Reviewer's report

Title: The contribution of illness perception to psychological distress in heart failure patients.

Version: 2 Date: 1 July 2014

Reviewer: Matthew Macfarlane

Reviewer's report:

Thank you for the opportunity to review this fascinating manuscript by Morgan et al, which used a validated questionnaire (the IPQ-R) to determine illness perceptions in a group of 95 patients with diagnosed heart failure, and correlated scores on different domains within the IPQ-R with scores on the Hospital Anxiety and Depression Scale. They found that heart failure patients did not apportion a high proportion of their symptoms to their illness, and that they felt well-informed about the illness. They had what seemed to be accurate perceptions of their illness’ chronicity and attendant impact on their lives, while feeling that it was controllable through their own actions and through treatment. The authors also found significant correlation between caseness for depression on the HADS and illness perceptions, particularly negative emotional representations. Similarly, they found a correlation between caseness for anxiety on the HADS and illness perception scores, but no significant correlation within the subscales.

I have a number of comments regarding methodology and interpretation of the results.

Major Compulsory Revisions

1. The main interpretation I feel needs to be discussed in the paper is that high scores on the ‘negative emotional representations’ section of the IPQ-R and high scores of depression and anxiety on the HADS may in fact be measuring the same thing, thus rendering the correlation trivial. For instance, on the IPQ-R, statements in the relevant section include ‘I get very depressed thinking about my illness’, ‘having this illness makes me feel anxious’, ‘my illness makes me feel afraid’, as well as other portions of the IPQ-R which reflect feelings of hopelessness common in clinical depression such as ‘there is nothing that can help my condition’. While these don’t correlate 1:1 with statements people are asked to endorse on the HADS, it would be unusual for a depression or anxiety disorder patient not to score highly on these aspects of the IPQ-R. In general experience, those people who have major medical illnesses of all types and comorbid depression have negative views about their illness, because they have generalised negative views about themselves, others and the world – Beck’s triad. Similarly, the correlation between anxiety and a feeling of lack of control/poor confidence in measures of coping/ameliorating the condition was described by Beck decades ago. I would appreciate more discussion on this point to justify what additional information this study adds to what is a fairly
well-established set of CBT principles.

2. Similarly, the suggested implications for further treatment seem unfocused. A suggestion of cognitive behavioural therapy is welcome, but I would like some clarity about whether the suggestion is that CBT should be given whether only when diagnosable depression or anxiety is present (in which case it is already indicated regardless of illness perceptions, and illness perceptions will not doubt be addressed in the course of therapy if the therapist and client feel they are relevant), or to all patients with heart failure (a conclusion I’m not sure is borne out by the results here).

3. No mention is made of the male preponderance of the sample, which is not representative of heart failure in general: the latter has much closer to a 1:1 distribution (Ho et al. The epidemiology of heart failure: the Framingham Study. J Am Coll Cardiol. 1993;22(4 Suppl A). This needs to be discussed and counted as a limitation. The rates of depression and anxiety seen in this sample, on the other hand, appear similar to other published work (eg Rutledge et al. Depression in heart failure a meta-analytic review of prevalence, intervention effects, and associations with clinical outcomes. J Am Coll Cardiol. 2006;48(8):1527).

Minor Essential Revisions

4. Some more clarity on patient selection would be helpful, particularly in which country the three hospitals mentioned in the methods were based (I presume Ireland, but I note one author’s affiliation is from Malaysia, which may make the decision to limit the study to English language more relevant if one or more of the sites was in that country).

5. When outpatient clinics are mentioned in methodology, I presume this means cardiac outpatient clinics – this should be specified, as many people with heart failure are managed in the general hospital and a cardiac clinic-only sample may be a little less generalizable (although still a worthwhile population to study in their own right).

6. The inclusion criteria appear to be in error – heart failure is generally defined by EFs lower than 40%, rather than higher. Also, the Abbreviated Mental Test (not the Abbreviate Mental Test – a typo) is scored abnormal if the score is below 8, not above 8.

7. I note that the ‘treatment control’ subscale of the IPQ-R had poor internal reliability as per Table 2. Given that conclusions are drawn later in the paper about treatment recommendations around addressing feelings of control over treatment, this limitation should be mentioned.

Generally, this paper covers an important topic, and the area of illness perceptions in general is an area which is exciting, based on the potential for short, focused interventions to improve physical and mental health outcomes in those with physical illness. However, I feel that this paper requires significant revision to accommodate the problems inherent in trying to measure a subset of negative beliefs in the context of people who, by definition, have a large and
disabling set of negative beliefs leading to their diagnosis of an anxiety or mood disorder.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.