Service Priorities and Programmes

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Initiation of a nurse-empowered acute pain service (APS) to improve patient outcomes on immediate postoperative day

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Introduction

Many patients experience unacceptable pain on the day of operation. Beauregard, Pomp & Choiniere (1998) found that 40% of patients underwent day surgery reported moderate to severe pain during the first 24 hours. Apfelbaum et al. (2003) also found that 58% of his study sample reported severe to extreme pain on the operative day. In our hospital, with restrain of resources, the pain doctor can only afford to have pain round once every day in the morning. However, quite a number of postoperative patients (40%) complained of severe pain during the immediate postoperative period before the pain doctor had the chance to see them during the anaesthetist-led pain round on the following day. One potential solution to tackle this problem is the introduction of nurse-empowered APS to review all new APS cases on the same day soon after patients are discharged from the post-anaesthetic care unit. Standard protocol for assessment of pain and adjustment of patient-controlled analgesia by nurses was established and agreed by pain specialist. We believe that nurse-empowered APS could provide prompt management of various acute pain problems, serve as a complement to anaesthetist-led pain round, thus improving the outcomes of APS.

Objectives

1. To improve patient's pain control 2. To increase patient's satisfaction

Methodology

As nurse-empowered APS was launched in mid-September 2013. Pre-intervention data (from July 2013 to mid-September 2013) and post-intervention data (from mid-September 2013 to end of November 2013) were collected for post-operative surgical patients undergoing major surgeries. Two sets of data were statistically compared by Chi-Square test and two-sample t-test. A p-value of less than 0.05 was considered as statistically significant.

Result

48 patients (pre-intervention group) and 44 patients (post-intervention group) were included. It showed that nurse-empowered APS 1) decreased % of patients with severe dynamic pain from 40% to 14% (p-value < 0.05) 2) increased patient satisfaction on pain management for their immidiate postoperative day (pre: 54.2% vs post: 84.1% p value = 0.003) 3) saved anesthetists' time (around 4000 minutes) and consequent labour cost (around HKD$16,800 to $66,800 per year) Conclusion Nurse-empowered APS is a cost-effective service. The initial results show that it improves patients' pain control and satisfaction.