#### PREVALENCE OF PERIMENOPAUSAL DEPRESSION AND ITS IMPACT ON QUALITY OF LIFE OF EGYPTIAN WOMEN.

Nermeen Saad Elbeltagy, Hesham Adel Sheshtawy,\* Nadem Hamed Ali, Sara Hazem Hassan, Hossam Eldin Salama Ahmed Ghazal Department of Obstetrics and Gynecology, Department of Neurology and Psychiatry,\* Faculty of Medicine, Alexandria University, Egypt.

## Introduction

Perimenopause is a physiological process and an important transitional phase towards menopause. It typically occurs between the age of 45 years to 55 years marking the end of reproductive years. With the underlying hormonal fluctuations, perimenopause usually leads to depression which is one of the most serious mental illnesses leading to perimenopausal depression.

Although perimenopausal depression is common in developing countries, it is under-recognized in low and middle-income countries, making a substantial contribution to maternal morbidity and mortality. It leads to poor quality of life, that seriously affects the Society as a whole.

In Alexandria, about 49.3% of perimenopausal women had at least one episode of depression.

# Aim of the work

To evaluate the prevalence perimenopausal depression and estimate its impact on the Quality of life among Egyptian women in Alexandria governorate.

## **Patients and Methods**

This study was conducted on 350 divided as 133 pre and 217 perimenopausal women respectively attending the Gynecological outpatient clinic in El-Shatby Maternity Hospital from June 2022 till June 2023. Women with previous psychiatric illnesses, women with artificial menopause, or on hormonal or psychiatric medications, and illiterate ones were excluded.

The participants were asked to complete a questionnaire that includes sociodemographic data, menstruation status, Patient Health Questionnaire-9 (PHQ-9) for depression assessment, and Personal Well-Being Index Adult (PWI-A) to evaluate subjective quality of life.

### Results

Mean age was  $(47.48 \pm 3.0)$ , with (52.6%) of the studied participants being from rural parts of Alexandria and less than half the women (48%) were outside Alexandria. about (27.1%) had a middle-level education while (72.9%) had a higher level of education. About (55.4%) of all participants had a job, while (44.6%) were housewives. (87.4%) of all participants were married, (14.9%) of all participants had a high-income level, while about (48.6%) had a moderate level and about (36.6%) had a low-income level. About (13.4%) of all participants were nulliparous, while about (9.7%) were primiparous, and about (76.9%) were multiparous. (38%) were premenopausal, while (62%) were perimenopausal.

#### Regarding perimenopausal women:

One fifth of women (20.2%) had (none or minimal depression), about (31.3%) had mild depression, about (27.2%) had moderate depression, and about (21.1%) had moderately severe to severe depression.

The Perimenopausal women have significantly higher scores on PHQ-9 and lower scores of PWI-A if compared to the premenopausal group.

**Table 1:** Comparison between the two studied groups according to total PHQ -9

|                             | Total (n = 350)   |      | Menopausal status       |      |                          |      |        |
|-----------------------------|-------------------|------|-------------------------|------|--------------------------|------|--------|
| Total PHQ-9                 |                   |      | Premenopausal (n = 133) |      | Perimenopausal (n = 217) |      | p      |
|                             | No.               | %    | No.                     | %    | No.                      | %    |        |
| None-minimal (0-4)          | 92                | 26.2 | 48                      | 36.0 | 44                       | 20.2 |        |
| Mild (5 – 9)                | 106               | 30.2 | 38                      | 28.5 | 68                       | 31.3 |        |
| Moderate (10 – 14)          | 90                | 25.7 | 31                      | 23.3 | 59                       | 27.2 | 0.013* |
| Moderately severe (15 – 19) | 37                | 10.5 | 10                      | 7.5  | 27                       | 12.4 |        |
| Severe (20 – 27)            | 25                | 7.1  | 6                       | 4.5  | 19                       | 8.7  |        |
| Min. – Max.                 | 0.0 - 26.0        |      | 0.0 - 23.0              |      | 2.0 - 26.0               |      | 0.001* |
| Mean $\pm$ SD.              | $10.93 \pm 6.08$  |      | $9.53 \pm 5.75$         |      | $11.78 \pm 6.14$         |      |        |
| Median (IQR)                | 10.0 (6.0 – 14.0) |      | 9.0 (4.0 – 12.0)        |      | 10.0 (7.0 – 15.0)        |      |        |

χ<sup>2</sup>: Chi square test

U: Mann Whitney test

p: p value for comparing the two studied groups

IQR: Inter quartile range

\*: Statistically significant at  $p \le 0.05$ 

SD: Standard deviation

**Table 2:** Comparison between the two studied groups according to total PWI-A.

|                              | Total (n = 350)   |      |                   |                     |                          |      |         |
|------------------------------|-------------------|------|-------------------|---------------------|--------------------------|------|---------|
| Total PWI-A                  |                   |      |                   | enopausal<br>= 133) | Perimenopausal (n = 217) |      | р       |
|                              | No.               | %    | No.               | %                   | No.                      | %    |         |
| Challenged level (≤49)       | 62                | 17.7 | 16                | 12.0                | 46                       | 21.2 |         |
| Compromised levels (50 – 69) | 111               | 31.7 | 38                | 28.6                | 73                       | 33.6 | 0.019*  |
| Normal levels (≥70)          | 177               | 50.6 | 79                | 59.4                | 98                       | 45.2 |         |
| Min. – Max.                  | 24.29 – 88.57     |      | 31.43 – 88.57     |                     | 24.29 – 85.71            |      |         |
| Mean $\pm$ SD.               | $64.98 \pm 17.01$ |      | $70.41 \pm 14.92$ |                     | $61.66 \pm 17.39$        |      |         |
| Median (IQR)                 | 70.0              |      | 74.29             |                     | 58.57                    |      | <0.001* |
|                              | (54.29 - 80.0)    |      | (62.86 - 82.86)   |                     | (52.86 - 74.29)          |      |         |

 $\chi^2$ : Chi square test

U: Mann Whitney test

p: p value for comparing between the two studied groups

\*: Statistically significant at  $p \le 0.05$ 

IOR: Inter quartile range

SD: Standard deviation

### Conclusion

Perimenopausal women had a higher prevalence of depression compared to premenopausal group, there is a significant negative correlation between perimenopausal depression and its impact on quality of life, most of sociodemographic characteristics significantly affect both depression and quality of life.



2023 ©Alexandria Faculty of Medicine CC-BY-NC