DEPRESSION;

PREVALENCE OF DEPRESSION AND MENOPAUSAL SYMPTOMS AMONG MENOPAUSAL WOMEN ATTENDING TERTIARY CARE HOSPITAL, MARDAN

Ejaz Gul[1], Muhammad Muslim Khan[2], Mukhtiar Azeemi[3], Pirzada Muhammad Muneeb[4]

1. FCPS (Psychiatry)
   Associate Professor,
   Bacha Khan Medical College,
   Chairman Department of Psychiatry,
   Mardan Medical Complex.
2. FCPS (Psychiatry)
   Assistant Professor,
   Department of Psychiatry,
   Mardan Medical Complex.
3. FCPS (Psychiatry)
   Chairman,
   Department of Psychiatry,
   Lady Reading Hospital, Peshawar.
4. MS Clinical Psychology
   Clinical Psychologist,
   Department of Psychiatry,
   Mardan Medical Complex.

Correspondence Address:
Dr. Mukhtiar Azeemi
Department of Psychiatry, Lady
Reading Hospital, Peshawar.
doctormian@yahoo.co.uk

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ABSTRACT... Depression is a common problem among women. Different variables contribute in influencing depression among women. Menopause is one variable that may trigger symptoms of depression. Different variables jointly contribute in influencing the presentation of menopausal symptoms including sociocultural, psychological and environmental factors. No studies have been conducted to assess mean age and symptoms of depression among menopausal women of Mardan. **Objectives:** To assess accompanying symptoms of depression and their severity among menopausal women. **Study Design:** Cross-sectional study. **Setting:** Gynae Out-patient Department at Mardan Medical Complex. **Period:** February 2017 to October 2017. **Methods:** The sample consisted of 200 women ranging in age from 45-71 years. Each patient was assessed using sociodemographic sheet, menopausal symptoms were assessed using Menopausal rating scale and severity of depression was measured using Hamilton depression scale. Data was entered and analyzed using SPSS Version 21.0. **Results:** According to the findings of this study, mean age at menopause was noted to be 49.1 ranging from 44-59. Among the many predominant menopausal symptoms, the most common among these symptoms reported were joint and muscle discomfort in 62% of women, followed by sleep problem (17%), and physical and mental exhaustion (11%). The least reported menopausal symptoms were drying of vagina, sexual problems and anxiety. Depression was found among 26 % of the female participants according to Hamilton scoring criteria. Mild depressive symptoms were noted among 24%, moderate depressive symptoms 14%, severe 5% and very severe 7%. **Conclusion:** According to the results of the current study, 50 % of the participants lies in the range of depression according to Hamilton depression scores. Among these 50%, more than half 26 % lies in the range of severe to very severe depression while the rest 24% lies in the range of mild to moderate depression.

Key words: Age Onset, Depression, Menopausal Symptoms.

INTRODUCTION

Depression is a serious problem among women. Specific hormonal changes may contribute to this increase in women. After puberty, women are 1.5 to 3 times more likely than men to develop depression. A prevalence rate of 21- 40.5% have been estimated in studies conducted in primary care clinics.[1] Depression also is very common among menopausal women and has serious consequences on women's life in terms of disturbance in routine functioning, social and sexual functioning.[2]

The function of human ovaries declines with advancing age and becomes unresponsive to gonadotropins, so that the sexual cycles disappear. Irregularities in the menstrual cycle starts usually at the age of 45 and ceases till 55 years, thus making the end of a woman's reproductive life.[3]

The stage of menopause starts when a women's menstruation cycle is not occurred for 12 consecutive months. This stage signals the end of a women's reproductive life.[4]

Menopause advances in two stages, the first stage perimenopause includes irregular menstrual cycles and the stage of post menopause is characterized by absence of menstrual cycles

for 12 consecutive months.[5] Menopause and associated hormonal changes bring upon various symptoms including sleep problems, hot flushes, memory disturbances, joint and muscle pain, and frequent urination.[6]

The most common clinical symptoms of menopause involve genitourinary symptoms, osteoporosis, motor instability and increased incidence of bone fractures, increased incidence of thrombo-embolic and ischemic heart disease, and psychological symptoms of anxiety, depression, and memory loss.[7]

Numerous researches from different parts of the world have revealed that menopause is highly variable in timing and symptoms reported.[8] Certain variables contribute in influencing the presentation of menopausal symptoms including sociocultural, psychological and environmental factors.[9]

Numerous studies have been conducted worldwide to assess menopausal women for symptoms of depression and to estimate the mean menopausal age of women but in Pakistan, there is a huge hurdle in conducting such studies because of difficulty in the ascertainment of the correct ages of women, as women do not feel comfortable to disclose their correct ages. Such issues make it difficult to conduct such studies and may lead to discrepancies in the results. Keeping in view these difficulties an attempt is made to tackle this issue by only selecting those women into the study who had correct documented ages in order to make a correct estimate of menopausal age and menopausal symptoms.

METHOD

OBJECTIVES
The current study aimed to assess depressive symptoms and their severity among menopausal women. The study also attempted to identify the mean age onset of menopause and most prevalent menopausal symptoms among women attending Gynae outpatient department of a tertiary care hospital.

Participants
A total of 200 menopausal women ranging in age from 45-71 attending gynae outpatient department of tertiary care hospital at Mardan were included in the study.

Description of Measures
Demographic information sheet was used to obtain information about age, gender, marital status, education, time since menopause, age of menopause, parity, and HRT use.

For measuring symptom severity of depression, Hamilton Depression Scale was used.[10] The scale has been widely used for assessing depressive symptoms among menopausal women.[11] HAM-D is a clinician rating scale consisting of 21 items. Score of 8-13 on HAM-D indicates mild depression, 14-18 moderate depression, 19-22 severe depression and >23 indicates very severe depression. Menopausal symptoms were assessed using menopausal rating scale.[12]

PROCEDURE

METHODOLOGY
The procedures followed in this research and material used were reviewed by the ethical committee and approval was sought for data collection from hospital administration.

Information about the purpose of the research was explained to the participants. Queries if any were cleared. Written informed consent was taken from the participants. Scales were administered by psychologists. They were facilitated to freely ask questions for any difficulty regarding any item or instructions of the measures. At the end thanks was paid to the participants for their cooperation.

Statistical Analysis
The results were analyzed using statistical package for social sciences (IBM SPSS, Version 22, Armonk, New York).

RESULTS
A total of 200 women were included in the study ranging in age from 45 to 71. The mean age of participants was determined to be 56.07. The

mean menopausal age was determined to be 49.1 ranging from 44-59. Most women were uneducated (50%), primary school education (32%), and matric and above (18%). Most of the participants were married 95%, while 5% were unmarried. HRT was used by only 6% of the participants.

In the current study 26% of women were found to have depression according to Hamilton scoring criteria. Mild depressive symptoms were noted among 24%, moderate depressive symptoms 14%, severe 5% and very severe 7% among the participants.

There were many predominant menopausal symptoms reported by women but the most common among these symptoms reported were joint and muscle discomfort in 62% of women, followed by sleep problems (17%), and physical and mental exhaustion (11%). The least reported menopausal symptoms were drying of vagina, sexual problems and anxiety.

The sample comprised of 200 female participants. Among the 200 participants, 190 (95%) of the participants were married while 10 (5%) were unmarried. The participants ranged in age from 45-71. Age since menopause was obtained in years. The minimum age of the participants at menopause was found to be 44 and the maximum age was 59. HRT was not used by 94% of the participants while 6% underwent HRT.

	N	F	%	Min	Max	Mean	S. D
Age	200			45	71	56.07	6.019
Time since Menopause	200			1	21	7.07	5.252
Age of Menopause	200			44	59	49.10	2.072
Parity							
Nullipara	200	16	8				
Primigravida	200	14	7				
Multigravida	200	38	19				
Grand multigravida	200	132	66				
Education							
Nil	200	100	50				
Primary	200	64	32				
Matric & Above	200	36	18				
Marital Status							
Married	200	190	95				
Un-Married	200	10	5				
HRT Use							
Yes	200	12	6				
No	200	188	94				

Table-I. Demographic characteristics of participants

Descriptive Statistics				Frequencies				
	N	Mean	S. D	None	Mild	Moderate	Severe	V. Severe
HAM.D	200	.95	1.214	50	24	14	5	7
Joint muscles discomfort	200	1.55	.986	20	18	52	7	3
Sleep problem	200	.86	.839	37	46	11	6	0
Bladder problem	200	.58	.621	49	44	7	0	0
Physical mental exhaustion	200	.55	.794	60	29	7	4	0
Depressive mood	200	.42	.605	64	30	6	0	0
Heart discomfort	200	.41	.778	73	17	6	4	0
Hot flushes	200	.36	.593	70	24	6	0	0
Anxiety	200	.23	.422	77	23	0	0	0
Irritability	200	.16	.485	89	6	5	0	0
Sexual problem	200	.13	.337	87	13	0	0	0
Drying of vagina	200	.11	.314	89	11	0	0	0

Table-II. Frequencies and description of menopausal symptoms

Among the 200 participants, 14 (7%) scored in the range of very severe depression, 10 (5%) severe depression, 28 (14%) moderate depression, 48 (24%) mild depression and 100 (50%) did not had depression.

On variable of joint and muscle discomfort (62%), the highest mean scores were noted (1.55), followed by (.86) sleep problems (17%). On the variables of drying of vagina (.11) and sexual problems (.13), the least mean scores were noted. Depression was noted among 26 % of participants according to Hamilton scoring criteria.

DISCUSSION

Menopause is a universal phenomenon and has a varied presentation due to different biological, environmental and cultural factors. It is associated with physical and psychological changes in women and is a risk period for various psychological disorders.

The participants of the current study were 200 menopausal women attending Gynae Out Patient Department of a tertiary care hospital located in Mardan district of Khyber Pakhtunkhwa. The mean age at menopause in this study was determined to be 49.10. Mean age at menopause in a similar study in India was determined to be 48.5.[13] In another similar study the mean age at menopause in Karachi was determined to be 44.5 years.[14] Minimum age at menopause in our study was 44 while maximum age at menopause was 59 among the participants.

In the current study, depressive symptoms were present among 26% of the study population. Almost similar finding were revealed by a study of depression among menopausal women with depression present in 24.7% of the study population.[15] Another recent study yielded similar results with depression present among 25.99% women with peri menopausal syndrome.[16]

Among the 200 participants of our study, 10 (5%) had severe depression. These findings are supported by studies in other parts of the world. A recent Indian study reported severe depression

to be present among 8.5 % of menopausal women.[17] Another study of menopausal women also reported the presence of severe depressive mood among 6.9 % of the population.[18] Very severe depressed mood was found among 7% of our study population.

In the current study, commonly reported menopausal symptoms included joint and muscle discomfort, sleep problems, bladder problem, physical mental exhaustion, depressive mood, heart discomfort, and hot flushes. The least present menopausal symptoms were drying of vagina, sexual problems, irritability and anxiety.

Menopausal women frequently report with symptoms of joint and muscular discomfort. In the current study the most commonly reported menopausal symptoms was joint and muscular discomfort present among 62% of the participants. A study in India assessing menopausal symptoms found joint and muscle discomfort among 59.1% of the study population.[11] Another study of menopausal women also found joint and muscular discomfort as the most commonly presented menopausal symptoms among 77 % of the women.[13]

CONCLUSION

According to the results of the current study, 50 % of the participants lies in the range of depression according to Hamilton depression scores. Among these 50%, more than half 26 % lies in the range of severe to very severe depression while the rest 24% lies in the range of mild to moderate depression.

RECOMMENDATIONS

In our society, depressive symptoms among menopausal women are usually neglected and are attributed to the advancing age. Females frequently do not openly express depressive symptoms.

Depression has huge impact on our lives and has serious consequences on our daily functioning. Therefore, depressive symptoms among menopausal women should be thoroughly addressed, explored and interventions should

be carried by Gynecologists and health care professionals at outpatient clinics and hospitals. **Copyright© 15 Apr, 2018.**

REFERENCES

1. Grover S, Dutt A, Avasthi A. **An overview of Indian research in depression.** Indian journal of psychiatry. 2010 Jan; 52(Suppl1):S178.

2. Hassa H, Tanir HM, Yildirim A, Senses T, Oge T, Mutlu FS. **Associated factors with urogenital score in natural and surgical menopause.** Maturitas. 2005 Sep 16; 52(1):65-9.

3. Ganong WF. **Review of medical physiology.** 21st Ed. India: McGraw Hill Co; 2003.

4. Arroyo A, Yeh J. **Understanding the menopausal transition, and managing its clinical challenges. Sexuality, Reproduction and Menopause.** 2005 May 1; 3(1):12-7.

5. Jaszmann L. **Epidemiology of climacteric and post-climacteric complaints.** In Ageing and estrogens 1973 (Vol. 2, pp. 22-34). Karger Publishers.

6. Blumel JE, Castelo-Branco C, Binfa L, Gramegna G, Tacla X, Aracena B, Cumsille MA, Sanjuan A. **Quality of life after the menopause: a population study.** Maturitas. 2000 Jan 15; 34(1):17-23.

7. Noreh J, Sekadde-Kigondu C, Karanja JG, Thagana NG. **Median age at menopause in a rural population of western Kenya.** East African medical journal. 1997 Oct; 74(10):634-8.

8. Qazi RA. **Age, pattern of menopause, climacteric symptoms and associated problems among urban population of Hyderabad, Pakistan.** Journal of the College of Physicians and Surgeons--Pakistan: JCPSP. 2006 Nov; 16(11):700-3.

9. Randolph Jr JF, Sowers M, Gold EB, Mohr BA, Luborsky J, Santoro N, McConnell DS, Finkelstein JS, Korenman SG, Matthews KA, Sternfeld B. **Reproductive hormones in the early menopausal transition: relationship to ethnicity, body size, and menopausal status.** The Journal of Clinical Endocrinology & Metabolism. 2003 Apr 1; 88(4):1516-22.

10. Hedlund, J. L., & Vieweg, B. W. **The Hamilton rating scale for depression: a comprehensive review.** Journal of Operational Psychiatry, 1979; 10(2), 149-165.

11. Singh A, Pradhan SK. **Menopausal symptoms of postmenopausal women in a rural community of Delhi, India: A cross-sectional study.** Journal of mid-life health. 2014 Apr; 5(2):62.

12. Heinemann LA, Potthoff P, Schneider HP. **International versions of the menopause rating scale (MRS).** Health and quality of life outcomes. 2003 Dec; 1(1):28.

13. Ali A, Yesudas KF, Palayat AM, Shoukkathaly S, Mahadevan K. **Depression and menopausal symptoms in perimenopausal women attending primary care.** Journal of Evidence Based Medicine and Healthcare. 2017 Jan 1; 4(44):2677-81.

14. Adhi M, Hasan R, Shoaib S, Tauheed S. **Age and symptomatology of menopause in Karachi, Pakistan.** Pak J Physiol. 2007; 3(1):41-.

15. Unsal A, Tozun M, Ayranci U. **Prevalence of depression among postmenopausal women and related characteristics.** Climacteric. 2011 Apr 1; 14(2):244-51.

16. Li RX, Ma M, Xiao XR, Xu Y, Chen XY, Li B. **Perimenopausal syndrome and mood disorders in perimenopause: prevalence, severity, relationships, and risk factors.** Medicine. 2016 Aug; 95(32).

17. Bansal P, Chaudhary A, Soni RK, Sharma S, Gupta VK, Kaushal P. **Depression and anxiety among middle-aged women: A community-based study.** Journal of family medicine and primary care. 2015 Oct; 4(4):576.

18. Nisar N, Sohoo NA, Sikandar R. **Menopausal symptoms: prevalence, severity and correlation with sociodemographic and reproductive characteristics. A cross sectional community based survey from rural Sindh Pakistan.** Education. 2015 Apr 1; 60(222):7-3.

AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Ejaz Gul	Idea conception and theme	
2	Muhammad Muslim Khan	Data collection	
3	Mukhtiar Azeemi	Write up and literature review	
4	Pirzada M. Muneeb	Data collection and bibliography	