

ENHANCING NURSES' CLINICAL PERFORMANCE IN PREVENTING POSTOPERATIVE PULMONARY COMPLICATIONS FOLLOWING LIVER RESECTION

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Background : The most effective method for preventing postoperative pulmonary complications(PPCs) after liver resection is the use of an incentive spiromete(IS). However, nurses receive limited education on IS usage, and assessing patients' IS usage remains challenging. This study examines the impact of education and monitoring activities on improving general ward nurses' clinical performance in preventing PPCs.

Methods : This quasi-experimental study evaluated changes in nurses' understanding of volume-oriented IS(VIS) and their CP in preventing PPCs in hepatectomy patients. Activities included VIS training, creating a self-recording sheet for patients' IS exercises, and standardizing records. Pre- and post-activity self-assessments measured nurses' understanding of VIS and their clinical performance. Data were analyzed using an independent sample t-test.

Results : Nurses' understanding of VIS improved significantly in the post-survey (4.63 ± 0.55) compared to the pre-survey (4.15 ± 0.74) ($t = -2.90$, $p = .005$). Similarly, clinical performance scores increased significantly in the post-survey (22.44 ± 2.51) compared to the pre-survey (20.33 ± 2.51) ($t = -3.378$, $p = .001$).

Conclusions : This study showed that nurses' understanding of VIS and their clinical performance improved through these activities. Further studies should explore whether these improvements lead to clinically significant outcomes, such as reduced PPCs incidence.

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