

## **The effects of a standardized preoperative education on the self-care knowledge, self-care performance, and physical recovery of stomach cancer patients who underwent gastrectomy**

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**BACKGROUND:** In Korea, stomach cancer is the second most common cancer, and with recent advances in diagnostic technology and surgical techniques, its 5-year survival rate has increased by up to 24.9%. Therefore, active nursing intervention is important for enhancing the rapid recovery and quality of life of patients after surgery. **HYPOTHESIS:** The experimental group received a standardized preoperative education program. It will be improved more than the control group on the self-care knowledge, self-care performance, satisfaction and physical recovery of stomach cancer patients who underwent gastrectomy. **METHODS:** This study was composed of two stages. First stage was methodological study to develop a standardized preoperative education program. Second stage was nonequivalent control group non-synchronized design to validate the effect of developed program. A standardized preoperative education was applied to the experimental group that included 31 patients, and a conventional leaflet was applied to the control group that included 32 patients from May to August, 2015. A pre-survey of both groups about self-care knowledge was conducted. The experimental group received individual tutoring for 20 minutes, using a tablet PC Power Point presentation and a mock-up, and each individual in this group was then also given an educational brochure. For both groups, the pain level associated with physical recovery, the incidence of pulmonary complications, and the degree of recovery of bowel movement were investigated from medical records. At 6 days after surgery, a post-survey about self-care knowledge, self-care performance, and patient satisfaction were conducted in both groups. **RESULTS:** There was significant difference and interaction between group, time, group and time in self-care knowledge ( $P \leq .001$ ). There was also significant difference in self-care performance ( $P \leq .001$ ). Although there was significant difference in pain levels associated with physical recovery after surgery between group, time ( $P \leq .001$ ), there was no interaction between group and time ( $P = .917$ ). There was no significant difference in the highest body temperature up to 48 hours after surgery ( $P = .192$ ), the presence or absence of atelectasis ( $P = .213$ ) associated with pulmonary complications, the time of the first expelling of gas ( $P = .299$ ), the presence or absence of ileus ( $P = .719$ ) associated with the recovery of bowel movement. There was significant difference in patient satisfaction ( $P \leq .001$ ). The preoperative education program developed in this study was found to increase self-care knowledge, self-care performance, and satisfaction after surgery, and to be effective particularly in reducing pain levels during physical recovery. It can be used as a nursing intervention for patients undergoing stomach cancer surgery in clinical practice.