

"Brain fog in menopause", a new symptom and its relationship with traditional menopausal manifestations. Evaluation of Colombian women workers

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INTRODUCTION

The term "brain fog in menopause" is a recently introduced clinical consideration and corresponds to a constellation of cognitive manifestations reported by women in the climacteric stage, especially difficulty in memory, concentration and attention. Globally, there is recent interest in exploring "brain fog in menopause" and evaluating climacteric women who work regularly.

Apparently, aspects that are part of the "brain fog in menopause" have not been evaluated in Latin American women linked to productive activity.

OBJECTIVE

to identify the frequency of "brain fog in menopause" and estimate its association with eleven of the menopausal symptoms traditionally studied, in women who fulfill an employment contract.

MATERIALS & METHODS

This cross-sectional study is part of the CAVIMEC [Quality of Life in Menopause and Colombian Ethnicities] research project. Approved by the ethics committee of the University of Cartagena, Colombia.

Sample size estimated with Data on the Participation of Colombian Women in the Labor Market [DANE]. Women were surveyed in their workplaces in public or private companies, aged between 40-59 years, with a contract of 8 hours/day of activity and residents in Colombian urban areas.

Anonymous study with informed consent.

Pregnant women or women with children under five years of age were excluded.

Between February 1 and May 30, 2025, women were surveyed with a format to obtain personal

information and apply two scales.

First, the Brain Fog Scale (BFS), a tool with 23 questions to answer never, rarely, occasionally, many times or almost all the time. The items are grouped into three domains:

mental fatigue, cognitive acuity impairment, and confusion.

The overall score identifies brain fog.

Second, the Menopause Rating Scale (MRS) identifies eleven traditional symptoms of menopause.

On both scales, the higher the score, the greater the severity of the manifestations.

Adjusted logistic regression was performed between brain fog (dependent variable) and eleven menopausal symptoms (independent variables), the covariates were: age, type of company, occupation and previous diagnosis of Covid-19.

RESULTS

726 working women were evaluated
Mean age 50.2±5.8 - BMI 25.4±4.1
Mestizos 86.7% - Afro-descendants 11.6%
Indigenous 1.7%
Premenopausal 29.0% - Transition 14.5%

Premenopausal 29.0% - Transition 14.5% Postmenopausal 56.5%

15-17% reported many times/almost all the time: forgetting words or names, being distracted, upset, fatigued, sleepy, or mentally exhausted.

| Brain Fog Scale [BFS] (%) | |
|-----------------------------|------|
| Mental fatigue | 45.7 |
| Cognitive acuity impairment | 48.6 |
| Confusion | 38.2 |
| Brain fog | 47.5 |

Postmenopausal women vs. premenopausal women: higher frequency of cognitive acuity impairment, confusion and brain fog (p<0.01)

No difference in mental fatigue (p=0.29)

Associated with brain fog Adjusted logistic regression. OR [CI 95 %] 2.10 [1.55-2.86] **Hot flashes** 2.86 [2.07-3.88] **Palpitations** 2.44 [1.80-3.30] Sleep problems 2.61 [1.92-3.54] Depressed mood 3.41 [2.50-4.65] Irritability 3.71 [2.72-5.08] Anxiety Physical/mental fatigue 3.39 [2.43-4.71] 3.53 [2.58-4.82] Sexual problems 2.84 [2.04-3.93] Discomfort when urinating 2.76 [2.03-3.75] Vaginal dryness 3.31 [2.36-4.63] Muscle/joint pain

CONCLUSION

In a group of middle-aged Colombian women with regular work activity: four out of ten presented brain fog, and the eleven traditional symptoms of menopause identified by MRS were significantly associated with a higher chance of brain fog.

It is suggested that BFS be used more widely, as it seems to be an interesting tool for identifying "brain fog in menopause".