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Psychosocial assessment and intervention – are we doing enough?

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Much of the focus of preventive cardiology has been – and continues to be - on issues such as physical activity, weight reduction, dietary change, drug therapy. Whilst this is important and laudable comparatively scant attention has been focused on psychosocial aspects such as depression, anxiety and social isolation. Assessing and intervening to alleviate these issues impacts not only directly but indirectly on how well people can manage to increase physical activity, reduce weight and adhere to diets and medications. Increasingly, psychosocial issues are important in terms of health outcomes and ill-health causes, but comparatively under-researched and poorly addressed in cardiac rehabilitation, even though they are vitally important for patients, partners, families and carers [1-5]. If these issues remain unattended they may exacerbate health outcomes, inhibit resumption of normal activities (work, leisure, sexual, social), attenuate healthcare costs and diminish quality of life and well-being [2-4].

As a recent review [6] has pointed out, cardiovascular disease (CVD) and depression are currently the two most common causes of disability in high income countries and are expected to become so world-wide by 2030. They incur substantial rising medical care costs, healthcare utilization, lost productivity and, perhaps more importantly for patients and their families, a significant diminution in quality of life

Anxiety and social isolation, for instance, are also commonly found among people with CVD and are associated with depression, both as a cause and sequela. It is now well recognised that loneliness and social isolation themselves are significant risk factors for CVD [7,8]. Indeed, the importance of psychosocial risk factors in the cardiovascular field is now starting to be recognised [1-6,9] and CVD prevention position papers [3], guidelines [10] and editorials [11], acknowledge the importance of psychosocial risk factors such as depression, anxiety and lack of social support contributing to the risk of developing CVD and to a worse prognosis, as well as acting as barriers to treatment adherence and efforts to improve lifestyle and health in patients and populations. The guidelines [10] go on to recommend consideration of psychosocial risk factor assessment using clinical interview or standardized questionnaires. So why then are we so reluctant or unconvinced about routinely assessing and, where necessary, intervening in preventive cardiology? A number of factors may be evident. These include (depending on what the issue is):

- Referral: personnel; systems

- Resources: hospital/community/home; professional/lay; personal/telephone/web; individual/group; manuals/apps/avatars
- Personnel: professional (hospital/community mental health nurse; clinical psychologist; social worker; psychiatrist); lay (carer/partner/family; friend)
- Location: home; community centre; hospital
- Surveillance: monitoring; continuity of care; follow-up

A routine structured clinical diagnostic interview is often impractical: it is time-consuming, requires specialist medical input and is costly. Therefore, a more realistic alternative is to use a valid and reliable self-report screening instrument that can be administered and scored in routine clinical practice, such as in the cardiac rehabilitation program, out-patient clinic or patient's home. Many of these scales are free or cheap to use and easy and quick to complete and score. For example, in regards to depression, guidance exists in the US [11] and Australia [12] on screening, referral and treatment for depression, and have advocated the use of the 2-item version of the Patient Health Questionnaire to screen for depression. The Patient Health Questionnaire (PHQ2) [13] asks patients how often they have been bothered over the previous 2 weeks by (1) little interest in or pleasure in doing things, and (2) feeling, down, depressed, or hopeless. Both questions are answered according to a four-point scale (0=not at all; 1=several days; 2=more than half the days; 3=nearly every day). A positive answer to either question (i.e., score ≥ 2) is an indication to use the full nine-item version of the Patient Health Questionnaire (PHQ-9) for further screening. In patients with high scores on the PHQ-9 [14], a more comprehensive clinical evaluation may be warranted.

However, routine screening for depression, for example, is a contentious issue, as opponents [15] argue that no trial to date has tested whether the screening and referral would improve depression outcomes for cardiac patients compared to usual care. They anticipate problems with mis-diagnosis or over-diagnosis and inappropriate labeling, adverse effects and inappropriate or unnecessary treatment as well as unjustified resource allocation.

Recommendations for screening instruments for anxiety, for example, have also been made [5], such as the Generalized Anxiety Disorder 7-item (GAD-7) scale [16]. In terms of assessing social support, the choice of measures is less clear, although the 12-item Multidimensional Scale of Perceived Social Support [17] designed to measure perceptions of

social support from three sources: family, friends and a significant other, appears useful. All of these measures are valid, reliable and sensitive in CVD populations.

In terms of psychosocial risk intervention a number of approaches are available, depending on the issue to be addressed, though it is important to remember that in many instances change will occur spontaneously. Where intervention is required, many people will respond to brief advice (5 min) using the 5As: ask, advise, assess, assist, arrange. Some may require brief behaviour counselling (15-20 min) or more specialised counselling such as motivational interviewing, mindfulness, cognitive behaviour therapy or behavioural activation. Crucial to the effectiveness of such interventions is, where possible, providing social supports, allaying fears, dispelling myths and correcting misconceptions.

There is growing, though admittedly mixed [18], evidence from large, multicentre trials [19] and systematic reviews and meta-analyses attesting to the effectiveness of such interventions in CVD patients and populations on psychosocial risk factors [13-16]. However, in many studies to date, the interventions are often complex, poorly conceptualized and described/reported on small samples and the delivery systems for the intervention are often limited. For example, some studies focus on one outcome [13] and many often report only short-term effects [16].

In order to be more confident in the findings from psychosocial interventions, which are after all complex interventions [17], there needs to be more clarity about the precise nature of the intervention, including its content, mode of delivery, timing, duration and location [18,19]. To enable evaluation, comparison and reproducibility of a psychosocial intervention, it is helpful to apply a taxonomy [20] that defines the risk factor, the target of the intervention and when and where to intervene. Studies of effectiveness should be replicated and compared before interventions are integrated into routine patient management. Only then shall we start to see psychosocial assessment and intervention take its rightful place in preventive cardiology

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