

***Analysis of Risk Factors for Pneumonia Adult Based on Medical
Records of Inpatients at RSD Dr. Soebandi Jember***
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ABSTRACT

Pneumonia is an acute infection affecting the lung tissue (alveoli) caused by bacteria, viruses, mycoplasma, fungi, and various chemical compounds and particles. This infection causes inflammation of the lungs. Pneumonia cases at RSD dr. Soebandi Jember consistently rank among the top 10 inpatients, followed by increasing mortality rates from 2021 to 2024. This study aims to analyze the risk factors for adult pneumonia, namely age, sex, chronic obstructive pulmonary disease (COPD), asthma, heart failure, diabetes mellitus, and stroke. This research was an observational analytic study with a case-control design. Data were collected using medical records. The study population consisted of 109 case groups and 806 control groups. The research sample included 86 case groups and 86 control groups selected through simple random sampling. Data were analyzed using univariate and bivariate analysis with the chi-square test. The results showed that age (p value = 0.000), sex (p value = 0.000), COPD (p value = 0.014), asthma (p value = 0.029), and stroke (p value = 0.000) were significantly associated with adult pneumonia. In contrast, heart failure (p value = 0.125) and diabetes mellitus (p value = 0.641) were not associated with adult pneumonia. In conclusion, age $\geq$ 46 years, male sex, history of COPD, asthma, and stroke increase the risk of pneumonia. RSUD dr. Soebandi Jember is advised to improve education and awareness regarding pneumonia risk factors through regular counseling and monitoring of high-risk patients. The community is encouraged to carry out prevention through PCV immunization, adopt a healthy lifestyle, and promptly seek medical care when pneumonia symptoms appear.

Keywords: *Asthma, COPD, Diabetes Melitus, Hearth Failure, Pneumonia, Risk Factors, Stroke.*