A Study on Effect of Anxiety on Quality of Life in Post-Menopausal Women

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Abstract:

Introduction: Natural menopause is the permanent ending of menstruation. Studies have shown that menopause have a negative effect on quality of life (QOL). With these a study was conducted to assess the severity of anxiety in post-menopausal women (PMW).

Methods: It was a cross sectional study conducted in the department of Psychiatry, GSL Medical College between November 2018 and March 2020. The PMW attended psychiatry on OPD basis and met ICD 10 criteria for anxiety were considered. Those with other psychiatric disorders, non-cooperative members were not considered. For all the eligible study participants, socio-demographic and clinical information was recorded with the help of a pre-tested proforma. Hamilton Anxiety Rating (HAM A) scale was applied to assess the severity of anxiety and utian quality of life (UQOL) scale was used to assess the QOL. Chi square test was used for the statistical analysis; P <0.05 was considered to be statistically significant.

Results: The age of the participants was ranged between 45 – 65 years, maximum (81; 67.5%) in 45 – 55 years. When HAM A scale was applied, 40 found diagnosed have anxiety disorder. Statistically there was significant association between QOL and anxiety.

Conclusion: Anxiety is one of the commonest psychological disorder among the PMW which needs to be attended with utmost care due to its further complications.

Keywords: Women, Anxiety, Psychiatry, Scale.

Introduction

Menopause is a physiological condition where there is a permanent cessation of menstruation due to the loss of ovarian activity. [1] Natural menopause is the permanent ending of menstruation. Some women will experience induced menopause due to surgery or medical treatment. During menopause, there is loss of oestrogen production, but hormonal and demographic differences can distinguish natural or induced menopause. [2]

>80% women experience physical or psychosocial symptoms in menopause. Physical symptoms include abnormal vaginal bleeding, joint and muscle pain, vaginal and urinary symptoms. Psychological symptoms include mood swings, anxiety, depression, decreased self-confidence and disturbed sexual functioning. [3, 4] Quality of life (QOL) is the important aspect. Studies have shown that menopause have a negative effect on QOL and often considered as a stressful life event. With these a

study was conducted to assess the severity of anxiety in post-menopausal women (PMW) in a tertiary care hospital.

Methods

It was a cross sectional study conducted in the department of Psychiatry, GSL Medical College, Rajamahendravaram. Study was conducted between November 2018 and March 2020. Study protocol was approved by the Institutional Ethics Committee. An informed written consent was taken from the study members.

The PMW attended psychiatry department on OPD basis and met the ICD 10 criteria for anxiety disorder were considered in this research. Individuals with other psychiatric disorders, those with chronic physical illness as well as other comorbid substance dependence and non-cooperative members were not considered in this

research. The study members were divided into test and control groups. Those were diagnosed to have psychiatric disorder were included in the test and normal women were included in the control group.

Semi-structured proforma was used in this research. The study population were thoroughly explained the purpose of the study and informed consent was obtained. For all the eligible study participants, socio-demographic and clinical information was recorded with the help of a pre-tested proforma. Hamilton Anxiety Rating (HAM A) scale was applied to assess the severity of anxiety [5] and utian quality of life (UQOL) scale was used to assess the QOL. [6]

Sample Size Calculation:

Sample size was calculated using formulae n = $4pq/l^2$. Here prevalence (p) was taken at 80% as per the study by. [7] Q = 100 – P; 100 – 80 = 20. Error was taken at the rate of 10% of P. When these were included, the sample size was considered to be 120.

Statistical Analysis:

The data were analyzed using SPSS software version 20. Chi square test was used for the statistical analysis; P <0.05 was considered to be statistically significant.

Results:

The age of the participants was ranged between 45 – 65 years, maximum (81; 67.5%) in 45 – 55 years. Most of the PMW were in lower middle and upper lower class, 32.5% (39), each respectively. Majority (94.2%; 112) were married women and literates (86; 72%). When HAM A scale was applied on the study members, 40 found diagnosed have anxiety disorder.

Out of the 40 (100%) PMW with anxiety, total QOL wise, 55% (22) were in 48 – 60 group followed by 40% (16) in 61 – 74 group. Whereas in the UQOL group, the total QOL was 75 to 87 in 47.5% (19) and 88 to 100 in 52.5% (21) of study members; statistically there was significant association (Table 1).

Table 1: Comparison of study participants based on total QOL in Anxiety group and UQOL scale group; n (%)

Total QOL	Anxiety	UQOL	Total
48 to 60	22 (55)	0	22 (27.5)
61 to 74	16 (40)	0	16 (40)
75 to 87	2 (5)	19 (47.5)	21 (26.3)
88 to 100	0	21 (52.5)	21 (52.5)
Total	40 (100)	40 (100)	80 (100)
Statistical analysis	$\Psi^2 = 80$; P>0.01. Statistically significant		

Discussion

Menopause is a natural biological event which can't be prevented. Globally the onset is variable, around 45 – 55 years and it was ranged between 41.9 to 49.4 years in the Indian subcontinent. [8] In this study, majority (67.5%) belong to 45 – 55 years followed by 56 – 65 (32.5%) years. In a study by Ahlawat P et al. [9], 45.2% PMW were in 51 – 55 years age, followed by 46 – 50 (37.2%), 56 – 60 (13.1%); just 4.5% were in 41 – 45 years group. The mean age was 50.2 ± 2.6 years. [10] The reasons for the age difference was not clear because it is a biological process. In another recent report, the PMW was aged between 35 – 78 years. [11]

Juang et al. [12] reported a strong association between anxiety and vasomotor symptoms in post-menopausal women, regardless of the presence of asleep disorder. Mechanisms explaining this association are still not well established. However, anxiety had been correlated to increased levels of norepinephrine and serotonin, which in turn can increase the frequency of vasomotor symptoms due to their important role in thermoregulation. Similarly, increased proinflammatory cytokine

interleukin-6 levels had been found in mid-aged women with psychological symptoms. [13]

Out of the 40 (100%) PMW with anxiety, total QOL wise, 55% (22) were in 48 – 60 group followed by 40% (16) in 61 – 74 group. Whereas in the UQOL group, the total QOL was 75 to 87 in 47.5% (19) and 88 to 100 in 52.5% (21) of study members; statistically there was significant association (Table 1). Almost similar findings were reported by Hopper SC et al. [14]

As per the research, there is 1.8 – 2 times higher chance of development of anxiety in PMW and the prevalence was 7 – 25%. [15] In this research total 120 (100%) PMW were included in this 40 (33%) were diagnosed to have anxiety disorder. As per this research anxiety was found to be common among PMW. This leads to obesity as well as chronic systemic disease such as cardiovascular diseases. Adiponectin and leptin are the hormones found to be the important cause for anxiety. [16]

Conclusion

The menopausal transition bring significant change in female life which has impact of het health.

Anxiety is one of the commonest psychological disorder among the PMW which needs to be attended with utmost care due to its further complications. Non correlation of some parameters such as literacy and anxiety, small sample size are the limitations of this research.

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