

JCHS

Journal of Clinical and Health Sciences

#2
2026

SUPPLEMENTARY ISSUE

Malaysian Obesity Society
MYOS



ND **2 NATIONAL OBESITY SCIENTIFIC CONFERENCE**

ABSTRACT BOOK

11th - 12th April 2026
**Connexion Conference &
Event Centre,**
Kuala Lumpur, Malaysia

Theme
**Obesity as a Treatable
Chronic Disease:
Science, Strategy,
and Success**

Issue **September 2026** | Volume **11** Issue **02 (Supplementary)**
eISSN 0127-984x
jchs-medicine.uitm.edu.my



**UNIVERSITI
TEKNOLOGI
MARA**

PD-58

The ‘Heavy’ Burden of Stress: Psychological Distress and Body Adiposity in Patients Attending Weight Management Clinic

Khairatul Nainey Kamaruddin^{1,2}, Mazapuspavina Md Yasin^{1,2}, Khasnur Abd Malek^{1,2}, Nik Munirah Nik Mohd Nasir^{1,2}, Lina Lohshini Kanoo^{1,2}, Zahirah Tharek^{1,2}, Rohana Abdul Ghani^{2,3}

¹ Department of Primary Care Medicine, Faculty of Medicine, Universiti Teknologi MARA (UiTM), Sungai Buloh Campus, 47000, Sungai Buloh, Selangor

² Weight Management Clinic, Hospital Al-Sultan Abdullah (HASA), Universiti Teknologi MARA (UiTM), 42300 Bandar Puncak Alam, Selangor

³ Department of Medicine (Endocrinology), Faculty of Medicine, Universiti Teknologi MARA (UiTM), Sungai Buloh Campus, 47000, Sungai Buloh, Selangor

Corresponding Author email: khairatul@uitm.edu.my

Introduction:

Obesity is increasingly recognised as a complex neurobehavioural disease. While the link between depression and body mass index (BMI) is well-documented, BMI often fails to capture body composition nuances. The relationship between psychological distress and actual total body fat percentage, which is a more direct biomarker of metabolic risk, remains under- explored in clinical populations. We aim to explore the relationship between psychological distress and total body adiposity in patients attending a university-based weight management clinic.

Methods:

We conducted a cross-sectional analysis of patients who attended a multidisciplinary weight management program. Psychological distress was assessed at baseline using the General Health Questionnaire-12 (GHQ-12), a validated screening tool for common mental disorders. Body composition, specifically body fat percentage (BF%), was measured using the bioelectrical impedance analysis (BIA). A Pearson correlation analysis and multiple linear regression analysis were performed to determine the relationship between GHQ-12 scores and BF%.

Results:

A total of 211 patients were included in the final analysis. Participants’ mean age was 38.7 (SD=12.4) years, with 50.2% (n=106) being female. Mean BMI and BF% were 44.4 (SD=9.9) kg/m² and 48.5% (SD=6.7), respectively. GHQ-12 mean score was 19.6 (SD=4.1), which indicates moderate distress. The correlation analysis and multiple linear regression revealed a statistically significant, moderate positive correlation between psychological distress and baseline BF% ($r=0.372$, $p=0.015$). The coefficient determination ($R^2=0.299$) suggests that psychological distress explains approximately 13.8% of the variance in body adiposity in this cohort.

Conclusion:

These findings support the existence of a “psychometabolic” phenotype where mental distress and adiposity are linked. The significant correlation suggests that psychological distress may increase fat storage. This underscores the critical need for a routine psychological screening alongside anthropometry and blood parameters in obesity management.