B2.1: Longitudinal changes in psychologically distressed post myocardial infarction patients and spouses in the Home Automatic External Defibrillator Trial (HAT)

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Abstract:
Introduction: Survival from sudden cardiac arrest (SCA) increases when patients are defibrillated and converted to sinus rhythm within 10 minutes. Automatic external defibrillators (AEDs) are now available for home use. Little is known about the long term psychological response of patients or spouses to CPR or AED training. We compare the long term psychosocial outcomes of CPR and CPR/AED training on depression and anxiety of post MI patients and their spouses.

Method(s): Participants in the Home Automatic External Defibrillator Trial (HAT) at 30 sites who were randomly assigned to CPR training (n=219) or CPR training plus AEDs (n=241) completed depression (BDI) and anxiety (STAI) scales at baseline, 1 month, 1 year and 2 years. The frequency of depression and anxiety were examined and those who were psychologically distressed were identified. Changes in depression and anxiety were examined with linear mixed models in psychologically distressed individuals.

Results: At study entry, 25% of the patients and 15% of the spouses were depressed and 21% of the patients and 19% of the spouses were anxious. Psychological distress, indicated by depression or anxiety of the spouse or the patient, occurred in 191 couples. Among psychologically distressed patients, depression and anxiety decreased over time independent of intervention group. The reduction in anxiety in the male patients was greater than in the female patients (p = .012, 95% CI .002, .018). Among psychologically distressed spouses, depression decreased over time independent of intervention. Changes in spouse anxiety depended on intervention groups (p = .012, 95% CI, .001, .012); anxiety decreased significantly in the CPR and remained high in the CPR/AED group.

Discussion & Conclusions: Home AEDs did not influence changes in patients’ depression or anxiety or spouses' depression when compared with CPR training. Spouses in the AED group did not experience decreases in anxiety parallel to those of the CPR group. Interventions targeted at
spouses who are psychologically distressed may be indicated when they receive AED training. Increased anxiety among spouses trained to use AEDs may decrease effective implementation of this life-saving technology.

Abstract History:
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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No, I (or a member of my immediate family) have not received something of value* from or own stock (or stock options) in a commercial company or institution related directly or indirectly to the subject of my presentation.

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