EDITORIAL CORONARY ARTERY DISEASE AND DEPRESSION: A MISSING PILLAR IN MANAGEMENT

Tariq Ashraf¹, Muhammad Ishaq¹ ¹Karachi Institute of Heart Diseases, Karachi, Pakistan

Patients with coronary artery disease have multiple comorbids that include dyslipidemia, hypertension, diabetes mellitus, smoking and physical inactivity. It has been seen that depression is another issue in these patients that need close attention. Studies have shown that it affects between 20% and 40% in patients with coronary artery disease (CAD) and have a higher prevalence than in general population.¹ One of the study done by SS Bokhari et al.² has shown a point prevalence of depression in CAD as 37% (31.3% males and 53.8% females).

Numerous studies have shown that patients with CAD and depression have poor health outcomes.³ Depression in different aspects in Pakistani population after myocardial infarction,⁴ after PCI⁵ and in inhospital patients with CAD⁶ were evaluated and found to have significant mental illness which co-relates with the results of other international studies.

Keeping all the research studies American Heart Association wrote a scientific statement and endorsed depression as a risk factor for cardiac morbidity and mortality.⁷ Importance of depression screening as a part of myocardial infarction protocol for caring patients with Ischemic Heart Disease was seen in TRIUMPH trial (Translational Research Investigating Underlying Disparities in Acute Myocordial Infarction Patients Health Status)⁸ ENRICHD Trial (Enhancing Recovery in Coronary Heart Disease)⁹ use of citalopram or serlatine plus as clinical management was used for depressive symptoms with CAD in CREATE Trial (Canadian Cardiac Randomized Evaluation of Antidepressant and Psychotherapy Efficacy).¹⁰

In Pakistan where prevalent of CAD is high i.e. one in 4 middle age adults,¹¹ managing such patients are numerous that includes revascularization (Surgical and Interventional), drugs and treatment of modifiable and nonmodifiable risk factors. Despite all these efforts it's a need of time to focus on diagnosing depression in CAD to improve outcomes. Depression screening should be conducted to identify these important risk factors and treated with drugs in reducing morbidity and mortality.

REFERENCES

- 1. Lett HS, Blumenthal JA, Babyak MA, Sherwood A, Strauman T, Robins C, et al. Depression as a risk factor for coronary artery disease: evidence, mechanisms, and treatment. Psychosom Med. 2004;66:305-15.
- 2. Bokhari SS, Samad AH, Hanif S, Hadique S, Cheema MQ, Fazal MAS, et al. Prevalence of depression in patients with coronary artery disease in a tertiary care hospital in Pakistan. J Pak Med Assoc. 2002;52(9):436-9.
- Jackson CA, Sudlow CLM, Mishra GD. Psychological Distress and Risk of Myocardial Infarction and Stroke in the 45 and Up Study. Circ Cardiovasc Qual Outcomes. 2018;11:e004500.
- Saeed H, Khan F, Mohsin SF, Qizilbash FH, Fraz TR, Jawed Q, et al. Pattern of Depression Among Patients of Myocardial Infarction in Karachi, Pakistan: A Cross-sectional Study. Cureus. 2018;10(8):e3199
- Mujtaba SF, Sial JA, Karim M. Depression and Anxiety in patients undergoing Percutaneous Coronary Intervention for Acute Coronary Syndrome. Pak J Med Sci. 2020;36(5):1100-5.
- 6. Khan SA, Azhar S, Asad SM, Iqbal A, Kousar R, Ahmad M, et al. Assessment of anxiety and depression in hospitalized cardiac patients of Faisalabad Institute of Cardiology, Pakistan. Trop J Pharm Res. 2016;15(11):2483-7
- Lichtman JH, Froelicher ES, Blumenthal JA, Carney RM, Doering LV, Frasure-Smith N, et al. Depression as a risk factor for poor prognosis among patients with acute coronary syndrome: systematic review and recommendations: a scientific statement from the American Heart Association. Circulation 2014;129:1350-69.
- Smolderen KG, Buchanan DM, Gosch K, Whooley M, Chan PS, Vaccarino V, et al. Depression Treatment and 1-Year Mortality Following Acute Myocardial Infarction: Insights from the TRIUMPH Registry. Circulation 2017;135:1681-9.
- 9. Berkman LF, Blumenthal J, Burg M, Carney RM, Catellier D, Cowan MJ, et al. Effects of treating depression and low perceived social support on clinical events after myocardial infarction: the Enhancing Recovery in Coronary Heart Disease

Patients (ENRICHD) Randomized Trial. JAMA 2003;289:3106-16.

- Lespérance F, Frasure-Smith N, Koszycki D, Laliberté MA, van Zyl LT, Baker B, et al. Effects of citalopram and interpersonal psychotherapy on depression in patients with coronary artery disease: the Canadian Cardiac Randomized Evaluation of Antidepressant and Psychotherapy Efficacy (CREATE) trial. JAMA 2007;297:367-79.
- 11. Jafar TH, Jafary FH, Jessani S, Chaturvedi N. Heart disease epidemic in Pakistan: women and men at equal risk. Am Heart J. 2005;150(2):221-6.

Address for Correspondence:

Dr. Tariq Ashraf, Karachi Institute of Heart Diseases, Karachi, Pakistan. **Email:** tariqash45@gmail.com

Citation: Ashraf T, Ishaq M. Coronary Artery Disease and Depression: A Missing Pillar in Management. Pak Heart J. 2022;55(03):205-206. <u>https://doi.org/10.47144/phj.v55i3.2377</u>