Managing cardiac-related mental health problems

Challenges and solutions

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Postcardiac event mental health issues are common and can compromise recovery. A patient-centred and collaborative approach to the overall management of postcardiac event mental health problems will optimise the emotional recovery of cardiac patients.

The mental health impact of coronary heart disease has gained increasing research attention in the past two decades. There is now considerable consensus that postcardiac event mental health issues are common and can compromise recovery. There is somewhat less agreement on how and when these issues should be managed and by whom. Given the prognostic importance of postcardiac event mental health problems, it is imperative that its identification and management is approached in a systematic and collaborative way.

Nature of psychosocial impacts of cardiac events

Cardiac events, such as acute coronary syndrome (ACS), acute myocardial infarction (AMI), cardiac arrest and spontaneous coronary artery dissection (SCAD), trigger a broad range of psychosocial challenges for patients, which can include shock, uncertainty, confusion and vulnerability.[1,2] These feelings are heightened in young patients and individuals who experience unexpected events, such as SCAD.[2,3] After a cardiac event, patients typically fear recurrence or sudden death, and worry about adjusting to a challenging and possibly foreshortened future.[1-4] Loss of independence and control, and changes in self-identity and roles are common, including negative impacts on work capacity, personal relationships, social life and exercise regimens.[1,2] These fears and losses also occur after procedures such as coronary artery bypass graft surgery, percutaneous coronary intervention and implantable cardioverter defibrillator surgery.[1] Physical symptoms

Key points

- **Anxiety and depression are common after cardiac events and compromise recovery.**
- **Risk factors for postcardiac event anxiety and depression include a history of mental health problems, social isolation, financial strain, younger age (under 55 years), smoking, comorbid diabetes or obesity, and compounded loss or bereavement.**
- **General practice provides an ideal setting for patient education, screening, treatment and referral to manage postcardiac event mental health issues.**
- **Interdisciplinary collaborative care has been shown to optimise patients' mental and physical recovery.**

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Red flags for postcardiac event anxiety and depression

- History of mental health problems
- Socially isolated, living alone or unpartnered
- Younger age (under 55 years)
- Financial strain or socioeconomic stress
- Smoking cigarettes
- Comorbid diabetes or obesity
- Compounded loss or bereavement

of fatigue, breathlessness and pain add to the patients' distress and frustration, whereas rigorous medication regimens and recommended lifestyle changes challenge patients' sense of identity and autonomy, often exacerbating feelings of sadness, helplessness and hopelessness.[1,2,5] Some patients go on to experience clinically significant postcardiac event anxiety and depression, both of which impact negatively on recovery and prognosis.[6,7]

Prevalence of postcardiac event anxiety and depression

About one in three patients experience clinically significant anxiety and about one in four become depressed after AMI, cardiac arrest, coronary artery bypass graft surgery or percutaneous coronary intervention, rates that are twice those seen in the general population.[7-11] Rates of anxiety, in particular, are even higher following SCAD.[12] Post-traumatic stress disorder is also common, varying from 15% to 20% in patients with ACS, and up to 35% in patients after cardiac arrest and implantable cardioverter defibrillator surgery.[13,14] Compared with the general population, ACS and other cardiac diagnoses are associated with a 50% increased risk of suicide, increasing to an almost fivefold increased suicide risk following cardiac arrest.[15]

Predictors of postcardiac event anxiety and depression

The past often predicts the future, and postcardiac event mental health status is no exception: patients with a history of pre-event mental health problems have a fourfold increased risk of postevent anxiety or depression.[7,16,17] Social connectedness is also important: those who are socially isolated, living alone or unpartnered have a twofold increased risk of postcardiac event mental health problems.[7,8,16,18] Other risk factors or 'mental health red flags' include being younger (aged under 55 years), being under financial strain or socioeconomic stress, smoking cigarettes, having comorbid diabetes or obesity and experiencing compounded loss or bereavement (see Box).[7,11,16-19] Indeed, the risk of first or subsequent cardiac events increases in the aftermath of bereavement.[20,21]

Consequences of postcardiac event anxiety and depression

Postcardiac event mental health problems negatively impact prognosis, increasing the risk of hospital readmission, recurrent cardiac events and premature mortality.[22-24] This is not surprising, as anxiety and depression compromise health-enhancing behaviours, such as medication adherence, engaging in physical activity, dietary changes, smoking cessation and cardiac rehabilitation attendance.[24-28] Postcardiac event anxiety and depression are also associated with increased inflammation, altered autonomic function and poor functional capacity,[29,30] highlighting the shared mechanisms between heart disease and mental illness.

Opportunities for screening, education and treatment

Over the course of a patient's cardiac journey, there are numerous opportunities for mental health screening, education and treatment. These include the preadmission period, period of hospitalisation, and immediate and later postcardiac event periods.

Screening

Australian cardiac guidelines recommend routine mental health screening at the time of the acute cardiac event, at first follow up, at two to three months postcardiac event, and subsequently on a yearly basis.[31] Ideally, every opportunity should be utilised to monitor mental health symptoms. Recommended screening tools include the Generalised Anxiety Disorder (GAD-7) for anxiety and the Patient Health Questionnaire (PHQ-9) for depression.[24,31,32] The importance of communication and collaboration between healthcare professionals cannot be over stated: screening results should be documented in the patient's medical record and communicated to others involved in the patient's care. The value of screening is limited unless adequate systems are in place to ensure accurate diagnosis, effective communication, appropriate referral and follow up, and effective treatment.[32]

Patient education

Patients need to be given a clear explanation about the likelihood, risk factors and consequences of postcardiac event anxiety and depression, with reference to their own personal circumstances and red flags for mental health problems.[16] Patients without mental health red flags can be reassured that they are unlikely to develop postcardiac event problems, whereas those who are younger (aged under 55 years), have a mental health history, live alone or have comorbid conditions, can be alerted to their increased mental health risk. Evidence shows that cardiac patients want to know about postcardiac event mental health risks and feel grateful for the opportunity to discuss these issues with a trusted healthcare professional.[33]

Mood difficulties are often heightened during the initial two- to three-month adjustment period, yet resolve without intervention for many patients.[34] These transient symptoms are referred to as the 'cardiac blues' and are likened to a bereavement or adjustment response.[6,35] During this early postcardiac event period, symptoms need to be acknowledged but not necessarily pathologised, to allow time for adjustment and natural resolution. Patients with elevated anxiety or depressive symptoms should be closely monitored with repeat screening and referral for mental health support as required.[6,36,37]

Treatment

The recommended mental health treatments for cardiac patients include cardiac rehabilitation attendance, lifestyle changes, psychological interventions, pharmacological treatments and collaborative care.[31] Cardiac rehabilitation attendance decreases morbidity and improves quality of life and survival.[38-40] Physical activity and exercise significantly improve postcardiac event anxiety and depression and reduce morbidity and premature mortality because of their effects on enhancing parasympathetic tone and decreasing inflammation, with benefits equivalent to the use of pharmacological treatment.[41-43] In terms of psychological therapies, cognitive behaviour therapy is recommended in Australian clinical cardiac guidelines for mental health management,[31] which results in reduced mental health symptoms and, in some studies, reduced mortality risk.[24,44-49] There is also convincing evidence that the use of pharmacological treatments, most notably selective serotonin reuptake inhibitors, result in reduced anxiety, depression and AMI recurrence in cardiac patients.[24,48,50] Pharmacological and psychological interventions can be combined for enhanced outcomes.[44] However, interactions between certain selective serotonin reuptake inhibitors and antihypertensive medications have been reported.[51] Moreover, there is some concern with the use of serotonin and norepinephrine reuptake inhibitors in cardiac patients due to the risk of cardiovascular side effects, including elevated blood pressure and bleeding.[52] Finally, collaborative care has also been shown to be effective and allows cardiac and mental health issues to be managed concurrently.[53]

Sharing the responsibility through collaborative mental health management

Cardiac patient care is shared between cardiologists and cardiac surgeons, GPs and the cardiac rehabilitation team of allied healthcare professionals. For some patients, referral to a psychologist or psychiatrist is warranted. Although barriers exist in each setting, taking a shared, collaborative and interdisciplinary approach to the identification and management of postcardiac event mental health problems is likely to result in optimal patient care.[31,53] Indeed, the 2023 statement of the Association of Cardiovascular Nursing and Allied Professions of the European Society of Cardiology recommended an integrated, interdisciplinary approach to achieve optimal cardiovascular care more generally,[54] whereas the recently released 2023 guidelines from the American Heart Association and the American College of Cardiology joint committee highlight the importance of incorporating the principles of shared decision-making and team-based care in the management of cardiac patients.[24]

Cardiologists currently play only a modest role in managing cardiac mental health. A recent study of 524 cardiologist members of the Cardiac Society of Australia and New Zealand found that only 3% routinely screen for depression, with most only 'sometimes' asking patients about their mood.[55] Consistently, only a minority routinely refer their patients with depression for treatment or prescribe antidepressant medication, with the majority lacking confidence in prescribing depression treatment. Currently, most cardiologists regard GPs as being primarily responsible for both identifying and managing cardiac-related depression.[55] Regardless, given that the opinions of cardiologists are highly valued by patients, it is important that cardiologists be supported to take an active role in mental health identification and management.

GPs are well placed to screen, monitor, treat and refer cardiac patients with mental health problems. In Australia, GPs are the most commonly consulted healthcare professional, even for mental health issues.[56] Almost all (95%) Australians with a chronic condition consulted a GP during 2022.[56] However, there is currently a lack of consistency in anxiety and depression screening and identification in the acute inpatient setting,[57] due to time limitations and the lack of remuneration.[32] Indeed, the burden of mental health management is falling increasingly, overwhelmingly and disproportionately to GPs and primary care physicians, who often feel inadequately equipped to manage these conditions,[58] further highlighting the need for interdisciplinary, shared-care models.

Outpatient cardiac rehabilitation programs provide an ideal opportunity for routine and repeat screening for anxiety and depression. A recent Australian study identified reasonably high rates of screening on both entry to and exit from cardiac rehabilitation.[59] However, screening efforts in this setting are compromised by suboptimal cardiac rehabilitation attendance[60] and tendencies towards underscreening of patients undergoing cardiac rehabilitation who are most in need of support, such as young patients, those with comorbidities, smokers, those of lower socioeconomic status and those who are less physically active.[61] Although cardiologists are more likely than primary care physicians to refer patients to cardiac rehabilitation programs,[62] both should be encouraged and supported to routinely refer cardiac patients to cardiac rehabilitation.

All primary care physicians and cardiologists have a central role in the referral of patients to specialist psychological and psychiatric services when warranted. It is therefore imperative for GPs, cardiac specialists and cardiac rehabilitation practitioners to know their referral options, including locally based psychologists and psychiatrists, and other relevant services. For example, the Cardiac Counselling Clinic of the Australian Centre for Heart Health offers evidence-based, cardiac-specific counselling and support through its team of trained registered psychologists.

Summary

Clearly, challenges and gaps exist at each opportunity and in each setting. This highlights the need for a systematic effort across the entire patient journey, with increased interdisciplinary communication and collaboration. Ideally, every patient encounter in each setting should be viewed as an opportunity for mental health education, screening, treatment and referral. Taking a patient-centred and collaborative approach to the overall management of postcardiac event mental health problems will optimise cardiac patients' emotional recovery. **CT**

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A list of references is included in the online version of this article (www.cardiologytoday.com.au).

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