

Letter to the Editor

To Screen or Not to Screen? At Which BMI Cut Point? Comment on “Obesity and BMI Cut Points for Associated Comorbidities: Electronic Health Record Study”

Chrissa Sioka, MD

Department of Nuclear Medicine, University Hospital of Ioannina, Ioannina, Greece

Corresponding Author:

Chrissa Sioka, MD
Department of Nuclear Medicine
University Hospital of Ioannina
1 Stavrou Niarhos Street
Ioannina, 45500
Greece
Phone: 30 2651099375
Email: csioka@yahoo.com

Related Articles:

Comment on: <http://www.jmir.org/2021/8/e24017/>

Comment in: <http://www.jmir.org/2022/6/e39717/>

(*J Med Internet Res* 2022;24(6):e37267) doi: [10.2196/37267](https://doi.org/10.2196/37267)

KEYWORDS

obesity; body mass index; BMI; risk factors; screening; health services; chronic disease; heart disease; myocardial perfusion imaging; anxiety; depression

In their article, Liu et al [1] investigated if there are BMI cut points for various obesity-associated comorbidities. For this purpose, they evaluated 243,332 patients aged 18 to 75 years, documented in the electronic health record, who had at least 3 in-person clinical visits over a 2-year period. The authors reported a significant correlation and calculated cutoff points of BMI with 6 comorbidities, including coronary artery disease, hypertension, hyperlipidemia, obstructive sleep apnea, osteoarthritis, and type 2 diabetes mellitus [1]. Interestingly, no association was found with anxiety and depression.

In our recent study [2], although of a different concept, we prospectively evaluated a cohort of 80 patients who were subjected to myocardial perfusion imaging for myocardial ischemia evaluation. All patients in the study were additionally

evaluated for the presence of anxiety and depression. Furthermore, cardiological risk factors, including obesity, were additionally assessed. Like the study by Liu et al [1], we found a positive association between obesity and myocardial ischemia. However, we also found a correlation between obesity and depression/anxiety and myocardial ischemia [2]. Other studies have also reported obesity and depression/anxiety as independent risk factors for acute coronary syndrome in young women [3] and that female patients had more central obesity and greater anxiety than male patients with coronary artery disease [4].

In any event, I agree with the conclusions of Liu et al [1] that additional studies may be needed to establish which comorbidities need to be screened in patients with overweight for appropriate management.

Conflicts of Interest

None declared.

References

1. Liu N, Birstler J, Venkatesh M, Hanrahan L, Chen G, Funk L. Obesity and BMI cut points for associated comorbidities: Electronic health record study. *J Med Internet Res* 2021 Aug 09;23(8):e24017 [FREE Full text] [doi: [10.2196/24017](https://doi.org/10.2196/24017)] [Medline: [34383661](https://pubmed.ncbi.nlm.nih.gov/34383661/)]
2. Fotopoulos A, Petrikis P, Iakovou I, Papadopoulos A, Sakelariou K, Gkika E, et al. The impact of depression and anxiety in prognosis of patients undergoing myocardial perfusion imaging with 99mTc tetrofosmin SPECT for evaluation of possible myocardial ischemia. *Nucl Med Rev Cent East Eur* 2020 Jul;23(2):58-62 [FREE Full text] [doi: [10.5603/NMR.a2020.0014](https://doi.org/10.5603/NMR.a2020.0014)] [Medline: [33007091](https://pubmed.ncbi.nlm.nih.gov/33007091/)]

3. Liu R, Xu F, Zhou Y, Liu T. The characteristics of risk factors in Chinese young women with acute coronary syndrome. *BMC Cardiovasc Disord* 2020 Jun 12;20(1):290 [[FREE Full text](#)] [doi: [10.1186/s12872-020-01577-z](https://doi.org/10.1186/s12872-020-01577-z)] [Medline: [32532208](#)]
4. Setny M, Jankowski P, Kamiński K, Gąsior Z, Haberka M, Czarnecka D, et al. Secondary prevention of coronary heart disease in Poland: does sex matter? Results from the POLASPIRE survey. *Pol Arch Intern Med* 2022 Mar 30;132(3):22 [[FREE Full text](#)] [doi: [10.20452/pamw.16179](https://doi.org/10.20452/pamw.16179)] [Medline: [34935325](#)]

Edited by T Leung; this is a non-peer-reviewed article. Submitted 13.02.22; accepted 24.05.22; published 29.06.22.

Please cite as:

Sioka C

To Screen or Not to Screen? At Which BMI Cut Point? Comment on “Obesity and BMI Cut Points for Associated Comorbidities: Electronic Health Record Study”

J Med Internet Res 2022;24(6):e37267

URL: <https://www.jmir.org/2022/6/e37267>

doi: [10.2196/37267](https://doi.org/10.2196/37267)

PMID:

©Chrissa Sioka. Originally published in the Journal of Medical Internet Research (<https://www.jmir.org>), 29.06.2022. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work, first published in the Journal of Medical Internet Research, is properly cited. The complete bibliographic information, a link to the original publication on <https://www.jmir.org/>, as well as this copyright and license information must be included.