

Abstract

SG-ANZICS1170

Preoperative multimedia patient education on patient and family satisfaction levels in the intensive care unit after elective cardiac surgery: a randomized controlled trial

¹Veronica Ka Wai Lai, ¹Anna Lee, ¹Patricia Leung, ¹Wai-Tat Wong, ¹Ka Man Ho, ¹Charles David Gomersall, ²Malcolm John Underwood, ¹Gavin Matthew Joynt

¹Department of Anaesthesia and Intensive Care, The Chinese University of Hong Kong, Hong Kong

²Division of Cardiothoracic Surgery, Department of Surgery, The Chinese University of Hong Kong, Hong Kong

Objectives:

Preoperative multimedia patient education may help meet information needs of patients and their family members, and lower their psychological distress levels. The primary objective of this study was to determine the effect of a preoperative multimedia patient education intervention on patient and family satisfaction levels in the intensive care unit (ICU) after elective cardiac surgery. A secondary objective was to determine if patient's postoperative anxiety and depression levels decreased after the intervention.

Methods:

In this two-group, parallel, superiority, blinded randomized controlled trial, 100 patients undergoing elective coronary artery bypass surgery were randomized into either a control (standard care) or intervention (standard care + educational video and ICU tour) group. We measured satisfaction scores with a 24-item questionnaire (0=low satisfaction to 100=high satisfaction) in both patients and family on the third day after surgery. Patient's anxiety and depression levels were measured using the Hospital Anxiety and Depression Scale (range 0 to 21) before and at one week after surgery. Intention-to-treat analysis, student's t-test and generalized estimating equations were used.

Results:

Of the 100 patients, 94 (46 control and 48 intervention) completed all questionnaires. The intervention group had higher overall patient satisfaction levels (mean difference (MD) 6.6, 95% CI: 0.3 to 12.9, $P=0.04$) and family satisfaction levels (MD 10.0, 95% CI: 3.8 to 16.3, ($P<0.01$)) than controls. There was a weak group*time effect ($P=0.06$); reduction in anxiety scores was larger in the intervention than control group (MD -1.7, 95% CI: -3.5 to 0.0). However, there was no group*time effect for depression levels ($P=0.53$); decrease in depression scores between groups was minimal (MD -0.6, 95% CI: -2.3 to 1.2).

Conclusions:

Preoperative multimedia patient education lead to higher patient and family ICU satisfaction levels, and may decrease patient's anxiety but not depression levels.