RESEARCH ARTICLE

Psychological Well-Being & Obesity in Peri-Menopausal and Post-Menopausal Women

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ABSTRACT

Background: Strange interplay of hormones (especially inadequacy or lack of estrogen) affects the psychological health of the women & tendency to gain weight but the reasons are not sure & obesity may lead to many mental disorders.

Objective: The study was aimed to correlate the quality of life in the form of psychological well-being in perimenopausal and post-menopausal women with obesity.

Materials and Methods: 30 peri 30 postmenopausal women were included in the study. For assessment of psychological well-being WHO-5 well-being index was used.

Results: We found no statistical difference in both the groups for BMI and psychological well-being of perimenopausal women was more affected as compared to postmenopausal women although the difference was not statistically significant.

Conclusion: Necessary actions are needed to prevent occurrence of complications not only after menopause but also during perimenopausal period.

KEY WORDS: Psychological Well-Being, Menopausal Transition, Obesity

INTRODUCTION

Health is more than the absence of disease; it is a resource that allows people to realize their aspirations, satisfy their needs and to cope with the environment in order to live a long, productive and fruitful life.[1] In this sense, health enables social, economic and personal development essential to well-being.

There is no consensus around a single definition of well-being, but there is general agreement that at minimum, well-being includes the presence of positive emotions and moods (e.g. contentment, happiness), the absence of negative emotions (e.g., depression, anxiety), satisfaction with life, fulfillment and positive functioning.[2] Physical well-being is considered to be critical for overall well-being. Researchers from different disciplines have examined different aspects of well-being that include physical well-being, economic well-being, social well-being and emotional well-being.

The use of rating scales in clinical research in psychiatry has increased since late 1950s with the introduction of antipsychotics and antidepressants. At present, there is variety of psychiatric rating scales in use for clinical as well as research purposes. Some are observer rating scales covering the various psychopathological states like dementia, schizophrenia, mania, depression, anxiety and obsessive compulsive disorder and others are self-rating scales widely used for conditions such as depression and anxiety.[3,4]

Over the last decades self-rating scales have been developed to include not only symptom scales but also scales covering social aspects (often referred to as disability scales) and subjective well-being (often referred to as quality of life scales). As well-being is subjective, it is logical that it should be measured by self-rating scales.[5]

WHO-Five well-being index is such a self-rating quality of life scale.[6] The WHO-Five Well-being Index was derived from a larger rating scale developed for a WHO project on quality of life in patients suffering from diabetes (WHO 1990).

Women undergo many changes in their middle age. These changes are predominantly due to hormonal changes in perimenopausal transition. Menopause has been considered a major transition point in a woman's reproductive life. In their late 40s, women report varied complaints known as menopausal syndrome, which refers to a group of physical and psychological symptoms experienced in the climacteric period.[7,8] The physical and reproductive changes occurring in females during this are well known. But its psychological relevance is still unclear. Biological factors at the time of menopause appear to predispose women to major psychological upheavals.[1]

A woman, in her reproductive period, gradually transcends into perimenopausal transition and after a couple of years into menopause. Perimenopause is a transitional phase and is marked by changes occurring from normal ovarian cycles to complete cessation of menstruation. This phase presents irregular menses and may last for 2 to 10 years. This period is followed by menopause where there is complete loss of ovarian activity and thus estrogen.

The strange interplay of hormones (especially inadequacy or lack of estrogen) affects the psychological health of the women.

This study was aimed to assess the quality of life in the form of psychological well-being in perimenopausal and post-menopausal women.

MATERIALS AND METHODS

Sixty women of the age group 40-60 years attending the Mid-life management clinic of Gynecology OPD, Bharati Hospital, Pune were included in the study. The subjects having diabetes, hypertension, ischemic heart disease, chronic inflammatory diseases like rheumatoid arthritis, psychiatric disorders, substance addiction disorder and patients with

oophorectomy and hysterectomy were excluded from the study.[7,8] The subjects were divided into Perimenopausal group (n= 30): This group consisted of subjects with irregular cycles (i.e. the gap between 2 menstrual events more than 2 months). The perimenopausal signs and symptoms of these subjects were recorded. Detailed menstrual history was noted as some women might present with history of irregular cycles since menarche. Postmenopausal group (n= 30): This group consisted of subjects who had witnessed amenorrhea since 12 months or more.

Subjects of both groups were asked to fill the 'WHO (Five) Well-Being Index' to assess their quality of life and psychological well-being.[5,6] The World Health Organization five-item well-being index (WHO-5) is a short, positively worded instrument designed to assess the level of positive well-being. It can also be used as a screening tool for depression in primary healthcare setting. It consists of five questions which are to be answered on a graded scale. The core items of subjective quality of life belong to the dimension of psychological well-being (positive mood, vitality and interest in things) which include positively worded items.

WHO 5 well-being includes five items which is rated on a 6-point Likert scale from 0 to 5. The theoretical raw score ranges from '0' to '25'. 'Zero' represents worst possible sense of well-being whereas '25' represents best possible sense of well-being. If the raw score is below 13 or if the patient has answered 0 to 1 to any of the five items; it indicates poor sense of well-being and is an indication to administer the Major Depression (ICD-10) Inventory to rule out depression. The raw scores for subjects in both groups were calculated.

RESULTS

Table 1 show that there is a significant difference in age between perimenopausal and postmenopausal women. There is no statistical difference in both the groups for body mass index but mean levels in post-menopausal group are higher than perimenopausal group (table 2). There is no statistical difference in both the groups for WHO well-being scores (table 3).

Table-1: Comparison of Age in Perimenopausal and Postmenopausal Women

Parameter	Peri-menopausal n=30	Post-menopausal n=30	Z Value	P Value
Age (Yrs)	42.89 ± 2.9	53.68 ± 5.34	9.36	<0.0001 (HS)

Table-2: Comparison of Body Mass Index in Perimenopausal and Postmenopausal Women

Parameter	Peri-menopausal n=30	Post-menopausal n=30	Z Value	P Value
BMI	25.69 ± 4.99	28.12 ± 6.75	1.52	>0.05 (NS)

Table-3: Comparison of WHO – Well-being Score Means in Perimenopausal and Postmenopausal Women

Parameter	Peri-menopausal n=30	Post-menopausal n=30	Z Value	P Value
WHO score	14.29 ± 7.28	16.36 ± 5.38	1.19	>0.05 (NS)

DISCUSSION

Perimenopause is a critical period in life during which striking endocrinological, somatic and psychological alterations occur in the transition to menopause. Menopause is the permanent cessation of menses as a result of the irreversible loss of a number of ovarian functions including ovulation and estrogen production. This study was aimed to assess the quality of life in perimenopausal and post-menopausal women and to correlate it with physiological changes which occur in the autonomic function tests.

In this study, we found the mean age of 42.89 years in perimenopausal women and that of 53.68 years in postmenopausal women (Table 1). According to different studies on menopausal women mean age group for menopause in India was found to be 45-49 years.[9,10]

The BMI of perimenopausal group was found to be 25.69 and that of postmenopausal group was 28.12. Both groups come under the category of overweight. There was no statistical difference in

both the groups for body mass index but mean levels in post-menopausal group were higher than perimenopausal group (table 2). Our findings support the study by Crawford SL[11] who suggested that increased weight experienced by middle-aged women was not a result of the menopause transition.

There is no statistical difference in the means of WHO well-being scores in both peri and post-menopausal groups (Table 3); however mean levels are higher in perimenopausal than post-menopausal women.

Interpretation of WHO-5 well-being index is done not only on the basis of score but also on the way subjects are answering the questions. If the raw score is below 13 or if the patient has answered 0 to 1 to any of the five items; it indicates poor sense of well-being and is an indication to administer the Major Depression (ICD-10) Inventory to rule out depression. In our study, the percentage of women with poor well-being index in perimenopausal women was 63% and that in postmenopausal women was 53%.

Various studies support these findings.[12-14] The reasons for poor well-being probably are stressful life events in middle aged women and hormonal changes in menopausal transition. In their studies of depressive symptoms and stressful life events among middle-aged women found that psychosocial factors were associated with the dysregulation of the hypothalamo-pituitary-adrenal axis, resulting in an increased release of cortisol, decreased glucose uptake, and elevated glucose levels. These studies shows that during middle age, women also have a tendency of weight gain associated with depression due to stressful life events.

Our study correlates well with the work done by Joyce T. Bromberger et al.[7] concluded that psychological distress was associated with irregular menses in midlife. It is important to determine whether distress is linked to alterations in hormone levels and to what extent a mood–hormone relationship may be influenced by socioeconomic and cultural factors.

Physiologically it is a well-known fact that depression of any origin is associated with high cortisol but it is also observed that there are low levels of serotonin in most of these obese subjects.[15] One of the study[8] found that climacteric symptoms but not menopausal status were associated with higher rates of depressive symptoms.[10]

In a study conducted by Deeks AA, McCabe MP[16] it was investigated whether menopausal stage and age accounted for how women felt about their purpose in life, self-acceptance and social role. It was found that women who were perimenopausal and postmenopausal did not feel as positive about their role/s in life as premenopausal women, regardless of their age.

Limitations

Sample size was small in our study. All the subjects with poor WHO well-being score should be further investigated for depression with the help of Major Depression Inventory under ICD-10 to confirm the results.

CONCLUSION

We found that psychological well-being of perimenopausal women was more affected (low WHO-5 well-being index) as compared to post-menopausal women although the difference was not statistically significant. These results indicate that psychological well-being and autonomic functions in both the groups are equally affected. Necessary actions are needed to prevent occurrence of complications not only after menopause but also during perimenopausal period. This study highlights the importance of risk factor screening for psychological disorders like depression, even prior to menopause in women, in order to prevent it. Susceptible women can be referred for counseling, life style modifications, diet planning, medication, exercise and yoga.

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