The 'cardiac blues': A guide for health professionals

What is the cardiac blues?

Each year, around 54,000 Australians have a heart attack and many undergo coronary artery surgery [1]. Up to three quarters of survivors experience the 'cardiac blues' during convalescence [2], a phenomenon which is characterised by a range of distressing and often debilitating emotional, behavioural and cognitive changes. Typical emotions include anxiety, fear and worry; anger, irritation and frustration; distress, sadness and depression; guilt and denial. These emotions are accompanied by behavioural symptoms such as tearfulness, social withdrawal, tiredness, sleep disturbance and changes in sex drive and eating patterns, as well cognitive symptoms such as confusion, forgetfulness, inability to concentrate, impaired decision making, and frequent nightmares [3-7]. Typically, people go on an emotional roller-coaster, experiencing many or all of these symptoms.

Patients want to know about the cardiac blues?

Patients themselves indicate that they need and want to be told about the cardiac blues. In a study of 160 Australian cardiac patients, four out of five indicated that they would like to have received information about the emotional aspects of their recovery, preferably from a health professional and preferably close to the time of the cardiac event [2]. Given that early education regarding symptom management enhances patient recovery and improves patient outcomes[8, 9], it is important that patients are informed about what to expect in terms of their likely emotional recovery after an acute cardiac event.[2]

Is it normal to go through the cardiac blues?

While the 'cardiac blues' is common, it tends to be transient. For most patients, symptoms tend to resolve in the first two to three months after the event.[2, 3, 5-7, 10-15] For this reason, while uncomfortable and distressing, the cardiac blues can be considered a part of the normal adjustment process and can be likened to a grief or bereavement response.

Is the cardiac blues the same as depression?

Depression is different to the cardiac blues. The two key features of depression are profound feelings of sadness most of the time, and lack of interest or enjoyment in most activities, including activities enjoyed prior to the heart event. Some people have thoughts of suicide or self-harm.

Around one in five patients experience severe depression in the year after their acute event [10, 12, 16-18], a prevalence that is four times higher than in the general population. [5, 19-22]

Post-event depression puts cardiac patients at a distinct disadvantage in terms of low engagement in activities that promote health and wellbeing, such as healthy eating [23, 24], physical activity[23-25], medication adherence [25, 26], and cardiac rehabilitation attendance [25, 27, 28 29, 30 25, 29], and high engagement in risk behaviours such as smoking [23, 25, 31 32].

Not surprisingly then, depressed cardiac patients are at increased risk of hospital readmission [33], recurrent cardiac events [27, 34-36], and premature mortality [37 38] compared with their non-depressed counterparts.

How do I differentiate between the cardiac blues and depression?

It is difficult to differentiate between the cardiac blues and depression as the symptoms of the presenting symptoms appear very similar. Two key factors are crucial in determining whether a patient has the cardiac blues or is depressed. The first is the trajectory of symptoms and the second is the presence of risk factors, or 'red flags'.

a) **Trajectories of symptoms.** In a 'normal' cardiac blues trajectory, patients' emotional wellbeing should improve over time, as they come to terms with the acute cardiac event and begin to recover physically[5, 10]. Typically symptoms of the cardiac blues should start to improve by 2-3 months after the cardiac event. If symptoms persist or worsen, it is likely that the patient is developing depression.

b) **Red flags.** The risk of major depression is highest amongst patients with a mental health history [39-41], those who live alone or are socially isolated,[10, 39, 42, 43] those who are economically disadvantaged,[39, 43, 44] smokers,[10, 23, 39] and those with more severe disease[10, 39] or comorbid conditions such as diabetes.[16, 39, 42, 45] These factors can be considered 'red flags' to alert health professionals to the patient's increased depression risk.

Red flags for increased depression risk:
• History of anxiety or depression
• Living alone or socially isolated
• Younger age (under 55 years)
• Regular use of cigarettes, drugs or alcohol
• Recent bereavement, job loss or financial stress
• Diabetes or other comorbid conditions

What is my role in supporting patients' emotional recovery?

Supporting patients' emotional recovery after hospital discharge is an important component of overall cardiac rehabilitation (CR) [46, 47].

- For patients on a normal bereavement trajectory, and with none or few of the 'red flags', the cardiac blues should be normalised and the patient reassured that the symptoms are likely to resolve.
- For those whose symptoms are persisting or worsening, particularly in the presence of two or more 'red flags', referral for comprehensive depression management is advised. You can refer patients to the ACHH Cardiac Counselling Clinic for support.

Differentiating the cardiac blues and depression

	Cardiac Blues	Depression
Time period	Transient	Persistent
Trajectory	Improving	Worsening
Red flags	Absent	Present
Incidence	75%	20%
Prognosis	Good	Poor

Depression screening

The latest Australian guidelines indicate that screening for depression in patients who have had a cardiac event is an important component of follow-up care [48]. The guidelines, released in 2013, recommend routine depression assessments "at first presentation and again at the next follow-up appointment", with repeat assessments recommended on a yearly basis [48]. The guidelines specifically recommend a screen 2-3 months after the cardiac event [48]. The recommended screening tool is the Patient Health Questionnaire (PHQ9).

Knowing when to refer a patient for comprehensive depression screening and management

If you are concerned that a patient might have developed anxiety or depression, you can refer them to the Cardiac Counselling Clinic directly via the ACHH website. You can also encourage your patients to make an appointment with their doctor to obtain a mental health plan to access counselling. There are many effective treatments for depression which will improve patients' mood and quality of life.

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