

# THE RELATIONSHIP BETWEEN UNDERLYING DISEASE OF RESPIRATORY FAILURE ON PNEUMONIA WITH THE VENTILATOR TREATMENT OUTCOME IN INTENSIVE CARE UNIT IN Dr. MOEWARDI HOSPITAL SURAKARTA 2012

Harsini,dr.,SpP, Wahyu Mustadi,dr\*

[Deleweh2009@gmail.com](mailto:Deleweh2009@gmail.com)

Department of Pulmonology and Respirology Faculty of Medicine Sebelas Maret University Surakarta

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## ABSTRACT

**Background:** Respiratory failure is a condition in which the respiratory system fails in one or both of its gas-exchanging functions oxygenation of mixed venous blood and elimination of carbon dioxide.

**Objective:** To describe whether there is a relationship between underlying disease of respiratory failure with the ventilator treatment outcome in Dr. Moewardi hospital intensive care unit patients.

**Method:** This is a retrospective cohort study on 17 patients with respiratory failure in 2012, using their medical records.

**Result:** Data was from 17 patients with respiratory failure treated in pulmonology department consists of: 9 female (52.94%), 8 male (47.06%), Most of their age groups ranged from 41-60 years old in 10 patients (58.82%) with their chief complaint was shortness of breath in 15 patients (88.23%). The most common underlying disease was sequelae of tuberculosis in 3 patients (17.64%). Patients with respiratory failure without concomitant diseases (comorbidity) were 2 patients (11.76%). The result of blood gas analysis revealed respiratory acidosis not compensated in most of the patient, as much as 6 patients (35.29%) and type I of respiratory failure in 9 patients (52.94%). Fifty nine (76.62%) patients were treated in the ward and 18 (23.38%) patients were treated in intensive care unit. Non invasive treatment was applied on 2 patients (11.76%) and invasive treatment was applied on 15 patients (88.23%). By the time the patients were discharged from the hospital, 14 patients (82.35%) recovered and 3 (17.64%) patients didn't recover (home forcibly and died). There was no significant correlation between underlying disease of respiratory failure with the ventilator treatment outcome, where the value of  $p = 0.541$  ( $>0.05$ ).

**Conclusion:** There is no relationship between underlying disease of respiratory failure in pneumonia with ventilator treatment outcome.

**Key words:** Respiratory failure – pneumonia - treatment - outcome.