

Depression, Anxiety and Stress assessment of Post-Myocardial Infarction patients using Web Application

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Introduction - Myocardial infarction (MI) significantly impacts both physical and psychological health, with post-MI patients often experiencing depression, anxiety, and reduced quality of life. Though there has been an advancement in medical technology in recent decades, there is a lack of digital platforms focused on addressing the psychological needs of MI patients. This study aims to bridge that gap by developing a web application to assess depression, anxiety, and stress in post-MI patients attending cardiology clinics.

Method - This web application was designed with three distinct interfaces as patients' view, doctor's view, and admin view. Psychological assessment was done using the DASS-21 standard questionnaire. Patients' view contain mood tracking tool, clinic updates, emergency contacts, upcoming events, and future clinic dates. Doctors' view contains patients list, new registration, information of all previous registrations, contacts for admin. Admin view contains new patient registration, patient details and filtering patient details.

Results - Development of 3 main interfaces including patient's view, medical officer's view and admin view with options of each interface. Development of a database for storage data and secure user data.

Conclusions & Recommendations - Linking mental health assessment with cardiac outcomes and offering a user-friendly administrative interface, the platform enhances patient care and system efficiency. Future studies are recommended to evaluate long-term impacts on prognosis and hospital readmissions, while integration with electronic health records and provider training could further improve its effectiveness.

Keywords - Myocardial infarction, Web application, Physiological assessment, DASS-21