

Guideline-directed medical therapy in post-myocardial infarction heart failure with reduced ejection fraction: Overcoming barriers in low health literacy populations

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Abstract

Background and Aim: Post-myocardial infarction heart failure with reduced ejection fraction (HFrEF) is a significant health concern affecting millions worldwide, particularly among low-educated populations. Effective management of this chronic condition hinges on adherence to guideline-directed medical therapy (GDMT), which includes essential medications such as angiotensin II receptor/neprilysin inhibitors, beta-blockers, sodium-glucose cotransporter inhibitors, and mineralocorticoid antagonists. Despite the proven benefits of GDMT in improving survival and reducing hospitalizations, adherence rates remain alarmingly low, with studies revealing that only about 39.05% of patients demonstrate moderate adherence to these recommendations[1][2]. Educational attainment plays a critical role in shaping health literacy, influencing patients' ability to understand and comply with complex medication regimens. Research indicates that individuals with lower educational backgrounds are less likely to adhere to GDMT, often due to limited understanding of the importance of their treatment and the complexities of managing their condition[3][4]. Additionally, socioeconomic barriers—such as medication costs, lack of access to healthcare services, and inadequate support systems—exacerbate these challenges, particularly for low-educated patients who face multiple obstacles in accessing and adhering to prescribed therapies[3][5]. Controversies surrounding the implementation of GDMT in low-educated populations underscore the need for tailored interventions that address specific barriers to adherence. Strategies such as enhanced patient education, socioeconomic support, and the use of digital health technologies have shown promise in bridging the gap in care for these vulnerable patients. Furthermore, collaborative care models that involve pharmacists and other healthcare providers can improve communication and provide essential resources to promote adherence[6][7]. Addressing these disparities is imperative to ensure equitable healthcare access and improve outcomes for individuals suffering from post-myocardial infarction HFrEF.

Keywords: HFREF; GDMT; Low educated; Post-MI