anxiety and Depression and its Risk Factors Among Post-Menopausal Women-Hospitals Based Study

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Abstract

Background: Lifespan of female encompasses several distinct epochs, each with characteristic hormonal, psychological and physiological changes. Women experienced a variety of symptoms after menopause.

Objective: To determine the prevalence of anxiety and depression and its risk factors among post-menopausal women.

Study type settings & duration: Cross-sectional study was conducted in hospitals of Lahore, and University of Lahore, Teaching Hospital, General Hospital, Services Hospital and teaching Hospital of University of Lahore from July 2019 to Sep 2019.

Methodology: A total of 178 participants were enrolled in this study. A standard self-rating questionnaire Hospital Anxiety and Depression scale (HADS) was used to calculate Anxiety and Depression scores. MenQOL questionnaire was used to assess the menopausal symptoms and their influence on anxiety and depression. Data was entered in SPSS version 21.0.

Results: The mean age of the sample of post-menopausal women was 51.29±5.510 with a minimum age of 45 years and maximum age of 65 years. The 65 (36.5%) of respondents had score ranging borderline abnormal and 91 (51.1%) respondents had score ranging abnormal in depression domain of HADS. It was found that 64 (34.0%) were at borderline abnormal level and 98 (55.1%) had score ranging abnormal in anxiety domain of HADS. Majority of menopausal symptoms were proved the statistically significant (p -value <0.05) risk factors for anxiety and depression.

Conclusion: Post-menopausal group shows significant prevalence of anxiety and depression. Menopausal symptoms are factors that contribute to anxiety and depression. There is need of counseling and implementation of coping strategies to reduce the prevalence of anxiety and depression in this group which will further prevent future medical conditions like insomnia etc.

Key words: Prevalence, post-menopausal, anxiety, depression, scores.

Introduction

The one of the leading cause of disease related disability in women were anxiety and depression. Depression is described as having diminished energy, inability to feel pleasure, feeling

of being fatigue, loss of interest in self-esteem and appearance. Women are more affected than men from depression, and were at increased risk in peri- and post-menopausal stages as menopause transition is marked by fluctuation in mood swings.¹ Menopause is the stable expiry of menstrual cycle resulting in the loss of ovarian follicle development.² Menopause may point to the expiration of a woman's reproducing capability. It begins the age of excessive conversion which may be both physical and mental.³

Many physiological and psychological fluctuations are also encountered by women at menopause.⁴ Epidemiological studies and clinical figures have unambiguously reinforced the belief that women undergo more psychiatric related issues in different phases of their lives as compared to men, predominantly mood swings, anxiety signs and sleep difficulties. For some women, it may also be

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Received: 13 November 2019, **Accepted:** 03 December 2020,
Published: 29 January 2021

Authors Contribution

AN conceptualized the project and performed the data collection. AN & SF did the Literature search. AF did the statistical analysis. Drafting, revision & writing of manuscript was done by AA.

recognized that these distended danger may be related with reproductive cycle episodes like the post-partum period or the menopausal transition.⁵

Accurately, depressive symptoms have been associated with vasomotor symptoms (VSM).⁶ Post-menopausal women's also undergo changes in sexual desire which would also results in psychological problems. Factors like Aging, long term illness, lack of energy, drugs use, and perception about body image results in reduce sexual desire. Women also have increased sensitivity to psychological pressure (depression and anxiety) at this stage. In United States of America, depression is generally faced by women.

A high incidence of anxiety and depression was found during climacteric. In past, 45% of women referred to clinics for psychological treatment were clinically depressed due to menopausal symptoms. Women are more vulnerable to severe symptoms of clinical depression due to menopause related symptoms.⁷ Besides social, psychological and behavioral fundamentals (e.g. family sustenance, lack of interest in sex, traumatic events). Females may in common be primarily susceptible to mood complaints and in specific or specifically to depressive symptoms.⁸

Studies conducted by E Gul back in 2018 according to Hamilton criteria 26% of the women were having depression. Twenty four percent were noted with mild depressive symptoms and fourteen percent severe and seven percent with severe depressive symptoms.⁹ This study aims to identify risk factors associated with depression and anxiety along with prevalence.

Methodology

The subjects were recruited from various hospitals of Lahore, including University of Lahore Teaching Hospital, General Hospital Lahore and Services Hospital Lahore.

A sample size of 178 subjects was calculated by taking confidence level as 95%, absolute precisions 5% and expected amount of depression among women as 87.6%.¹¹

$$n = z_{1-\alpha/2}^2 P (1 - P) / d^2$$

Z = Confidence Level= 95 =1.96

P = Prevalence of depression = 86.7%

d = Absolute Precision = 5%

n = 178

Demographic information such as age of 178 subjects was obtained after taking consent from participants. Post-menopausal women of age ≥ 45 were included in this study. Participants with any

history of fall, diseases such bone tuberculosis and cancer were excluded as these underlying pathologies might be sole cause of anxiety and depression. The non-probability convenient sampling was used to collect the data.

A standard scale Hospital Anxiety and Depression (HADS) was used.

This self-rating has 14 items divided into two categories. The overall scores of depression and anxiety domains were calculated to determine whether the individual is normal (0-7), borderline case (8-10) or abnormal case (11-21).

MenQol consisting of 29 questions was divided into four domains: Vasomotor (three questions), psychological (seven questions), physical (sixteen questions) and sexual (three questions). The counting for all of the four MenQol areas was alike. Throughout the processing of MenQol, a Likert Scale was used (seven point). It was changed for counting and figures investigation. This Likert Scale (seven point) was changed into an eight point scale, extending from 1-8 for the entire 29 items. The sternness of the menopausal signs related scoring method is as mentioned, score ranging 0-1 was considered absence of symptoms, score ranging 2-4 was considered mild symptoms, score ranging 5-6 was considered moderate symptoms and score ranging 7-8 was considered as severe signs. Similarly, women reporting frequency of pain were evaluated as follows, 0-1 times a month (none), 1-2 times a week (mild), 3-4 times a week (moderate), almost every day (severe).

All data was entered in SPSS 21 and statistically run to determine the results. Chi square test was used to check the associations where p-value <0.05 was considered statistically significant.

The ethical approval was taken from Institution Review Board of The University of Lahore, Lahore.

Results

A total 178 participants were enrolled with mean age of 51.29 ± 5.510 .

According to their depression level, it was found that 22 (12.4%) were considered normal, 65 (36.5%) were at borderline, 91 (51.1%) were at severe level of depressive symptoms. Moreover, it was found that 16 (9.0%) were normal, 64 (34.0%) were at borderline, 98 (55.1%) were within abnormal range of anxiety symptoms (Table-1).

Statistically significant risk factors that predisposed depression are shown Table-2. Besides there were few menopausal symptoms that shows no association with depression were; Hot flushes (p-value .246), night sweats (p-value 0.205), fluctuating wind or gas pans (p-value 0.127), feeling

bloated (p -value 0.309), change in sexual desire (p -value 0.131).

Table 1: Hospital anxiety and depression score.

HADS Depression Score	Frequency	Percentage
Normal	22	12.4
Borderline Abnormal	65	36.5
Abnormal	91	51.1
HADS Anxiety Score		
Normal	16	9.0
Borderline Abnormal	64	34.0
Abnormal	98	55.1

Statistically significant risk factors that contribute to anxiety among post-menopausal women were mentioned in Table-3. Likewise there were few symptoms that showed no association with anxiety were; experiencing poor memory (p -value .216), drying skin (p -value .166), weight gain (p -value .226), involuntary urination when laughing or coughing (p -value .281), Change in sexual desire (p -value .122), Vaginal dryness during intercourse (p -value .309), Avoiding intimacy (p -value .296).

Discussion

Depression is archetype mental condition disorder which is basically hurting experience that comprised of severe suffering which lead to drain quality of life. Women are approximately twice

affected than men by affective disorders. A number of factors contribute to development of depression. In this study, total of 178 respondents were enrolled. A total of 36.5% of women had major depressive symptoms and. In a research directed by Polissen in Brazil, the estimated prevalence of depression among post-menopausal group was 36.8% which is lower than our study findings.¹⁰

In Iran, study conducted by Afshari prevalence of depressive symptoms in postmenopausal women was calculated to be 59.8% which is greater than our study.¹¹ In a study conducted by Bansal in India the prevalence syndromic symptoms of depression and anxiety was found to be 86.7% and 88.9%, respectively which is much higher than present study.¹²

Anxiety; a state of apprehension, insecurity and dreadfulness arise from the anticipation of imaginary or may be natural threatening incident that lead to compromised physical, social and psychological functioning of affected individual. It was found that 34% of post-menopausal women had score ranging at borderline abnormal level and 55.1% had score ranging abnormal in anxiety domain of HADs.

A study conducted by KD Juang concluded that anxious and depressive symptoms in peri- and postmenopausal women were associated with Hot flashes in East Asian residents with low prevalence of vasomotor symptoms¹³. In another study a,

Table 2: Statistically significant risk factors that predisposed depression.

Risk Factors For Depression	Person Chi-Square Value	df	p-Value
Sweating* Depression score	13.305	6	0.038
Being dissatisfied with personal life* Depression	15.158	6	0.019
Feeling anxious or nervous * Depression	18.667	6	0.005
Experiencing poor memory * Depression	20.549	6	0.002
Accomplishing less than I used to * Depression	19.439	6	0.003
Feeling depressed down or blue * Depression	33.326	6	0.000
Being impatient with other people * Depression	23.504	6	0.001
Feelings of wanting to be alone * Depression	18.295	6	0.006
Aching in muscles and joints * Depression	15.919	6	0.014
Feeling tired or worn out * Depression	25.930	6	0.000
Difficulty in sleeping*Depression	13.076	6	0.042
Aches in back of neck and head * Depression	19.353	6	0.004
Decrease in physical strength * Depression	15.509	6	0.017
Decrease in stamina * Depression	17.902	6	0.006
Feeling a lack of energy * Depression	13.881	6	0.031
Drying skin * Depression	22.074	6	0.001
Weight gain * Depression	13.492	6	0.036
Increased facial hair * Depression	25.017	6	0.000
Changes in appearance, texture, or tone of skin * Depression	23.072	6	0.001
Low backache* Depression	14.937	6	0.021
Frequent urination * Depression	29.083	6	0.000
Vaginal dryness during intercourse * Depression	15.896	6	0.014
Avoiding intimacy * Depression	21.385	6	0.002

Table 3: Statistically significant risk factors that contribute to anxiety among post-menopausal women.

<i>Risk Factors For Anxiety</i>	<i>Person Chi-Square Value</i>	<i>df</i>	<i>p-Value</i>
Night sweats * Anxiety	17.065	6	0.009
Sweating * Anxiety score	12.732	6	0.047
Being dissatisfied with personal life * Anxiety	16.642	6	0.011
Feeling anxious or nervous * Anxiety	16.646	6	0.011
Accomplishing less than I used to * Anxiety	18.461	6	0.005
Being impatient with other people * Anxiety	17.837	6	0.007
Feelings of wanting to be alone * Anxiety	19.936	6	0.003
Fluctuating wind or gas pains * Anxiety	14.191	6	0.028
Aching in muscles and joints * Anxiety	20.939	6	0.002
Feeling tired or worn out * Anxiety	40.741	6	0.000
Difficulty in sleeping*Anxiety	17.947	6	0.006
Difficulty sleeping * Anxiety	15.000	6	0.020
Aches in back of neck and head * Anxiety	17.010	6	0.009
Decrease in physical strength * Anxiety	23.336	6	0.001
Decrease in stamina * Anxiety	25.465	6	0.000
Feeling a lack of energy * Anxiety	25.850	6	0.000
Increased facial hair * Anxiety	19.776	6	0.003
Changes in appearance, texture, or tone of skin * Anxiety	22.598	6	0.001
Low backache *Anxiety	14.413	6	0.025
Frequent urination * Anxiety	14.982	6	0.20

significant relationship between stress ($p = 0.04$), anxiety ($p = 0.01$), and sexual dysfunction was found. Likewise, there was a statistically significant relationship between depression ($p = 0.003$) and sexual dysfunction.¹⁴ Incurrent study, all menopausal symptoms were studied for their association with anxiety and depression

Findings enlightened that depression is significantly present in post-menopausal women and menopausal symptoms are major risk factors in this group. There is need to adopt effective measure so to reduce the burden of this issue in society. These problems lead to future health hazards and results in impaired quality of life in women.

Depression and anxiety; these two variables were highly prevalent in post-menopausal group which lead to future health hazards. Post-menopausal symptoms were major risk factors that lead to development of anxiety and depression. Effective methods should be implemented to control this health problem. By reducing depression and anxiety, overall quality of life may be enhanced among post-menopausal women. It is highly recommended that community based larger scale research (other than hospital admitted patients) is required to compare anxiety and depression in pre and post-menopausal women who do not have any other underlying medical problem.

Acknowledgement

Special thanks to Dr. Ashfaq Ahmed and Dr. Arif Ali Rana for guiding me and supporting me

through out every step of my research and for enlightening me with her wisdom and knowledge.

Conflict of interest: None declared.

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