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Depression in Cardiovascular Disease: From Awareness to Action

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In this issue of *Trends in Cardiovascular Medicine*, Drs. Bradley and Rumsfeld¹ provide a clear, contemporary review of the phenomenology, assessment, and treatment of depression in patients with heart disease. Their article adds to a large volume of such reviews written over the last 15 years. It should be clear at this point that depression in cardiac patients is common, underrecognized, persistent, and deadly. Furthermore, it is also increasingly clear that psychotherapy and antidepressant medications are well-tolerated and generally effective in treating depression in this population. The question is: now what?

Certainly increasing recognition of the prevalence and toxic effects of depression is a start. In addition to reviews such as this one, the American Heart Association has taken a lead role in highlighting the issue of depression in cardiac patients, first in 2008 by recommending systematic screening of all cardiac patients,² and then in 2014 by declaring depression a risk factor for poor prognosis following an acute coronary syndrome.³ However, despite being a good first step, depression screening alone is at best ineffective and at worst associated with increased patient distress and greater clinician burden.^{4,5}

Furthermore, asking front-line clinicians to assess patients for depression, initiate treatment, and monitor and adjust such treatment may feel well beyond the scope of practice for many cardiologists. This is especially true given that most cases of major depression—in cardiac and non-cardiac patients—often require long trials and multiple adjustments of treatment before patients have substantial symptomatic and functional relief.⁶ Furthermore, there is evidence that patients with significant medical conditions may be more refractory to initial depression treatment.⁷ Therefore, it is critical to have clinicians who are both aware of the range of depression treatment options and devoted to making multiple treatment adjustments when needed.

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There are several ways to incorporate depression treatment into outpatient cardiology care. Some settings are fortunate to have a psychiatrist or other mental health clinician who serves as a consultant or liaison regarding psychiatric issues. In these cases, cardiologists can refer patients who have clinical symptoms (or above-threshold scores on screening items) for further evaluation by a mental health specialist. By personally knowing these clinicians, cardiologists can feel confident that the psychiatric condition will be managed well—and can convey such confidence to patients. These models may work even better when the mental health clinician is co-located in the cardiology setting,^{8,9} such that patients can have visits concordant with their cardiology appointments and view their depression treatment as part of their overall cardiac care. However, to be successful, this model requires one or several clinicians with an ability to both take on new cases and see existing cases in follow-up, which may not be viable in all settings.

A second and perhaps even more promising approach for managing depression in cardiac patients is the use of integrated care models. These team-based models typically utilize a non-physician care manager to assess and monitor depression, provide education to patients, obtain ongoing depression recommendations from the team psychiatrist, and convey the recommendations (e.g., medication name and dose) to the primary medical or cardiac provider. In these models, the primary medical provider often prescribes the depression treatment to ensure that these prescriptions are integrated with patients' other pharmacologic treatments.¹⁰ Integrated care models have been tested in a variety of heart disease cohorts, and have been found to be effective in improving clinical outcomes and highly cost-effective.^{11–13} Newer, blended care management models have nurse care managers monitor depression symptoms, cardiac health behaviors, and cardiac parameters (weight/blood pressure) in a more holistic integrated care approach, and a trial of this pragmatic program was linked to improvements in objective medical outcomes, including blood pressure and glycemic control.¹⁴

Implementation of these care management programs is certainly not straightforward, and requires initial financial resources, training of care managers, and an organized approach to population health management. However, integrated 'collaborative care' models have been increasingly implemented across the country (e.g., in over 3 million patients in California and in 75 primary care clinics in Minnesota¹⁵), and implementation guides have been created to facilitate the process.¹⁶ Such models are in keeping with the trends in medicine toward integration of care, the use of Patient-Centered Medical Homes, and the development of Accountable Care Organizations.

Finally, depression care in patients with heart disease may be enhanced through the use of technology. Telehealth programs, whereby patients interact with mental health clinicians through video conferencing sessions, may allow for the provision of psychiatric care to patients in a wider range of settings, including community health centers and rural areas. Though several logistic and administrative hurdles remain prior to widespread implementation,¹⁷ telehealth programs may expand the reach of psychiatric expertise to allow the delivery of high-quality care to patients with both depression and cardiovascular disease. Psychotherapeutic interventions delivered remotely,¹⁸ such as computerized

cognitive behavioral therapy, have also been developed and are likely to be increasingly used given the potential for greater economy of scale with these treatments.

In sum, reviews like the one authored by Bradley and Rumsfeld¹ are important to the field, and yet are only the start. Despite increased recognition that depression is independently and prospectively linked to cardiac health, most depressed patients in cardiac settings are not yet getting the comprehensive and longitudinal care required to effectively treat this complex condition, and asking front-line cardiac clinicians to simply take on the management of depression is unlikely to be an effective approach. However, with continued highlighting of this issue, evolution of care management and technological approaches to optimize resource use, and the focus of healthcare reform on integration of mental health and medical care, cardiac patients with depression will be more likely to get the care they need.

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