Original article

Prevalence of depressive and anxiety disorders in a Brazilian outpatient sample of menopausal women

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INTRODUCTION

Menopause is divided into two main stages: perimenopause is characterized by the presence of irregular cycles or with characteristics different from the cycles seen during reproductive life, with the last menstruation occurring less than 12 months ago; and postmenopause, marked by absence of menstruation for more than 12 months.[1] Most women who reach menopause do not present major depressive symptoms.[2] However, a prevalence higher than expected of similar depressive symptoms has been observed among these women.[2] The transition into menopause seems to act not as the cause of mood symptoms, but as a facilitator.

A series of studies carried out among climacteric women in Campinas (SP, Brazil) showed very relevant national data. Assessment using home questionnaires of 367 individuals showed high prevalence of emotional symptoms, such as nervousness (81.7%), headache (68.4%), irritability (67.3%) and depression (58.9%).[4] Eighty per cent of interviewed women sought medical care; one of the main factors was related with a higher intensity of psychological symptoms.[5] Whitehead,[6] evaluating studies from other countries, had already reported that degrees of anxiety, irritability and depression would be the main differentiating characteristics from women who seek specialized treatment or not.

Few Brazilian studies have investigated the characteristic of menopausal women receiving outpatient care. None of them have used diagnostic instruments for mental disorders, being based only on scales to quantify common symptoms of menopause, such as the Kupperman index.[7] Among them are Halbe et al.,[8] who have found low prevalence of emotional complaints (9.1% of nervousness) in 1,319 climacteric patients. In a more recent Brazilian study, 254 menopausal women receiving care in outpatient clinics presented irritability (87.1%), arthralgias and myalgias (77.5%) and melancholy (73.2%) as the most prevalent symptoms.[9]

We have noted that the data related to the Brazilian population are rare and contradictory. We intend to determine the prevalence of depressive and anxiety disorders in an outpatient sample

of menopausal women and to correlate the occurrence of diagnosis with sociodemographic factors, personal or family psychiatric history and gynecological clinical data.

METHODOLOGY

Eighty-six women receiving care in the menopause clinic at Instituto de Ginecologia da Universidade Federal do Rio de Janeiro were consecutively assessed from March to October 2005. Women were consecutively selected and interviewed using the Mini-International Neuropsychiatric Interview (MINI), version 4.4.[10,11] All assessments were performed by the same psychiatrist, while the patients waited for the regular visit to their gynecologist. There was no restriction of age, since our objective was to globally characterize the population receiving care.

Clinical and general sociodemographic data were also collected during the interview and through medical charts. With regard to sociodemographic data, we surveyed race (Indo-European or African-Brazilian), marital status (married, single, divorced or widow), schooling (less than 8 years, between 8-10 years or more than 10 years) and employment and family income (number of minimum wages). We also characterized the menopausal stage (premenopause, perimenopause or postmenopause)[1] of each woman, type of menopause (surgical or natural), follow-up time at the clinic, age at menarche, use of hormone replacement therapy (HRT) and previous or family history of depression or psychiatric treatment.

Data analysis

Continuous variables were assessed as to their average and standard deviation (SD), and categorical variables as to their absolute and relative frequencies. Patients with and without psychiatric diagnosis, with and without major depression (MD) and with and without generalized anxiety disorder (GAD) were compared with regard to their clinical and sociodemographic characteristics. Mann-Whitney and Student's *t* tests were used to compare continuous variables

between groups, and chi-square and Fisher's exact tests to compare categorical variables between groups. Statistically significant associations were those that presented $p \leq 0.05$.

RESULTS

Our sample was mostly composed of Indo-European (64.3%), married (54.8%), unemployed (53.5%) women with less than 8 years of schooling (62.8%). Mean age was 54.2 years (SD = 6.9), and income in number of minimum wages was 3.1 (SD = 2.6) (table 1). With regard to menopausal stage, 84.9% were in the postmenopause, 12.8% in the perimenopause, and 2.3% in the premenopause. Most (74.7%) women reached menopause naturally, and 30.2% were undergoing some type of HRT during assessment, although 75.5% had already used HRT at some point of the treatment. Assessed women had been followed up for 7.3 years (SD = 4), and age at menarche was 13.1 years (SD = 2.2).

Table 1 - Sociodemographic data from the total sample (n = 86) of women receiving care in the menopause clinic at Instituto de Ginecologia, Universidade Federal do Rio de Janeiro

Mean age (± SD)	54.2 (± 6.9)
Mean income in minimum wages (± SD)	3.1 (± 2.6)
Schooling, n (SD)**	
< 8	54 (62.8%)
8-10	17 (19.8%)
> 10	15 (17.5%)
Race	
Indo-European	54 (64.3%)*
African-Brazilian	30 (35.7%)*
Marital status, n (SD)	
Married	46 (54.8%)*
Other	38 (45.2%)*
Job, n (SD)	
Employed	46 (46.5%)
Unemployed	40 (53.5%)

SD = standard deviation.

* Information taken from medical charts and present in 84 individuals.

** In years of study.

Most women presented some type of current psychiatric diagnosis (57%); GAD (34.9%) and MD (31.4%) were the most prevalent disorders. Other diagnoses found and their respective prevalence are shown in table 2. Among those who presented any disorder, 44.9% had only one diagnosis, 42.9% had two, and 12.2% had three. Family history (FH) and personal history (PH) for depression or psychiatric follow-up were positive in 37.2 and 32.6%, respectively.

Table 2 - Frequency and prevalence of disorders seen in the total sample (n = 86)*

Diagnoses	Frequency (% prevalence)
GAD	30 (34,9)
MD	27 (31,4)
Suicidal ideation	15 (17,4)
Agoraphobia	12 (13,9)
Panic disorder	5 (5,8)
Social phobia	5 (5,8)
Others	5 (5,8)

GAD = generalized anxiety disorder; MD = major depression.

* Comorbid cases (n = 27) were included in this table.

The group of women with at least one diagnosis (CD) was significantly younger (52 *versus* 56 years; p = 0.021), compared with the group without diagnosis (WD). Married women were more likely to present some diagnosis (69.2 *versus* 48.2%; p = 0.098). Group CD presented higher positive FH (51 *versus* 18.9%; p = 0.003), which was also seen comparing groups with MD (CMD) and without MD (WMD) (55.5 *versus* 28.8%; p = 0.029), but not significantly between groups with GAD (CGAD) and without GAD (WGAD) (50 *versus* 30.3%; p = 0.101). Group CGAD presented higher prevalence of women with less than 7 years of schooling (76.6 *versus* 53.5%; p = 0.024).

DISCUSSION

In our sample, we noted significant prevalence of anxiety and mood disorders (57%), especially GAD (34.9%) and MD (31.4%). The general prevalence of diagnoses found in our study is in accordance with the findings by Ballinger,[12] who had 52.5% psychiatric cases in their sample of 217 women aged between 40-54 years and receiving outpatient care. Gater et al.,[13] in a multi-

centered study at general outpatient services, found prevalence of 12.5% for MD and 9.2% for GAD among women. The same study has used a sample from a university service in Rio de Janeiro, which showed prevalence of 38% for psychiatric diagnoses, 16% for MD and 23% for GAD. Hortal et al.[14] noted MD prevalence of 26.8% among women receiving primary care. Compared with studies that have assessed menopausal women receiving outpatient care, our study noted higher MD prevalence than the study by Wojnar et al.[15] (19%) and lower than the study by Hay et al. (45%)[3] and Anderson et al.,[16] who found 33% of patients with moderate to severe MD. Therefore, the tendency of higher prevalence of mental disorders among outpatient menopausal women, in relation to women receiving general care, was also seen in our study.

Most women with mental disorders presented at least two diagnoses (55.1%), with association between directly connected and consequent diagnoses, such as GAD and MD, GAD and agoraphobia, and MD and agoraphobia. Such high prevalence of comorbid conditions that worsen the primary disorder makes us speculate about its possible reasons. It seems to show the progress to a worse diagnosis for most patients, besides reflecting the implication of absence of specific early treatment in the course of mental disorders among assessed women.

We noted an important relationship between positive FH and occurrence of any anxiety and depressive disorder among assessed women, especially for MD. That is, chances of presenting any diagnosis were higher in women who presented positive FH (prevalence ratio or PR = 2.7), which was also true for MD (PR = 1.9). The role of FH as a risk factor to be investigated by the gynecologist who works with menopausal women should be stressed.

Among sociodemographic factors, we have noted a higher tendency of psychiatric illness in married women with less years of schooling, which is confirmed by other studies.[2,5] We did not find any association between menopausal stage and occurrence of anxiety and depressive disorders. We believe that this negative finding, opposite to several studies in this area,[17,18] was due to the study design not being appropriate for this aim, since we did not adopt restrictive criteria for age, and most women (84.9%) were in the postmenopause. In spite of this, the group CD presented mean age

significantly lower in 4 years, compared with the group WD. Younger women would naturally be closer to transition into menopause and with less time in this life stage, which makes us consider a relationship between menopausal stage and psychic illness in our sample, even using indirect data.

The great concentration of MD and GAD found in our sample draws the attention because it is about the current existence of a diagnosis. Brazilian population studies have determined incidences of current episode of MD between 1.3[19] and 15.8%,[20] dependent on the diagnostic instrument used and municipality under investigation. For GAD, the National Comorbidity Survey, which assessed the American population, found only 1.6% incidence and 5% prevalence throughout life for this diagnosis.[21] It is worth stressing that the data found in our sample cannot be used to characterize the population of menopausal women. It is a subpopulation with particular characteristics, due to biases that motivated women to seek outpatient care. There is the need of a Brazilian population study to determine the prevalence of mental disorders among menopausal women in our country.

The high prevalence of anxiety and mood disorders in menopausal women receiving outpatient care may be a consequence of several factors. Among them are hormonal changes acting as facilitators of the transition into menopause, social and emotional aspects of women in this age group, and difficulty in seeking psychiatric help for predominantly mild to moderate disorders, due to the negative image still carried by this specialty. Another explanation would be the fact that women with MD and/or GAD complain more and have lower tolerance to climacteric symptoms, seeking medical care more frequently.

We have noted the necessity of a better interface between this population, gynecologists and psychiatry, in order to increase detection and offer of disorder treatments that have a highly negative influence on women's quality of life, such as mental disorders.

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ABSTRACT

Objective: *To determine the prevalence of depressive and anxiety disorders in women receiving care in a menopause clinic.*

Methods: *Eighty-six women receiving care in the menopause clinic at Instituto de Ginecologia da Universidade Federal do Rio de Janeiro were assessed using the Mini-International Neuropsychiatric Interview.*

Results: *Most women had a psychiatric diagnosis (57%); generalized anxiety disorder (34.9%) and major depression (31.4%) were the most prevalent disorders. The group composed of subjects with any disorder was represented by young and married women, with lower schooling level and family history for psychiatric disorders.*

Conclusion: *In our study, there was a high prevalence of psychiatric disorders in outpatient women receiving care in a menopause clinic, in relation to women receiving care in other outpatient clinics, as described in the literature. There was also a high prevalence of comorbid diseases (55.5% of patients with any disorder) complicating the primary disorder, which may compromise the prognosis due to lack of early specific treatment.*

Key words: *Epidemiology, anxiety, depression, menopause.*

Title: *Prevalence of depressive and anxiety disorders in a Brazilian outpatient sample of menopausal women*

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