Telephone-Based Collaborative Care in Early Detection and Treatment of Depression and Anxiety in Post-Coronary Artery Bypass Graft Patients

Appraised by: Kimberly Bauer and Stephanie Morris Sanford College of Nursing

Clinical Question:
In post-operative coronary artery bypass graft patients (CABG), does telephone-based collaborative care lead to earlier identification and treatment of depression and anxiety and improve overall patient recovery outcomes?

Articles:


Synthesis of Conclusions:

The purpose of the study by Hartford, Wong, and Zakaria (2002) was “to determine the effectiveness of an information and support telephone intervention for reducing anxiety in patients who have undergone coronary artery bypass graft surgery and their partners” (p.199). This was a level II randomized controlled trial conducted at a teaching hospital in Ontario, Canada, and consisted of 131 patient-partner dyads. The authors found that by the second evaluation, both groups had lower anxiety scores, but the treatment group had significantly higher numbers of patients in the minimal anxiety category and a lower number in the greater than minimal anxiety category as opposed to the control group. The telephone intervention had a prolonged effect on patient’s partners as shown by lower anxiety scores at the second and third evaluations of treatment. The authors found that “telephone support by experienced nurses is a viable option to extend support” (p. 205).

Hartford (2005) conducted a level VI qualitative analysis of the randomized controlled trial in the previous study. Out of the 63 patient-partner dyads in the treatment group, ten
interviews were selected to reflect the diversity of a group and to achieve saturation. Three major themes were found among the concerns discussed: physical, affective, and lifestyle. The authors concluded “the application of telecommunications technology in the delivery of nursing services, in which a specialized nurse establishes a relationship with patients over time, enabled these patients to learn how to care for themselves when an issue arose postoperatively. It also allowed the nurse to ‘guide’ patients in areas of health promotion” (p. 466).

The level II randomized control trial by Rollman et al. (2009) involved 302 post-CABG patients with depression who were divided into treatment and standard care groups along with 151 randomly sampled post-CABG patients without depression. It was found that “compared with usual care, telephone-delivered collaborative care for post-CABG depression can improve HRQL [mental health-related quality of life], physical functioning, and mood symptoms at eight-month follow up.” Half of the intervention patients reported a 50% improvement in mood symptoms vs. 29% in the usual care group. The authors suggested further research into the cost-effectiveness of this intervention.

Each study had a sufficient number of participants enrolled in the study. Each study found similar conclusions in that they all recommend using telephone-based collaborative care for post-CABG patients.

**Bottom Line:**

The evidence suggests improved patient outcomes and decreased rates of depression and anxiety with the use of telephone-based collaborative care post-coronary artery bypass graft surgery.

**Implications for Nursing Practice:**

Telephone-delivered collaborative care can be used with patients who are unwilling or unable to be seen by their healthcare provider for follow-up, or as a means of continued intervention with this high-risk group. It has been shown to decrease rates of depression and anxiety, as well as improve overall patient outcomes. It is something that can be implemented and monitored for follow-up results.