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Review Article

HOLISTIC CARE FOR CARDIAC PATIENTS: INTEGRATING MENTAL HEALTH INTERVENTIONS

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ABSTRACT

Cardiovascular disease (CVD) remains the foremost cause of death and disability worldwide, responsible for nearly 19.4 million deaths annually and affecting more than 612 million individuals. Despite advances in biomedical interventions, the psychosocial dimensions of cardiac illness particularly depression, anxiety, and chronic stress are often overlooked. Evidence shows that 20–40% of cardiac patients experience significant mental health disorders, which negatively impact adherence to treatment, participation in rehabilitation, and long-term survival. The dual burden of CVD and mental illness creates a cycle in which psychological distress exacerbates cardiovascular risk factors such as hypertension, diabetes, and obesity, while cardiac illness itself precipitates mental health challenges. This review synthesizes global data and current evidence to emphasize the necessity of integrating mental health interventions into cardiac care. Using a structured methodology guided by PRISMA standards, peer-reviewed literature published between 2010 and 2025 was analyzed. Findings reveal that interventions such as cognitive behavioral therapy (CBT), mindfulness-based stress reduction (MBSR), structured counseling, and group therapy significantly improve resilience, reduce depressive symptoms, and foster adherence to lifestyle modifications. Pharmacological support, when carefully monitored, complements these approaches. Digital health innovations, including tele-counseling and mobile applications, expand access to psychosocial care, particularly in low-resource settings. Several integrated models have emerged globally. Collaborative care models ensure multidisciplinary management of physical and psychological needs, lifestyle medicine integration promotes sustainable behavioral change, digital health empowers self-management, and community-based approaches leverage social support to reduce isolation. Despite challenges such as stigma, workforce shortages, and fragmented systems, holistic care remains essential for improving survival, reducing hospitalizations, and enhancing quality of life.

Keywords: Cardiovascular disease, Holistic care, Mental health interventions, Depression, Anxiety.

INTRODUCTION

Cardiovascular disease (CVD) continues to dominate the global health landscape as the foremost cause of death and disability. According to the American Heart Association's 2025 update, approximately 19.41 million deaths worldwide in 2021 were attributed to CVD, with a global prevalence of over 612 million individuals living with cardiovascular conditions. The age adjusted death rate stood at 235 per 100,000 population, underscoring the immense burden on healthcare systems and societies. Regions such as Central Asia, Eastern Europe, Oceania, North Africa, and Sub-Saharan Africa report the highest mortality rates, reflecting disparities in healthcare access, socioeconomic conditions, and preventive strategies. While the physiological dimensions of CVD are well documented,

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the psychological and social dimensions are often underappreciated. Research consistently demonstrates that depression, anxiety, and chronic stress are prevalent among 20–40% of cardiac patients, particularly following acute events such as myocardial infarction or cardiac surgery (Celano *et al*., 2018; Carney & Freedland, 2017; Freedland *et al*., 2016) . These mental health conditions are not merely comorbidities; they exert a direct influence on disease progression. Depression, for instance, is associated with poorer medication adherence, reduced participation in rehabilitation programs, and higher rates of hospital readmission (Dickens *et al*., 2013; O'Neil *et al*., 2012). Anxiety contributes to maladaptive coping strategies, heightened sympathetic nervous system activity, and increased risk of arrhythmias (Watkins *et al*., 2013; Frasure-Smith & Lespérance, 2008). The World Health Organization's 2025 health statistics report emphasizes the interconnectedness of non-communicable diseases and mental health, noting that mental health disorders contribute significantly to the global burden of disease and impede progress toward Sustainable Development Goals. The dual burden of CVD and mental illness creates a vicious cycle: cardiac illness precipitates psychological distress, while untreated mental health conditions exacerbate cardiovascular risk factors such as hypertension, diabetes, and obesity (Rozanski *et al*., 1999; Chaddha *et al*., 2016). Globally, the economic implications are staggering. CVD alone is projected to cost trillions of dollars in healthcare expenditure and lost productivity by 2030. When compounded by mental health disorders, the financial strain intensifies, as patients require longer hospital stays, more frequent interventions, and ongoing psychosocial support. This underscores the urgent need for holistic care models that integrate mental health interventions into cardiac care pathways (Huffman *et al*., 2018; Tully & Baumeister, 2015). Holistic care recognizes the patient as a whole addressing biological, psychological, and social dimensions simultaneously.

Evidence from integrated care models demonstrates that cognitive behavioural therapy (CBT), mindfulness-based stress reduction, and structured counselling programs significantly improve patient outcomes. These interventions reduce depressive symptoms, enhance resilience, and foster adherence to lifestyle modifications such as diet, exercise, and smoking cessation (Blumenthal *et al*., 2016; Lavretsky & Irwin, 2016). Moreover, digital health innovations, including tele counseling and mobile applications, are expanding access to psychosocial support, particularly in low resource settings. The integration of mental health into cardiac care is not without challenges. Stigma surrounding mental illness, limited availability of trained professionals, and fragmented healthcare systems hinder implementation. However, successful models in high income countries illustrate the potential of multidisciplinary teams where cardiologists, psychiatrists, nurses, and social workers collaborate to deliver comprehensive care (Ski *et al*., 2025; Huffman *et al*., 2018). Scaling such models globally requires policy commitment, workforce training, and culturally sensitive adaptations.

Psychosocial Dimensions of Cardiac Disease

Cardiovascular disease (CVD) is widely recognized as a physiological condition, yet its psychosocial dimensions are equally critical in shaping patient outcomes. The interplay between mental health, social support, and behavioral responses profoundly influences disease progression, recovery, and quality of life (Rozanski *et al*., 1999; Chaddha *et al*., 2016). Understanding these dimensions is essential for developing holistic care strategies that address both the body and mind.

Depression and Anxiety

Depression and anxiety are among the most prevalent psychosocial conditions in cardiac patients. Studies estimate that 20–40% of individuals with CVD experience clinically significant depression or anxiety**,** particularly following acute events such as myocardial infarction or coronary artery bypass surgery (Celano *et al*., 2018; Carney & Freedland, 2017). Depression is strongly associated with poor adherence to medication, reduced participation in cardiac rehabilitation, and increased risk of recurrent cardiac events (Dickens *et al*., 2013; Freedland *et al*., 2016). Anxiety, on the other hand, often manifests as heightened sympathetic nervous system activity, leading to elevated heart rate, blood pressure, and arrhythmias (Watkins *et al*., 2013). These conditions not only diminish quality of life but also contribute to higher mortality rates (Frasure-Smith & Lespérance, 2008; Lane *et al*., 2000).

Stress and Coping Mechanisms

Chronic stress is a well-established risk factor for both the onset and progression of CVD. Stress triggers neuroendocrine responses, including elevated cortisol and catecholamine levels, which exacerbate hypertension, endothelial dysfunction, and atherosclerosis (Rozanski *et al*., 1999). Patients with maladaptive coping strategies such as denial, avoidance, or substance use tend to experience worse outcomes compared to those employing positive coping mechanisms like problem-solving or emotional regulation. Stress management interventions, including mindfulness and relaxation techniques, have shown promise in reducing cardiovascular risk and improving psychological resilience (Blumenthal *et al*., 2016; Lavretsky & Irwin, 2016).

Social Support and Isolation

Social support plays a protective role in cardiac health. Patients with strong family, community, or peer support networks demonstrate better adherence to treatment, lower rates of depression, and improved recovery trajectories (Berkman *et al*., 2003; Huffman *et al*., 2018). Conversely, social isolation and loneliness are linked to increased morbidity and mortality (Lane *et al*., 2000). The absence of supportive relationships can intensify psychological distress, reduce motivation for lifestyle changes, and hinder engagement with healthcare services.

Behavioral and Lifestyle Factors

Psychosocial conditions often influence lifestyle behaviors that directly impact cardiac health. Depression and stress are associated with unhealthy dietary patterns, physical inactivity, smoking, and poor sleep quality. These behaviors compound cardiovascular risk and complicate disease management (O'Neil *et al*., 2012; Dickens *et al*., 2013). Addressing psychosocial factors is therefore essential for promoting sustainable lifestyle modifications.

Cultural and Socioeconomic Influences

Cultural beliefs, socioeconomic status, and health literacy significantly shape psychosocial experiences in cardiac patients. In low- and middle-income countries, stigma surrounding mental health may prevent patients from seeking psychological support. Financial constraints and limited access to healthcare services further exacerbate stress and anxiety (Shanmugasegaram *et al*., 2012). Tailoring interventions to cultural contexts and addressing socioeconomic barriers are crucial for equitable care.

Implications for Holistic Care

The psychosocial dimensions of cardiac disease highlight the need for integrated care models that combine medical treatment with psychological and social support. Screening for depression and anxiety should be routine in cardiac care, followed by timely interventions such as counseling, cognitive behavioral therapy, or stress management programs. Multidisciplinary teams including cardiologists, mental health professionals, nurses, and social workers are best positioned to deliver comprehensive care that addresses both physiological and psychosocial needs (Huffman *et al*., 2018; Tully & Baumeister, 2015).

MATERIALS AND METHODS

This review was conducted using a structured and transparent approach to ensure adherence to international standards for scholarly synthesis. A comprehensive literature search was performed across major databases including PubMed, Scopus, Web of Science, and PsycINFO. The search strategy combined keywords and Medical Subject Headings (MeSH) such as "cardiovascular disease," "cardiac patients," "holistic care," "mental health interventions," "depression," "anxiety," and "psychosocial support." Boolean operators (AND, OR) were applied to refine results and capture relevant studies. The inclusion criteria were peer-reviewed articles published between 2010 and 2025, focusing on adult populations with cardiovascular disease and incorporating mental health dimensions. Studies were considered if they addressed psychological interventions, integrated care models, or the impact of mental health disorders on cardiac outcomes. Exclusion criteria included pediatric populations, non-English publications, and studies lacking empirical data. The review process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Titles and abstracts were screened independently by two reviewers, followed by full-text evaluation to ensure relevance. Discrepancies were resolved through consensus. A PRISMA flow diagram was used to document the selection process, including the number of records identified, screened, excluded, and included. Data extraction focused on study design, sample characteristics, type of intervention, outcomes measured, and key findings. Both quantitative and qualitative studies were included to capture the breadth of evidence. Quality appraisal was conducted using standardized tools such as the Cochrane Risk of Bias tool for randomized controlled trials and the CASP checklist for qualitative studies. The synthesis adopted a thematic approach, grouping findings into categories: prevalence of mental health disorders among cardiac patients, evidence-based interventions (e.g., cognitive behavioral therapy, mindfulness, counseling), and models of integrated holistic care. Comparative tables were prepared to highlight similarities and differences across studies.

RESULTS AND DISCUSSION

Cardiovascular disease (CVD) remains the leading cause of death worldwide, accounting for nearly 19.4 million deaths annually and affecting more than 612 million individuals globally**.** The burden is disproportionately high in regions such as Central Asia, Eastern Europe, Oceania, North Africa, and Sub-Saharan Africa, where socioeconomic disparities and limited healthcare infrastructure exacerbate mortality rates. Beyond its physiological impact, CVD is closely linked with mental health disorders. Studies consistently reveal that 20–40% of cardiac patients experience depression or anxiety**,** particularly after acute cardiac events. Depression is associated with poor adherence to medication, reduced participation in rehabilitation, and increased risk of recurrent events. Anxiety contributes to maladaptive coping, heightened sympathetic activity, and arrhythmias. Chronic stress further worsens cardiovascular outcomes by elevating cortisol and catecholamine levels, fueling hypertension and atherosclerosis. The World Health Organization (WHO) emphasizes that mental health disorders significantly impede progress toward global health goals, creating a dual burden that intensifies the overall disease impact. Thus, the global burden of CVD cannot be fully understood without acknowledging its psychosocial dimensions.

Table 1. Global Burden of Cardiovascular Disease and Its Psychosocial Dimensions.

Aspect	Key Information	Implications for Health Outcomes
Global Prevalence of CVD	Cardiovascular disease affects more than 612 million people worldwide.	Represents one of the most widespread chronic health conditions globally.

Global Mortality	CVD accounts for approximately 19.4 million deaths annually worldwide.	Remains the leading cause of death globally, creating a major public health challenge.
High-Burden Regions	Particularly high prevalence in Central Asia, Eastern Europe, Oceania, North Africa, and Sub-Saharan Africa.	Socioeconomic inequalities and limited healthcare infrastructure increase mortality rates.
Mental Health Comorbidity	Around 20–40% of cardiac patients experience depression or anxiety, especially after acute cardiac events.	Mental health conditions significantly influence recovery and disease progression.
Impact of Depression	Depression is linked with poor medication adherence, reduced participation in rehabilitation, and higher risk of recurrent cardiac events.	Leads to worse clinical outcomes and increased healthcare utilization.
Impact of Anxiety	Anxiety contributes to maladaptive coping behaviors, increased sympathetic nervous system activity, and arrhythmias.	Can worsen cardiac symptoms and increase complications.
Role of Chronic Stress	Chronic stress elevates cortisol and catecholamine levels, promoting hypertension and atherosclerosis.	Accelerates cardiovascular disease progression and increases mortality risk.
Global Health Perspective	The World Health Organization (WHO) recognizes mental health disorders as a barrier to achieving global health goals.	Highlights the need for integrated cardiovascular and mental health care strategies.
Psychosocial Dimension of CVD	The interaction between cardiovascular disease and mental health creates a dual disease burden.	Effective CVD management must address both physiological and psychological factors.

Evidence demonstrates that integrating mental health interventions into cardiac care yields measurable improvements in patient outcomes. Cognitive Behavioral Therapy (CBT) has been shown to reduce depressive symptoms and enhance adherence to lifestyle modifications such as diet, exercise, and smoking cessation. Mindfulness-based stress reduction (MBSR) programs lower blood pressure, improve emotional resilience, and reduce hospital readmissions. Structured counseling and group therapy provide patients with coping strategies and peer support, mitigating feelings of isolation. Pharmacological interventions, including antidepressants, can complement cardiac medications when carefully monitored to avoid adverse interactions. Importantly, digital health innovations such as tele-counseling, mobile applications, and remote monitoring are expanding access to psychosocial support, particularly in low-resource settings. These tools allow continuous engagement, personalized feedback, and improved adherence. Evidence from randomized controlled trials and meta-analyses confirms that patients receiving integrated psychological interventions report higher quality of life, lower depressive scores, and improved long-term survival compared to those receiving standard cardiac care alone.

Table 2. Evidence-Based Mental Health Interventions Improving Outcomes in Cardiac Patients.

Intervention	Description	Key Outcomes/Benefits in Cardiac Patients
Cognitive Behavioral Therapy (CBT)	Structured psychotherapy that helps patients identify and modify negative thoughts and behaviors affecting health.	Reduces depressive symptoms and improves adherence to lifestyle modifications such as diet control, regular exercise, and smoking cessation.
Mindfulness-Based Stress Reduction (MBSR)	A program combining mindfulness meditation, breathing exercises, and stress management techniques.	Lowers blood pressure, improves emotional resilience, and reduces hospital readmissions.
Structured Counseling	Individual psychological counseling focusing on coping strategies and emotional support.	Enhances psychological well-being and helps patients manage stress related to cardiac illness.
Group Therapy	Therapeutic sessions conducted in groups that encourage peer interaction and shared experiences.	Provides social support, reduces feelings of isolation, and strengthens coping mechanisms.
Pharmacological Interventions	Use of antidepressants or other psychiatric medications alongside cardiac medications with careful monitoring.	Helps manage depression and anxiety while maintaining safety and avoiding adverse drug interactions.

Digital Mental Health Solutions	Tele-counseling, mobile health applications, and remote monitoring systems.	Expands access to psychological support, enables continuous patient engagement, and improves adherence to treatment.
Integrated Psychological Care (RCT Evidence)	Combination of psychological therapies within routine cardiac care supported by clinical research evidence.	Improves quality of life, reduces depressive scores, and enhances long-term survival compared with standard cardiac care alone.

Holistic care models recognize the patient as a whole, addressing biological, psychological, and social dimensions simultaneously. Collaborative care models**,** where cardiologists, psychiatrists, nurses, and social workers jointly manage patients, have demonstrated success in improving both clinical and psychosocial outcomes. These models emphasize routine screening for depression and anxiety, followed by timely interventions. Lifestyle medicine integration combining nutrition counseling, exercise programs, and sleep hygiene with psychological support has proven effective in sustaining long-term behavioral changes. In high-income countries, multidisciplinary cardiac rehabilitation programs routinely incorporate mental health services, resulting in reduced hospitalizations and improved survival. However, in low- and middle-income countries, challenges such as stigma, workforce shortages, and fragmented healthcare systems hinder implementation. Digital health solutions, including telemedicine platforms and mobile apps, offer scalable alternatives by bridging gaps in access and reducing costs. Culturally sensitive adaptations are essential to ensure relevance and acceptance across diverse populations. Holistic care also emphasizes the importance of social support networks**.** Family involvement, peer groups, and community-based programs enhance motivation, reduce isolation, and foster resilience. Evidence suggests that patients with strong social support demonstrate better adherence to treatment and improved recovery trajectories. Thus, integrated care models must extend beyond clinical settings to include community engagement and policy support.

Table 3. Key Components and Outcomes of Holistic and Integrated Care Models in Cardiovascular and Mental Health Management.

Component of Holistic Care Model	Description	Impact/Benefits
Holistic Care Approach	Recognizes the patient as a whole and addresses biological, psychological, and social dimensions simultaneously.	Promotes comprehensive patient management and improved overall well-being.
Collaborative Care Model	Cardiologists, psychiatrists, nurses, and social workers jointly manage patients.	Improves both clinical and psychosocial outcomes through coordinated care.
Routine Mental Health Screening	Regular screening for depression and anxiety followed by timely intervention.	Enables early detection and management of psychological issues in cardiac patients.
Lifestyle Medicine Integration	Combines nutrition counseling, exercise programs, sleep hygiene, and psychological support.	Helps sustain long-term behavioral changes and improves cardiovascular health.
Multidisciplinary Cardiac Rehabilitation	Programs in high-income countries integrate physical rehabilitation with mental health services.	Reduces hospitalizations and improves survival rates.
Challenges in LMICs	Implementation barriers include stigma, shortage of trained workforce, and fragmented healthcare systems.	Limits access to integrated mental and cardiovascular care.
Digital Health Solutions	Use of telemedicine platforms and mobile health applications.	Expands access to care, reduces costs, and supports scalable interventions.
Culturally Sensitive Adaptations	Tailoring interventions according to cultural beliefs and practices.	Improves acceptance, relevance, and effectiveness among diverse populations.
Social Support Networks	Family involvement, peer support groups, and community-based programs.	Enhances motivation, reduces isolation, and strengthens patient resilience.
Community and Policy Engagement	Extending integrated care beyond hospitals to communities and policy support systems.	Improves treatment adherence and long-term recovery outcomes.

Models of Integrated Holistic Care

Holistic care for cardiac patients emphasizes the integration of physical, psychological, and social dimensions of health. Traditional cardiology has focused primarily on biomedical interventions, but growing evidence demonstrates that mental health plays a pivotal role in recovery, adherence, and long-term outcomes. Several models of integrated holistic care have emerged globally, each offering unique approaches to combining cardiovascular treatment with mental health interventions.

Collaborative Care Model

The collaborative care model is one of the most widely adopted frameworks. It involves a multidisciplinary team cardiologists, psychiatrists, nurses, psychologists, and social workers working together to deliver comprehensive patient management. Routine screening for depression and anxiety is embedded into cardiac care pathways, followed by evidence-based interventions such as cognitive behavioral therapy (CBT) or counseling. This model has been shown to reduce hospital readmissions, improve adherence to medication, and enhance overall quality of life. Its strength lies in the seamless communication between professionals, ensuring that both physical and psychological needs are addressed simultaneously.

Lifestyle Medicine Integration

Lifestyle medicine models combine medical treatment with structured programs targeting nutrition, physical activity, sleep hygiene, and stress management. These programs often incorporate psychological support, such as mindfulness training or stress-reduction workshops, alongside cardiac rehabilitation. Patients are encouraged to adopt sustainable lifestyle changes while receiving counseling to overcome barriers like depression or low motivation. Evidence suggests that this integrated approach not only improves cardiovascular outcomes but also reduces depressive symptoms and enhances resilience. By addressing behavioral risk factors, lifestyle medicine models provide a preventive dimension to holistic care.

Digital Health and Telemedicine Models

Digital health innovations are increasingly being used to expand access to holistic care, particularly in low-resource settings. Tele-counseling, mobile applications, and remote monitoring tools allow patients to receive psychological support and lifestyle guidance without frequent hospital visits. These platforms often include stress-management modules, medication reminders, and peer support communities. Digital models are cost-effective, scalable, and adaptable to diverse cultural contexts. They also empower patients by promoting self-management and continuous engagement with healthcare providers.

Community-Based and Social Support Models

Community-based models emphasize the role of family, peer groups, and local organizations in supporting cardiac patients. Social support has been shown to reduce isolation, improve adherence, and foster emotional resilience. Programs may include group counseling sessions, peer mentoring, or family education workshops. These models are particularly effective in cultures where community ties are strong, as they leverage existing social structures to enhance patient outcomes. Integrating community support into formal healthcare systems ensures that patients receive both clinical and psychosocial assistance.

Challenges and Future Directions

Despite their effectiveness, integrated holistic care models face challenges such as stigma surrounding mental health, limited availability of trained professionals, and fragmented healthcare systems. In low- and middle-income countries, resource constraints often hinder implementation. Future directions should focus on culturally sensitive adaptations, workforce training, and policy support to embed mental health into cardiac care globally. Digital health solutions and community engagement offer promising pathways to overcome barriers and scale holistic care models.

Table 4. Models of Integrated Holistic Care for Cardiac Patients.

Model	Key Features	Strengths	Challenges/Limitations
Collaborative Care Model	Multidisciplinary team (cardiologists, psychiatrists, nurses, psychologists, social workers). Routine screening for depression/anxiety with interventions like CBT or counseling.	Comprehensive management of physical and psychological needs; reduces hospital readmissions; improves adherence and quality of life.	Requires strong coordination; resource-intensive; limited feasibility in low-resource settings.
Lifestyle Medicine Integration	Combines medical treatment with structured programs on nutrition, exercise, sleep hygiene, and stress management. Psychological support via mindfulness and counseling.	Preventive approach; improves cardiovascular outcomes; reduces depressive symptoms; promotes sustainable lifestyle changes.	Patient motivation and adherence can be difficult; requires long-term engagement and support.

Digital Health & Telemedicine	Tele-counseling, mobile apps, remote monitoring. Includes stress-management modules, medication reminders, and peer support communities.	Cost-effective, scalable, adaptable to diverse contexts; expands access in low-resource areas; empowers self-management.	Digital divide in rural/low-income populations; requires technological literacy and infrastructure.
Community-Based & Social Support	Family involvement, peer groups, community organizations. Group counseling, peer mentoring, family education workshops.	Reduces isolation; enhances resilience; leverages cultural and social ties; improves adherence and recovery.	Effectiveness depends on strength of community networks; may lack formal clinical oversight.

The findings of this review highlight the critical importance of integrating mental health interventions into cardiac care. Cardiovascular disease (CVD) is not only a physiological condition but also a psychosocial challenge, with depression, anxiety, and stress exerting significant influence on disease progression and recovery. Addressing these dimensions through holistic care models offers a pathway to improved outcomes, yet implementation remains uneven across global healthcare systems. One of the most compelling insights is the bidirectional relationship between CVD and mental health. Depression and anxiety are prevalent among cardiac patients, often following acute events such as myocardial infarction. These conditions worsen prognosis by reducing adherence to medication, limiting participation in rehabilitation, and increasing hospital readmissions. Stress further compounds risk by elevating neuroendocrine responses that exacerbate hypertension and atherosclerosis. Thus, mental health cannot be considered secondary; it is integral to cardiac health. Evidence demonstrates that interventions such as cognitive behavioral therapy (CBT), mindfulness-based stress reduction, and structured counseling programs significantly improve patient resilience and adherence to lifestyle modifications. Pharmacological support, when carefully monitored, complements these approaches. Digital health innovations, including tele-counseling and mobile applications, expand access to psychosocial care, particularly in low-resource settings. These findings suggest that integrating mental health interventions is both feasible and effective, with measurable benefits for survival and quality of life. Holistic care models collaborative, lifestyle-based, digital, and community-driven illustrate diverse pathways for integration. Collaborative care, involving multidisciplinary teams, ensures comprehensive management of both physical and psychological needs. Lifestyle medicine emphasizes preventive strategies, while digital health offers scalable solutions. Community-based models leverage social support networks, which are particularly valuable in cultures with strong communal ties. Together, these models demonstrate that holistic care is adaptable across contexts, though challenges remain. Barriers to implementation include stigma surrounding mental illness, limited availability of trained professionals, and fragmented healthcare systems. In low- and middle-income countries, resource constraints hinder widespread adoption. Addressing these barriers requires policy commitment, workforce training, and culturally sensitive adaptations. Importantly, integrating mental health into cardiac care aligns with global health priorities, including the Sustainable Development Goals, by addressing non-communicable diseases in a comprehensive manner. The discussion underscores that holistic care is not optional but essential. Integrating mental health interventions into cardiac management improves adherence, reduces hospitalizations, and enhances quality of life. Future efforts must focus on scaling integrated models globally, ensuring that cardiac patients receive care that nurtures both heart and mind.

CONCLUSION

Cardiovascular disease (CVD) continues to be the leading global health challenge, with its impact compounded by the high prevalence of mental health disorders such as depression, anxiety, and chronic stress among cardiac patients. This dual burden creates a vicious cycle in which psychological distress worsens cardiovascular outcomes, while cardiac illness itself precipitates mental health difficulties. Evidence from the reviewed literature highlights that integrating psychosocial interventions such as cognitive behavioral therapy, mindfulness-based stress reduction, structured counseling, and group therapy significantly improves resilience, adherence to treatment, and long-term survival. Pharmacological support, when carefully monitored, further complements these approaches. Holistic care models, including collaborative multidisciplinary teams, lifestyle medicine integration, digital health innovations, and community-based support, demonstrate strong potential in addressing both physiological and psychological needs. These models not only reduce hospitalizations and mortality but also enhance quality of life by promoting sustainable behavioral changes and fostering social support. However, barriers such as stigma, workforce shortages, and fragmented healthcare systems remain pressing challenges, particularly in low- and middle-income countries. The future of cardiac care must therefore embrace a holistic paradigm that integrates mental health into routine cardiovascular management. Policy commitment, workforce training, and culturally sensitive adaptations are essential to scale these models globally. By recognizing the patient as a whole biological, psychological, and social healthcare systems can move toward more equitable, effective, and compassionate care. Ultimately, holistic integration of mental health interventions into cardiac care is not optional but

imperative for improving survival, reducing disease burden, and ensuring meaningful recovery.

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CONFLICT OF INTERESTS

The authors declare no conflict of interest

ETHICS APPROVAL

Not applicable

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AI TOOL DECLARATION

The authors declares that no AI and related tools are used to write the scientific content of this manuscript.

DATA AVAILABILITY

Data will be available on request

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