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Depression in cardiac patients: an evidence base for selection of brief screening instruments by nursing staff.

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Citation
In a recent editorial in the EJCN entitled “Depression in cardiac patients: what can nurses do about it?” [1], Thompson and Froelicher [1] emphasised the importance of depression in cardiac patients and the importance of nurses’ roles in caring for these patients. We agree with many of the important points made in this editorial, and we would like to expand further on some of the points made by the authors, with particular reference to research conducted on rapid methods of assessing risk of depression in acute cardiac settings. Furthermore, it is also important to note the limitations of screening without a formal management protocol.

Depression is more common in medical patients than in the general population. It has a prevalence of between 15% and 41% in cardiac patients [2]. Depression is not only linked to poorer subjective health and reduced quality of life but is also associated with reduced adherence to medication, reduced participation and increased dropout rates in rehabilitation programmes and reduced adherence to secondary prevention lifestyle changes [2–5]. Both health service use and costs are higher in depressed patients by as much as 40% [2].

The identification of cardiac patients with co-morbid depressive symptoms is therefore crucial for healthcare professionals. The reasons for increased risk in depressed cardiac patients are not fully understood, but proposed mechanisms may be physiological (increased platelet activity, decreased heart rate variability, etc.) or behavioural (failure to cease smoking, reduced adherence to cardiovascular medications or lifestyle changes [6]). Routine assessment of depression in cardiac patients is therefore important for several reasons: (i) we can treat depression successfully and improve patient quality of life, (ii) there may be potential to reduce the higher cardiovascular risk and associated healthcare costs of depressed patients and (iii) it is important to identify and intervene with those who are less likely to adhere to recommendations from health professionals, such as smoking cessation or attendance at cardiac rehabilitation.

As stated in the previous editorial, a range of screening instruments are available to assess significant depressive symptoms. However, both diagnostic interviews and lengthy screening instruments may preclude assessment of depression in acute settings, as mental health professionals may be unavailable and patients may be too ill or distressed to complete lengthy questionnaires (e.g. 21-item Beck Depression Inventory [7]). These methods can also be very costly. The key to developing routine assessment may therefore be the use of briefer depression scales with proven validity.

We conducted research assessing the predictive validity of two such 7-item scales (the Beck Depression Inventory-Fast Screen [8], and the Hospital Anxiety and Depression Scale Depression subscale [9]) [10,11]. In a study of 38 hospitals admitting cardiac patients in Ireland, over 500 patients with confirmed acute coronary syndrome (ACS) completed one of the above scales while in intensive/coronary care and were reassessed one year later.

For brief scales to be useful in acute settings, they must be acceptable to both staff and patients. In this research nursing staff in intensive/coronary care offered the scales to those they deemed capable of completing the self-assessment (i.e. exclusion criteria were cognitive impairment, illiteracy or patient deemed too distressed) 2–5 days post-admission for ACS. Scales were offered to 99% of patients deemed appropriate and 73% of these patients completed a scale [10].

Findings showed that those who were depressed according to these brief scales (i.e. scored above an accepted cut-off point) had a 3- to 4-fold higher risk of mortality, were less likely to cease smoking, were less likely to attend cardiac rehabilitation, visited a general practitioner more often, were less likely to return to work and were less likely to feel physically better at one year [10,11].

These results replicated the findings of studies which used more sophisticated techniques, such as lengthy questionnaires or diagnostic interviews. Given that the scales were also acceptable to both staff and patients alike, these results highlight both the validity and feasibility of using brief scales to identify those at risk of poorer outcomes and sub-optimal health behaviours in cardiac patients. This methodology can
be adopted by nurses as the first step in identifying those with significant depressive symptoms, allowing subsequent interventions to be targeted more efficiently.

The choice of depression assessment tools for CHD patients has been extensively reviewed, and the interested reader is encouraged to consult a recent update [12]. Coronary care staff also have the option of asking two simple questions, with a negative response to either effectively ruling out depression: “During the past month, have you often been bothered by feeling down, depressed, or hopeless?” and “During the past month, have you often been bothered by little interest or pleasure in doing things?” [13]. However, there is currently no research to demonstrate that these questions identify those at increased cardiovascular risk including suboptimal secondary prevention behaviour profiles.

However, the selection of assessment tools remains only part of the challenge. One systematic review has investigated the effect of feedback from psychiatric questionnaires on the management and outcome psychiatric disorders in non-psychiatric settings [14]. The authors concluded that there was little evidence to support the use of such screening scales in order to improve patient outcomes, as the feedback of scores for patients who completed scales did not increase the overall rate of recognition of anxiety or depression. Worryingly, this negative result was seen regardless of the severity of scale scores.

Thus, without a formal management protocol in place, there may be little benefit from systematically assessing patients on depression scales. Successful depression management programmes have improved the detection and care of patients [15], and the more successful of these programmes have incorporated systematic screening of depression [16]. Systematic management programmes need to be incorporated into the treatment of depression in acute settings. The composition of programmes which may prove especially beneficial has recently been outlined [17].

To conclude, depression is a significant problem in cardiac patients, affecting a host of secondary prevention outcomes and behaviours. Research has demonstrated the efficacy of using brief depression scales to assess increased risk in acute cardiac patients. However, without a formal management protocol in place, there is likely to be little benefit from the adoption of such a screening process.

References