Reviewer's report

Title: Illness cognition as a predictor of exercise habits and participation in cardiac prevention and rehabilitation programs after acute coronary syndrome

Version: 1 Date: 1 June 2013

Reviewer: Yaakov Henkin

Reviewer's report:

The authors used questioners based on the Health Belief Model and the Common Sense Model to assess the association of illness cognition (IC) with exercising and with participation in cardiac prevention and rehabilitation programs (CPRP) among 420 Jewish and Arab patients hospitalized with acute coronary syndrome. They found that “perceived susceptibility” was independently associated with an active lifestyle 6 months after the acute event, while “perceived benefits” of regular exercise and “a sense of personal control” were independently associated with participation in CPRP. However, none of the IC variables assessed could explain the large differences in health promoting behaviors between the Jewish and Arab patients. They conclude that other explanatory pathways should be explored to explain these differences.

This is an important study that explores the contribution of specific attitudes and perceptions of illness to an important public health problem. Despite the well documented benefit of CPRP in the attenuation of recurrent coronary events, the participation of patients in such programs following hospitalization for acute coronary events is disappointingly low. This gap is even more prominent in specific minority ethnic sub-groups, women and immigrants. Understanding the barriers to participation in CPRP might provide tools to cope with this problem.

The study question is well-defined, and the methods employed appear to be appropriate and well described. The discussion and conclusions appear to be well balanced and adequately supported by the data, although some caution should be used in over-interpretation of the results (e.g. page 12, 3rd paragraph: “It seems that cardiac patients who conceive themselves to be highly predisposed to additional cardiac events refrain from exercising on a regular basis due to their misconception that this behavior might harm their health and the manuscript is written well”. The manuscript is written well.

Comments:

Major:

1. Were all Arab patients interviewed in Arabic? I assume some Jewish immigrants were excluded due to language problems; this should be noted in the results.

2. The sociodemographic and clinical characteristics of patients excluded from the study should be compared to the study participants.
3. The baseline characteristics of the participants (demographic, clinical etc.) should be included in the results. It is not sufficient to provide a reference to a previous paper.

4. The level of activity at six months, both independent activity as well as participation in CPRP, should be clearly noted and compared between the groups. If available, the number of weeks of participation in PCRP (rather than just enrollment to a program) and the type of employment (as a representation of the non-exercise activity) should be noted. If not available, these should be noted as limitations to the study.

Discretionary Revisions

5. It has previously shown that Jewish immigrants have a lower rate of participation in CPRP than veteran Israelis (Gendler et al. Harefuah 2012, 151:511-7, 558, 557). Did you evaluate the differences in IC among Jewish immigrants and veterans?

6. Do you have data on the distance of residence from the nearest rehabilitation center? This might be different between Jews and Arabs, and might influence participation in CPRP.

7. A sample-size calculation for the study might be appropriate.

Minor Essential Revisions:

1. Some of the references (e.g. #1, #4) appear to be unrelated to the text.
2. Reference #11 is incomplete
3. The sentence “Based on the health belief model…..acute coronary syndrome” in the abstract (lines 8-11) is flawed grammatically

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests