Accepted Manuscript

Title: Depression and Anxiety symptoms are associated with White Blood Cell count and Red Cell Distribution Width: a sex-stratified analysis in a population-based study

Authors: Mojtaba Shafiee, Maryam Tayefi, Seyed Mahdi Hassanian, Zahra Ghaneifar, Mohammad Reza Parizadeh, Amir Avan, Farzad Rahmani, Zahra Khorasanchi, Mahmoud Reza Azarpajouh, Hamideh Safarian, Mohsen Moohebati, Alireza Heidari-Bakavoli, Habibolah Esmaeili, Mohsen Nematy, Mohammad Safarian, Mahmoud Ebrahimi, Gordon A. Ferns, Naghmeh Mokhber, Majid Ghayour-Mobarhan



PII: S0306-4530(17)30281-0

DOI: http://dx.doi.org/doi:10.1016/j.psyneuen.2017.06.021

Reference: PNEC 3665

To appear in:

Received date: 24-3-2017 Revised date: 29-6-2017 Accepted date: 30-6-2017

Please cite this article as: Shafiee, Mojtaba, Tayefi, Maryam, Hassanian, Seyed Mahdi, Ghaneifar, Zahra, Parizadeh, Mohammad Reza, Avan, Amir, Rahmani, Farzad, Khorasanchi, Zahra, Azarpajouh, Mahmoud Reza, Safarian, Hamideh, Moohebati, Mohsen, Heidari-Bakavoli, Alireza, Esmaeili, Habibolah, Nematy, Mohsen, Safarian, Mohammad, Ebrahimi, Mahmoud, Ferns, Gordon A., Mokhber, Naghmeh, Ghayour-Mobarhan, Majid, Depression and Anxiety symptoms are associated with White Blood Cell count and Red Cell Distribution Width: a sex-stratified analysis in a population-based study. Psychoneuroendocrinology http://dx.doi.org/10.1016/j.psyneuen.2017.06.021

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Depression and Anxiety symptoms are associated with White Blood Cell count and Red Cell Distribution Width: a sex-stratified analysis in a population-based study

Mojtaba Shafiee^{1,2,*}, Maryam Tayefi^{3,*}, Seyed Mahdi Hassanian^{4,5,*}, Zahra Ghaneifar^{3,*}, Mohammad Reza Parizadeh³, Amir Avan⁶, Farzad Rahmani⁴, Zahra Khorasanchi^{1,2}, Mahmoud Reza Azarpajouh⁷, Hamideh Safarian⁴, Mohsen Moohebati⁷, Alireza Heidari-Bakavoli⁷, Habibolah Esmaeili⁸, Mohsen Nematy¹, Mohammad Safarian¹, Mahmoud Ebrahimi⁷, Gordon A. Ferns⁹, Naghmeh Mokhber^{3,6,#}, Majid Ghayour-Mobarhan^{3,#}

Affiliations:

- 1) Department of Nutrition, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.
- 2) Student Research Committee, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.
- 3) Metabolic Syndrome Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.
- **4**) Department of Medical Biochemistry, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.
- 5) Microanatomy Research Center, Mashhad University of Medical Sciences, Mashhad, Iran.
- **6)** Department of Modern Sciences and Technologies, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.
- 7) Cardiovascular Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.
- 8) Department of Biostatistics & Epidemiology, Faculty of Health, Management & Social Determinants of Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran.
- 9) Brighton & Sussex Medical School, Division of Medical Education, Falmer, Brighton, Sussex BN1 9PH, UK

Running title: Association of Depression and Anxiety disorders with hematological inflammatory markers

#Corresponding

Majid Ghayour-Mobarhan MD, Ph.D. Metabolic Syndrome Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran, Tel: +985138002288, Fax: +985138002287; Email: ghayourm@mums.ac.ir

Naghmeh Mokhber, MD, Psychiatry and Behavioral Sciences Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran, Tel: +985138002288, Fax: +985138002287; Email: Mokhbern@mums.ac.ir

Grant: This study was support by grant from Mashhad University of Medical Sciences

Conflict of interest: The authors have no conflict of interest to disclose

Highlights:

- Depression and anxiety disorders are associated with elevated levels of WBC; however, this association was only present in men.
- Depression and anxiety disorders also have a significant positive association with RDW which is much stronger among men.
- Depression also have a significant negative association with red blood cell (RBC) and mean corpuscular hemoglobin (MCH).

^{*} Equally contributed as first author

Download English Version:

https://daneshyari.com/en/article/4934209

Download Persian Version:

https://daneshyari.com/article/4934209

<u>Daneshyari.com</u>