

Aldona Kubica

Department of Cardiac Rehabilitation and Health Promotion, *Collegium Medicum*, Nicolaus Copernicus University, Bydgoszcz, Poland

# The functioning in chronic illness — a key determinant of treatment efficacy in patients with metabolic syndrome

## To the Editor

Metabolic syndrome (MetS) including obesity, hypertension, impaired glucose metabolism, and elevated non-high-density lipoprotein cholesterol level due to increasing prevalence and serious impact on clinical outcomes constitutes a significant health and social problem [1]. Recently several papers published in “Medical Research Journal” presented different therapeutic approaches in this subset of patients [2–6]. Obesity is a key factor impeding the physical and mental functioning of patients with MetS. The Functioning in Chronic Illness Scale (FCIS) is a unique tool developed for comprehensive evaluation of various aspects of patient functioning with chronic disease [7–9]. This scale, consisting of three subscales and 24 items is designed to evaluate the impact of the disease on the patient in the first subscale. It mainly refers to the patient’s physical efficiency, quality of life, and acceptance of the disease. The second and third subscales assess the patient’s beliefs regarding the possible impact on the course of illness and the impact of the disease on the patient’s attitudes, respectively. These subscales refer mainly to self-efficacy and the location of health control [10–12]. MetS affects multiple aspects of patients’ lives in many ways, including physical activity, emotional and spiritual spheres, and social functioning. Limited functioning of a patient with MetS results in decreased self-esteem, deteriorated well-being, increased anxiety,

and uncertainty about the future [13, 14]. The FCIS has never been validated in MetS patients, however, it appears to be an excellent fit for the diagnostic needs of this specific subgroup of patients [15, 16]. Low adherence to therapeutic plans is the main limitation of the effectiveness of therapy in obese patients. There is a direct link between the patient’s functioning and adherence to treatment, therefore, all activities aimed at supporting cooperation with an obese patient are of key importance for therapy effectiveness [7, 11–21]. Thus, the Adherence in Chronic Disease Scale (ACDS) is also worth validating in MetS patients [22–27].

## Article information

**Acknowledgements:** *None.*

**Conflict of interest:** *None.*

**Funding:** *None.*

**Supplementary material:** *None.*

## References

1. Dobrowolski P, Prejbisz A, Kuryłowicz A, et al. Metabolic syndrome — a new definition and management guidelines: A joint position paper by the Polish Society of Hypertension, Polish Society for the Treatment of Obesity, Polish Lipid Association, Polish Association for Study of Liver, Polish Society of Family Medicine, Polish Society of Lifestyle Medicine, Division of Prevention and Epidemiology Polish Cardiac Society, „Club 30” Polish Cardiac Society, and Division of Metabolic and Bariatric Surgery Society of Polish Surgeons. *Arch Med*

## Corresponding author:

Aldona Kubica, Department of Cardiac Rehabilitation and Health Promotion, Collegium Medicum, Nicolaus Copernicus University, Bydgoszcz, Poland;  
e-mail: akubica@cm.umk.pl

Medical Research Journal 2023; Volume 8, Number 4, 326–327, DOI: 10.5603/mrj.97864, Copyright © 2023 Via Medica, ISSN 2451-2591, e-ISSN 2451-4101

This article is available in open access under Creative Common Attribution-Non-Commercial-No Derivatives 4.0 International (CC BY-NC-ND 4.0) license, allowing to download articles and share them with others as long as they credit the authors and the publisher, but without permission to change them in any way or use them commercially.

- Sci. 2022; 18(5): 1133–1156, doi: 10.5114/aoms/152921, indexed in Pubmed: 36160355.
2. Kubica J, Kubica A, Grąbczewska Z, et al. Efficacy of double vs. standard empagliflozin dose for METabolic syndromE tReatment (DEME-TER— SIRIO 11) study. Rationale and protocol of the study. *Med Res J.* 2023; 8(3) 171–178, doi: [10.5603/mrj.97187](https://doi.org/10.5603/mrj.97187).
  3. Pawluszewicz P, Golaszewski P, Gluszyńska P, et al. What does the volume of stomach resected during laparoscopic sleeve gastrectomy depend on and what impact does it have on postoperative results? *Med Res J.* 2023; 8(3) 208–215, doi: [10.5603/mrj.a2023.0033](https://doi.org/10.5603/mrj.a2023.0033).
  4. Giordano U, Kobińska J, Pilch J. Semaglutide as a chance for obesity treatment. *Med Res J.* 2023; 8(3) 262–264, doi: [10.5603/mrj.a2023.0034](https://doi.org/10.5603/mrj.a2023.0034).
  5. Umińska JM. Multiple new therapeutic options in the treatment of obesity. *Med Res J.* 2023; 8(3) 265–266, doi: [10.5603/mrj.97463](https://doi.org/10.5603/mrj.97463).
  6. Moczulska B, Leśniewska S, Nowek P, Osowiecka K, Gromadziński L. The frequency of hypertension in patients with pathological obesity. *Medical Research Journal* 2023;8(1):21-25. DOI: [10.5603/MRJ.a2023.0003](https://doi.org/10.5603/MRJ.a2023.0003)
  7. Kubica A, Kubica J. Functioning in chronic disease — a key factor determining adherence to heart failure treatment. *Medical Research Journal* 2022;7(4):277-279. DOI: [10.5603/MRJ.2022.0059](https://doi.org/10.5603/MRJ.2022.0059)
  8. Michalski P, Kasprzak M, Kosobucka A, et al. Sociodemographic and clinical determinants of the functioning of patients with coronary artery disease. *Med Res J.* 2021; 6(1): 21–27, doi: [10.5603/mrj.a2021.0003](https://doi.org/10.5603/mrj.a2021.0003).
  9. Kubica A, Pietrzykowski Ł, Michalski P, et al. The occurrence of cardiovascular risk factors and functioning in chronic illness in the Polish population of EUROASPIRE V. *Cardiol J.* 2022 Nov 17. doi: [10.5603/CJ.a2022.0102](https://doi.org/10.5603/CJ.a2022.0102). Epub ahead of print. PMID: 36385605.
  10. Buszko K, Pietrzykowski Ł, Michalski P, et al. Validation of the Functioning in Chronic Illness Scale (FCIS). *Med Res J.* 2018;3(2): 63–69, doi: [10.5603/mrj.2018.0011](https://doi.org/10.5603/mrj.2018.0011).
  11. Kubica A, Michalski P, Kasprzak M, et al. Functioning of patients with post-COVID syndrome — preliminary data. *Med Res J.*2021; 6(3): 224–229, doi: [10.5603/mrj.a2021.0044](https://doi.org/10.5603/mrj.a2021.0044).
  12. Kubica A, Adamski P, Bączkowska A, et al. The rationale for Multilevel Educational and Motivational Intervention in Patients after Myocardial Infarction (MEDMOTION) project is to support multicentre randomized clinical trial Evaluating Safety and Efficacy of Two Ticagrelor-based De-escalation Antiplatelet Strategies in Acute Coronary Syndrome (ELECTRA – SIRIO 2). *Med Res J.* 2020; 5(4): 244–249, doi: [10.5603/mrj.a2020.0043](https://doi.org/10.5603/mrj.a2020.0043).
  13. Fullon S, Décarie-Spain L, Fioramonti X, et al. The menace of obesity to depression and anxiety prevalence. *Trends Endocrinol Metab.* 2022 Jan;33(1):18-35. doi: [10.1016/j.tem.2021.10.005](https://doi.org/10.1016/j.tem.2021.10.005). Epub 2021 Nov 5. PMID: 34750064.
  14. Kolođkin RL, Meter K, Williams GR. Quality of life and obesity. *Obes Rev.* 2001 Nov;2(4):219-29. doi: [10.1046/j.1467-789x.2001.00040.x](https://doi.org/10.1046/j.1467-789x.2001.00040.x). PMID: 12119993.
  15. Kubica A. Self-reported questionnaires for a comprehensive assessment of patients after acute coronary syndrome. *Med Res J.*2019; 4(2): 106–109, doi: [10.5603/mrj.a2019.0021](https://doi.org/10.5603/mrj.a2019.0021).
  16. Kubica A, Bączkowska A. Rationale for motivational interventions as pivotal element of multilevel educational and motivational project MEDMOTION. *Folia Cardiologica.* 2020; 15(1):6–10, doi: [10.5603/fc.2020.0003](https://doi.org/10.5603/fc.2020.0003).
  17. Kosobucka A, Michalski P, Pietrzykowski Ł, et al. The impact of readiness to discharge from hospital on adherence to treatment in patients after myocardial infarction. *Cardiol J.* 2022;29(4):582-590. doi: [10.5603/CJ.a2020.0005](https://doi.org/10.5603/CJ.a2020.0005). Epub 2020 Feb 10. PMID: 32037501; PMCID: PMC9273254.
  18. Kubica A, Kosobucka A, Fabiszak T, et al. Assessment of adherence to medication in patients after myocardial infarction treated with percutaneous coronary intervention. Is there a place for new self-reported questionnaires? *Curr Med Res Opin.* 2019 Feb;35(2):341-349. doi: [10.1080/03007995.2018.1510385](https://doi.org/10.1080/03007995.2018.1510385). Epub 2018 Sep 13. PMID: 30091642.
  19. Kubica A, Obońska K, Fabiszak T, et al. Adherence to antiplatelet treatment with P2Y12 receptor inhibitors. Is there anything we can do to improve it? A systematic review of randomized trials. *Curr Med Res Opin.* 2016; 32(8): 1441–1451, doi: [10.1080/03007995.2016.118290](https://doi.org/10.1080/03007995.2016.118290), indexed in Pubmed: [27112628](https://pubmed.ncbi.nlm.nih.gov/27112628/).
  20. Kubica A. Adherence to medication in elderly patients. *Med Res J.* 2023; 1(8): 93–94, doi: [10.5603/mrj.a2023.0015](https://doi.org/10.5603/mrj.a2023.0015).
  21. Kubica A, Gruchala M, Jaguszewski M, et al. Adherence to treatment — a pivotal issue in long-term treatment of patients with cardiovascular diseases. An expert standpoint. *Med Res J.* 2018; 2(4): 123–127, doi: [10.5603/mrj.2017.0016](https://doi.org/10.5603/mrj.2017.0016).
  22. Kubica A, Pietrzykowski Ł. The therapeutic plan implementation in patients discharged from the hospital after myocardial infarction. *Med. Res J.* 2021; 6(2): 79–82, doi: [10.5603/mrj.a2021.0024](https://doi.org/10.5603/mrj.a2021.0024).
  23. Kubica A, Kasprzak M, Obońska K, et al. Discrepancies in assessment of adherence to antiplatelet treatment after myocardial infarction. *Pharmacology.* 2015; 95(1-2): 50–58, doi: [10.1159/000371392](https://doi.org/10.1159/000371392), indexed in Pubmed: [25592409](https://pubmed.ncbi.nlm.nih.gov/25592409/).
  24. Kubica A, Kasprzak M, Obońska K, et al. Impact of health education on adherence to clopidogrel and clinical effectiveness of antiplatelet treatment in patients after myocardial infarction. *Med Res J.* 2016; 3(4): 154–159, doi: [10.5603/fmc.2015.0010](https://doi.org/10.5603/fmc.2015.0010).
  25. Buszko K, Obońska K, Michalski P, et al. The Adherence Scale in Chronic Diseases (ASCD). The power of knowledge: the key to successful patient — health care provider cooperation. *Med Res J.* 2016; 1(1):37–42, doi: [10.5603/mrj.2016.0006](https://doi.org/10.5603/mrj.2016.0006).
  26. Ratajczak J, Kubica A, Michalski P, et al. Determinants of Lipid Parameters in Patients without Diagnosed Cardiovascular Disease-Results of the Polish Arm of the EUROASPIRE V Survey. *J Clin Med.* 2023; 12(7), doi: [10.3390/jcm12072738](https://doi.org/10.3390/jcm12072738), indexed in Pubmed: [37048821](https://pubmed.ncbi.nlm.nih.gov/37048821/).
  27. Pietrzykowski Ł, Kasprzak M, Michalski P, et al. Therapy Discontinuation after Myocardial Infarction. *J Clin Med.* 2020; 9(12), doi: [10.3390/jcm9124109](https://doi.org/10.3390/jcm9124109), indexed in Pubmed: [33352811](https://pubmed.ncbi.nlm.nih.gov/33352811/).