Abstract
Introduction: Pulmonary complications are the largest and serious post-operative complications of thorax and abdomen. Patients’ post-operative experience is directly linked to the pre-operative preparations. Objective of the study was to evaluate the effect of pre-operative teaching of breathing exercise in terms of knowledge and practice of patients undergoing elective abdominal surgery and on the incidence of post-operative pulmonary complications among patients undergoing elective abdominal surgery. Methods: A quantitative evaluative approach with a preexperimental one group pre-test – post-test design was adopted for the study. Fifty subjects were selected by using purposive sampling technique. Pre-test was checked by using structured knowledge questionnaire on breathing exercise and observational checklist on breathing practice. Post-test knowledge and practice assessment were done on the third post-operative day and the assessment of Post-Operative Pulmonary Complications (PPCs) was done on the fifth post-operative day. Results: The mean pre-test knowledge score was 7.48 ±2.35 and the mean post-test knowledge score was 22 ±3.51. The pre-test practice level of majority of the patients was inadequate (46%) whereas the post-test practice level was adequate for majority of patients (64%). The findings of the study revealed that there was significant improvement in knowledge (t=15.66, P<0.05) and practice (t=15.08, P<0.05) scores. The total incidence of pulmonary complications throughout the study period was only four percent. Conclusion: It is concluded that the nursing personnel need to take initiative in directing, teaching and educating patients about breathing exercise prior to the surgery and instructional demonstration is a good tool for it, by which we can prevent the post-operative pulmonary complications among patients undergoing elective abdominal surgery.

Key words: Instructional demonstration; breathing exercise; patients undergoing elective abdominal surgery; postoperative pulmonary complications