

Thesis Title Effect of Chest Strap on Lung Expansion and
Satisfaction in Postoperative Open Heart Patient

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ABSTRACT

Respiratory complications following open - heart surgery are commonly found and the important of decreasing this problem is effectly managed by chest physiotherapy. The chest physioterapy is consisted of effective deep breathing and coughing but these maneuvers are difficult to do because of the post operative pain. Therefore chest strap will solved this problem by support the wound while patients have underwent chest physiotherapy. The researcher is interested in studying the effect of chest strap on lung expansion and satisfaction in postoperative open heart patient. An experimental research design was implemented. The sample group consisted of 20 open-heart patients who had a median

sternotomy incision and had cared in the cardiac intensive care unit at Vajira Hospital. The sample of this study was experimented by used chest strap and was not used the chest strap. Data were analysed by pair t-test. The results were as followed.

1. Patient's lung expansion:

1.1 The peak expiratory flow rate while using chest strap was significantly higher than that was not use. ($p < .01$)

1.2 The circumference of the chest at the xyphoid process while using chest strap was significantly less than that was not use. ($p < .01$)

1.3 The circumference of the chest at 12th rib while using chest strap was not significantly less than that was not use. ($p > .01$)

2. Patient's satisfaction:

Patient's satisfaction while using chest strap was significantly higher than that was not use. ($p < .01$)

Form this research we found that the post open-heart patients were satisfied with the used of chest strap during chest physiotherapy and the chest strap had no effect in decreased lung expansion. The researcher suggesets from this study is that we should use chest strap in post open-heart patients at the time of chest physiotherapy but we should not strap the chest wall all the time.