

Prevalence of Overweight, Obesity and General Abdominal Obesity and Association with Menopause-Related Symptoms in Postmenopausal Women



Postmenopausal Women



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Introduction

Menopause is the permanent cessation of a woman's menstrual cycle, caused by reduced secretion of oestrogen and progesterone¹, leading to reduced ovarian function². A woman is considered postmenopausal once she has not experienced a period in 12 months.

The menopause has been attributed to many psychological, vasomotor and urogenital symptoms³. Weight gain and body shape changes also occur at this stage of life. However, there is currently no published evidence regarding weight and menopausal symptoms among postmenopausal women in Ireland.

Aim

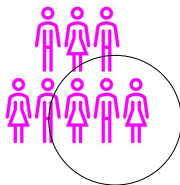
Investigate the association between prevalence of overweight, obesity and general abdominal obesity and menopause-related symptoms in postmenopausal women.



Methods

Study Design

- Observational
- Cross-sectional



Participants

- Postmenopausal women experiencing a natural menopause.
- Not pregnant/lactating.
- Available to travel to the TUS campus.



Questionnaires

- The MRS scale assessed menopausal symptom severity⁴.
- The demographic lifestyle questionnaire assessed participant characteristics.



Anthropometric Measurements

- Height (cm), weight (kg) and waist circumference (cm) measurements were taken by trained researchers.

Data Processing and Statistical Analysis

- The data gathered was exported to Excel, where it was coded for analysis
- Some data was exported to SPSS for ANOVA testing.



References:

1. Panay, N. and BMS (2022). *Testosterone Replacement in Menopause*. [online] *British Menopause Society*, Buckinghamshire: British Menopause Society, pp.1–5. Available at: <https://thebms.org.uk/wp-content/uploads/2022/12/08-BMS-TfC-Testosterone-replacement-in-menopause-DEC2022-A.pdf>.
2. Rosewell, K. and Curry, T. (2018). *Reproductive Senescence in the Female*. 2nd ed. Amsterdam: Elsevier, pp.250–254.
3. Al-Safi, Z.A. and Polotsky, A.J. (2015). Obesity and Menopause. *Best Practice & Research Clinical Obstetrics & Gynaecology*, [online] 29(4), pp.548–553. doi:10.1016/j.bpobgyn.2014.12.002.
4. Heinemann, L.A., Potthoff, P. and Schneider, H.P. (2003). International Versions of the Menopause Rating Scale (MRS). *Health and Quality of Life Outcomes*, [online] 1(1), p.28. doi:10.1186/1477-7525-1-28.

Results

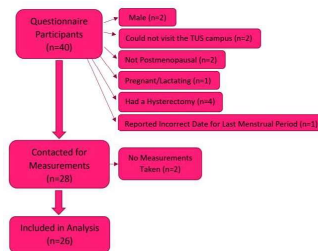


Figure 1: Exclusion of participants

This research found that a significant relationship exists between BMI and psychological MRS scores. A significant difference was discovered between the healthy and obese categories ($p=0.024$).

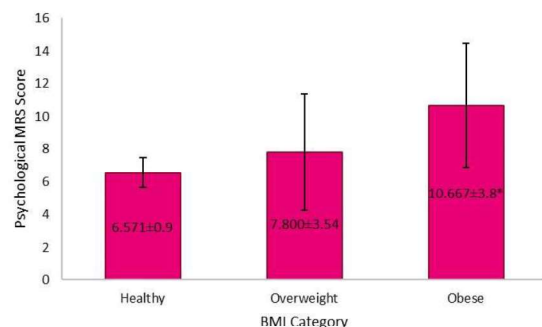


Figure 2: BMI Relationship with Psychological Subscale Averages (Mean±SD) (*=Significant difference)

Discussion

- This study found that obese women had significantly more severe psychological symptoms than women with a healthy BMI, but a causal effect cannot be confirmed.
- These findings are not representative of the Irish postmenopausal population due to the small sample size of the study.
- Anthropometric measurements were carried out by trained researchers, ensuring accuracy. However, the questionnaires were self-reported, increasing the risk of information bias.

Future Recommendations

- Larger sample size.
- Focus on women with no menopausal symptoms versus those with symptoms.
- Different study design.

