

Particularities of Depressive Disorders Installed in Perimenopause

Crișan R, Gabos Grecu I, Buicu Gabriela, Țăran Livia, Gaboș-Grecu Marieta, Nireștean A, Gliga Florina

University of Medicine and Pharmacy, Tg.Mures

Background: The risk of woman to present a depressive clinical picture increases in parallel with the approaching age of perimenopause.

Aim: The main purpose of the paper is to study correlations between symptoms of perimenopause and depressive episode occurrence, taking into consideration the severity and the frequency of symptoms of perimenopause.

Material and methods: We have selected the cases by performing a screening to patients with major depressive disorder, hospitalized in No. 1 Psychiatric Clinic, between 01.01.2007–31.12.2009.

Results: From the total patients admitted (1342) only 160 patients aged 34–55 years, voluntarily wanted to participate, representing 11.92% of all patients. Analyzing the severity of psychological symptoms we have obtained statistical significance in the age group 46–50 years: $p = 0.0303$. Analyzing the frequency of vasomotor symptoms by age group, we have obtained statistical significance in the age group 34–40 years: $p = 0.006$. Analyzing the frequency and severity of somatic symptoms by age groups, we have obtained statistical significance in the age group 34–40 years.

Conclusions: The rural environment proved to be a protective factor in the emergence of depressive disorders ($P = 0.0189$). Estimating the role of hormonal decline at patients aged over 40 years, helped us to understand that the emergence and evolution of clinical manifestations during perimenopause and menopause may be caused by fluctuations of central secretion of pituitary hormones and sex steroids.

Keywords: perimenopause, depression

Introduction

Starting from the share of over 40% of depressive disorders among women in the climacteric periods (perimenopause), menopause and postmenopausal compared with approximately 7% prevalence of depressive syndromes common at women under the age of 40 years, a woman's risk to present a depressive clinical picture increases in parallel with the approaching age of perimenopause [1–4]. Even if most women reach menopause without showing signs of depression, studies show that the transition can be risky.

Purpose

The main purpose of the paper is to study correlations between symptoms of perimenopause and depressive episode occurrence, taking into consideration the severity and the frequency of symptoms of perimenopause.

Material and methods

Firstly we have selected the cases by performing a screening to patients with major depressive disorder, hospitalized in Psychiatric Clinic No. 1, between 01.01.2007–31.12.2009. During this period, each patient aged between 34–55 years, who met ICD 10 criteria and DSM IV TR, for major depressive disorder, was informed of the possibility of a voluntary participation at the research to identify risk factors that are/or are not responsible for the occurrence of depression.

Study group configuration: From the total of 1342 who had the diagnosis of major depressive disorder, during the

period 01/01/2007–12/31/2009, 160 have voluntarily wanted to participate.

The research method used was the conduct of a descriptive epidemiological study, the extent to which she proposed to indicate the rate of perimenopause and menopause depression, with psychiatric clinical care from Tîrgu Mures. The study component was a longitudinal and prospective one, for the verification of assumptions made.

Inclusion criteria

- ▶ signed the informed consent;
- ▶ menopause diagnosis established by laboratory examination of FSH ≥ 20 IU/L and estrogen ≤ 40 IU/L;
- ▶ establishing the diagnosis of depression according to ICD 10 criteria and DSM IV TR.

Exclusion criteria

- ▶ women who have artificially installed menopause by surgery or chemotherapy were excluded from the study

Investigating tools

- ▶ developing an information questionnaire, covering all the necessary elements of a multifactorial and dimensional investigation;
- ▶ to explore the menopausal symptoms we have used PERZ's list.

The questionnaires were completed individually by patients and we provided additional information, where needed.

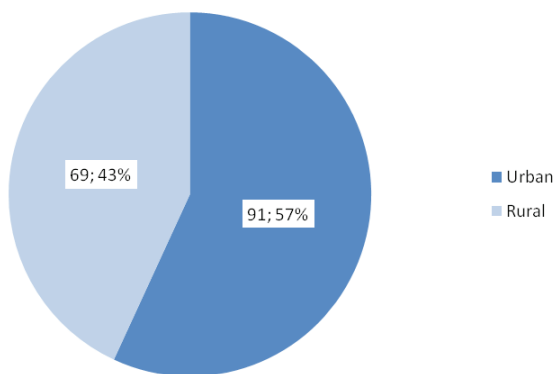


Fig. 1. Distribution of patients in relation to their environment of origin

The data obtained was entered into a database registering information on these demographic variables: age, environment. Data analysis was performed using at first descriptive statistics. The statistical and analytical processing was done using the Graph Instat program, the Chi-square test, Fisher, and the study of correlation between certain variables.

As I mentioned, the sample studied included 160 women, selected on the basis of new diagnostic tools and classification of mental disorders (ICD-X, and DSM-IV), which between 2007 to 2009 have benefited from specialized gynecological and psychological care at the Psychiatry Clinic No.1, in Targu-Mures, for various gynecological diseases, in close correlation with the perimenopause and depression.

Psychiatric clinical study focused on mood depressive disorders required various investigations to clearly distinguish climacteric depressions with the onset in perimenopause from those with onset outside menopause. In this sense, very helpful were anamnesis data and personal longitudinal and transversal data.

From the total patients admitted (1342) only 160 patients aged between 34–55 years, wished to voluntarily participate in the survey, representing 11.92% of all patients.

The primary diagnosis was depressive episode of major severity (Axis I DSM-IV), without prior personality disorders (Axis II), various organic suffering (Axis III), internal

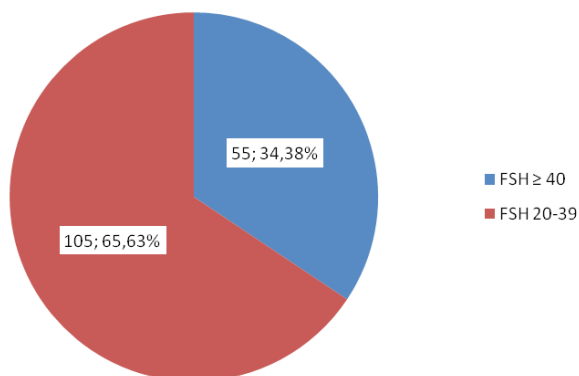


Fig. 3. Distribution of patients in relation to FSH

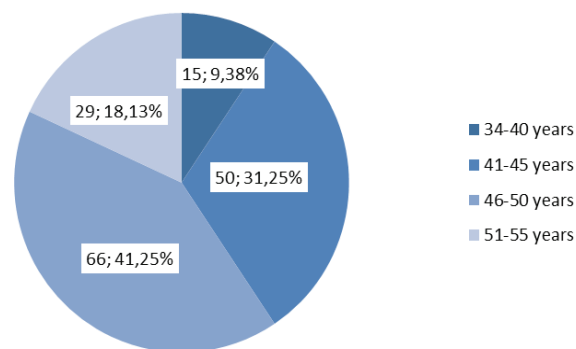


Fig. 2. Distribution of patients in relation to age

and relational discomfort associated with persistent functional difficulties (Axis IV and V).

Regarding the environment we found out that 91 (56.88%) patients were from urban areas and 69 (43.12%) from rural areas. These data are presented in the table and figure below (Figure 1).

The study of the demographic variable shows that women from urban areas have better health conditions, which are constant, compared to those in rural areas. Rural environment proved to be a protective factor in the emergence of depressive disorders ($P = 0.0189$).

Participants were aged between 34–55 years. Average age was 47 years. As it can be seen from the Figure 2 below, by distribution mentioned above, we obtained the following absolute and percentage values:

As for the FSH values it can be seen in Figure 3, that 34.38% had $FSH \geq 40$, and 65.63% had FSH between 20–39.

I have tried to observe the correlations in relation with FSH values. I have obtained statistical significance, FSH values between 20–39 IU/L, it proved to be a risk factor in the occurrence of depressive disorder, at our patients $p < 0.0001$, Figure 4.

We have wanted to test whether there is a statistically significant association between FSH values and the number of episodes and we have obtained statistically significant value, $p < 0.0001$. Patients who had an oscillating FSH between 20–39, showed more episodes than those who had $FSH \geq 40$.

As for the LH values it can be seen that 70% had LH between 41–60 LH IU/l, and 30% had ≤ 40 .

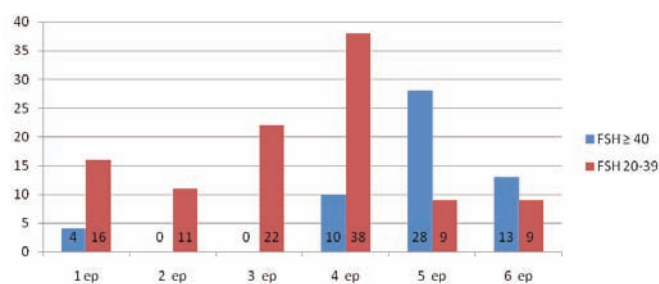


Fig. 4. Distribution of patients in relation to FSH values and the number of episodes

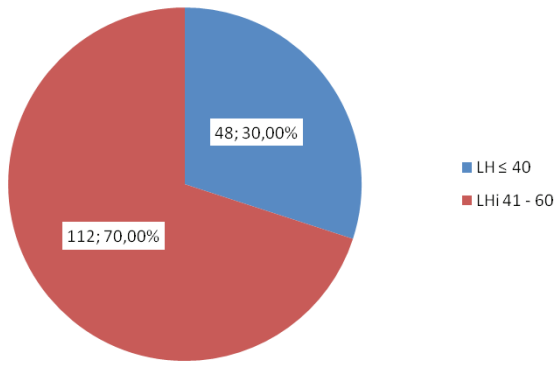


Fig. 5. Distribution of patients in relation to LH values

We have tried to observe the correlations in relation with LH values. We have obtained statistical significance, with LH values between 41–60 IU / L, proved to be a risk factor in the occurrence of depressive disorder, at our patients $p < 0.0001$.

We wanted to test whether there is statistically significant association between LH values and the number of episodes. We have obtained statistically significant value, Figure 6.

Also, we have used Perz's list for exploring menopause: The list is composed of 25 symptoms, from which the first 8 are psychological symptoms, the following 9–17 are vaso-motor symptoms 18–25 are general somatic symptoms. Each symptom was analyzed according to its severity (I have not noticed, gentle (1), medium (2), severe (3), very severe (4) and their daily frequency (never (0), rarely (1) regular (2) , often (3), almost all the time (4)).

We have found out that 83 patients have reported severe psychological symptoms, considering the answer severe as severe, very severe, and 77 reported middle psychological symptoms, considering as gentle the answer I have not noticed, gentle, environment.

Analyzing the severity of psychological symptoms by age group, we have obtained the following meanings:

- ▶ Age group 34–40 years: p statistically insignificant = 0.8787
- ▶ Age group 41–45 years: p statistically insignificant = 0.8477
- ▶ Age group 51–55 years: p statistically insignificant = 0.0620

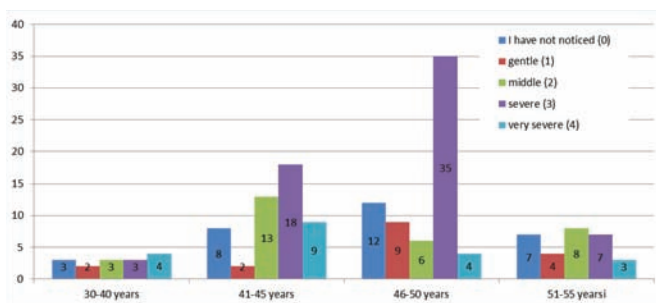


Fig. 7. The severity of psychological symptoms by age groups

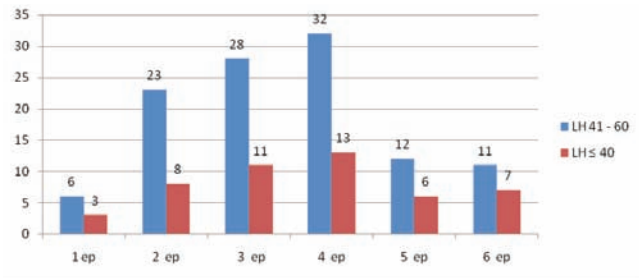


Fig. 6. Distribution of patients in relation to LH values and the number of episodes

- ▶ Age group 46–50 years: p statistically significant = 0.0303

Analyzing the frequency of psychological symptoms by age groups, we have obtained the following meanings:

- ▶ Age group 34–40 years: p statistically insignificant = 0.5939
- ▶ Age group 41–45 years: p statistically insignificant = 0.5024
- ▶ Age group 46–50 years: p statistically insignificant = 0.3446
- ▶ Age group 51–55 years: p statistically insignificant = 0.1071

The most common symptoms that occur during the transition to menopause are hot flashes. McKinlay et al [7], showed accelerated prevalence during the transition to menopause with a peak at the end of the menstrual period.

Analyzing the severity of vasomotor symptoms by age group, we have obtained the following meanings:

- ▶ Age group 34–40 years: p statistically insignificant = 0.3896
- ▶ Age group 41–45 years: p statistically insignificant = 0.3916
- ▶ Age group 46–50 years: p statistically insignificant = 0.1513
- ▶ •Age group 51–55 years: p statistically insignificant = 0.9265

Hot flashes are characteristic symptoms, seen in approximately 75% women. Hot flashes usually occur at the age of 47–48 years and lasts for around 3–4 years. At some women,

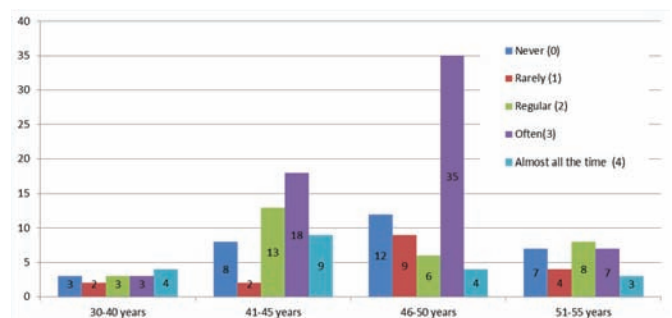


Fig. 8. The frequency of psychological symptoms by age groups

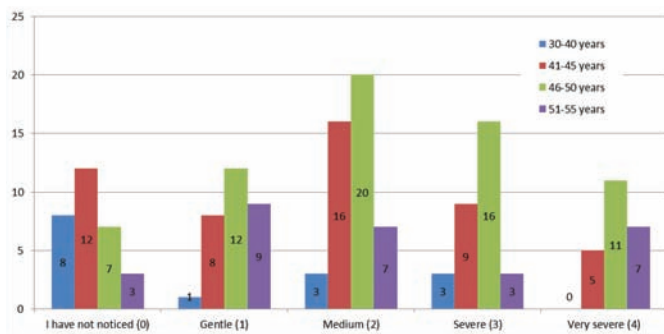


Fig. 9. The gravity of vasomotor symptoms by age groups

hot flashes occur earlier, even towards the end of the third decade of life or around the age of 40 years. Hot flashes may continue to appear for 5 or 10 years, 25% of women have occasional hot flashes for more than five years [5].

Hot flashes, which manifest as a transient sensation of heat, with or without objective signs: skin vasodilation accompanied by a possible and variable reddening of the face, sweating, palpitations, anxiety, irritability, even panic attack, seem to be precipitated by the decrease of estradiol levels, rather than hypo-estrogenism per se [6].

Analyzing the frequency of vasomotor symptoms by age group, we have obtained the following meanings:

- ▶ Age group 34–40 years: p statistically significant = 0.0061
- ▶ Age group 41–45 years: p statistically insignificant = 0.2567
- ▶ Age group 46–50 years: p statistically insignificant = 0.1370
- ▶ Age group 51–55 years: p statistically insignificant = 0.1780

Analyzing the severity of somatic symptoms by age group, we have obtained the following meanings:

- ▶ Age group 34–40 years: p statistically significant = 0.0099
- ▶ Age group 41–45 years: p statistically insignificant = 0.1091
- ▶ Age group 46–50 years: p statistically insignificant = 0.6583
- ▶ Age group 51–55 years: p statistically insignificant = 0.5108

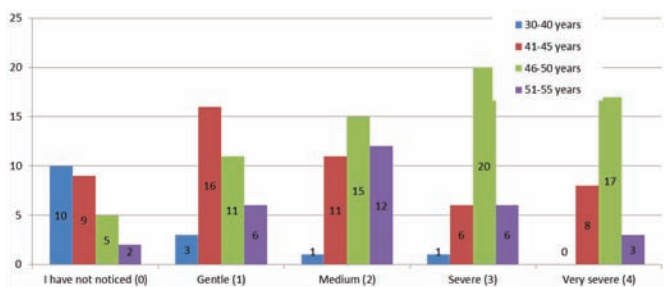


Fig. 11. The severity of somatic symptoms by age groups

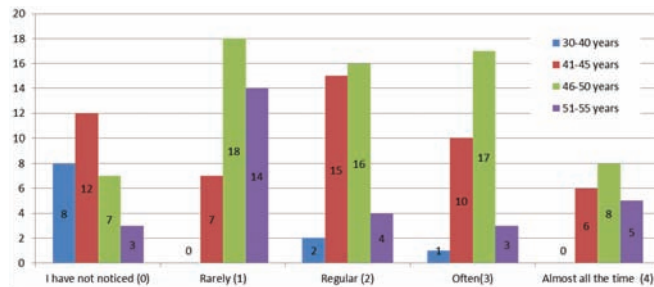


Fig. 10. The frequency of vasomotor symptoms by age groups

Analyzing the frequency of somatic symptoms by age group, we have obtained the following meanings:

- ▶ Age group 34–40 years: p statistically significant = 0.0007
- ▶ Age group 41–45 years: p statistically insignificant = 0.8728
- ▶ Age group 46–50 years: p statistically insignificant = 0.8530
- ▶ Age group 51–55 years: p statistically insignificant = 0.0782

Conclusions

This paper reflects the particularities of depressive mood disorders at a number of 160 patients between the age limits of 34 and 55 years, who were sent to the Psychiatric Clinic No. I from Targu Mures, between 01.01.2007-31.12.2009.

As for the environment, it shows that 91 (56.88%) patients are from urban areas and 69 (43.12%) from rural areas. Rural proved to be a protective factor in the emergence of depressive disorders.

Estimating the role of hormonal decline at patients aged over 40 years, helped us understand that the emergence and the evolution of clinical manifestations of perimenopause and menopause, can be determined by the fluctuations of central secretion of pituitary hormones and sex steroids. Patients who had an FSH oscillating between 20–39, showed more episodes than those who had FSH ≥ 40. FSH values between 20–39 IU / L, proved to be a risk factor in the occurrence of depressive disorder at our patients p < 0.0001. We have obtained statistical significance, LH values between 41–60 IU / L, proved to be a risk factor in the occurrence of depressive disorder at our patients p < 0.0001. In our study, hot flashes have appeared early,

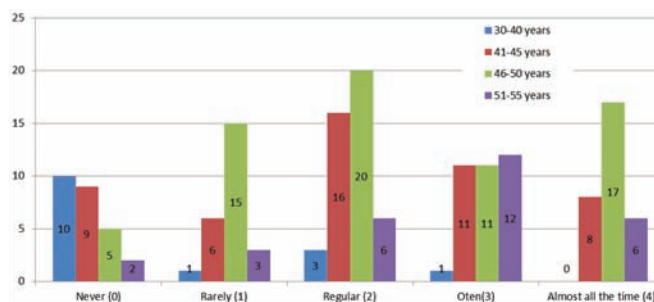


Fig. 12. The frequency of somatic symptoms by age groups

towards the end of the third decade of life or around the age of 40 years.

If perimenopause, by herself, is or is not a depresogen risk factor, or if it works only through modulation of other traditional risk factors, remains to be established through further research.

The paper had an interdisciplinary character by addressing a complex problem: psychosomatic disorders related to the menstrual cycle.

Your obstetrician can be the first professional to observe and ask the collaboration of the psychiatrist to specify the diagnosis of mental disorder arising in connection with the menstrual cycle.

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