

**THE COMBINATION OF CHEST PHYSIOTHERAPY AND PURSED
LIPS BREATHING THERAPY ON OXYGEN SATURATION IN
PNEUMONIA PATIENTS AT KARSA HUSADA REGIONAL HOSPITAL
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ABSTRACT

The combination of chest physiotherapy and *Pursed Lips Breathing* is a non-pharmacological intervention aimed at increasing airway pressure and improving gas exchange efficiency. However, the application of this combined intervention is still limited in clinical practice. To determine the effect of combining chest physiotherapy and *Pursed Lips Breathing* on improving oxygen saturation in pneumonia patients. This study used a quasi-experimental design with a pretest-posttest control group approach. A total of 32 respondents were selected using purposive sampling and divided into two groups: the control group (receiving chest physiotherapy only) and the intervention group (receiving a combination of chest physiotherapy and *Pursed Lips Breathing*), with 16 respondents in each group. Data were analyzed using the *Wilcoxon* and *Mann-Whitney* tests. A significant increase in oxygen saturation was observed before and after the intervention in both the control and intervention groups ($p = 0.000$). However, the *Mann-Whitney* test revealed a significant difference between the two groups after the intervention ($p = 0.001$), with the intervention group showing a greater improvement. The combination of chest physiotherapy and *Pursed Lips Breathing* has a significant effect on oxygen saturation in pneumonia patients. This combined therapy is recommended as a supportive non-pharmacological intervention to improve the oxygenation status of pneumonia patients.

Keywords: Pneumonia, Chest Physiotherapy, *Pursed Lips Breathing*, Oxygen Saturation