

***Risk Factors Analysis of Heart Failure Based on Medical Records of Inpatients
at Perkebunan Jember Klinik Hospital***

Dony Setiawan Hendyca Putra, S.Kep., Ns., M.Kes (Supervisor)

Oktavia Putri Dewitasari

*Study Program of Health Information Management
Department of Health*

ABSTRACT

Heart Failure is a structural or functional heart disorder that results in the heart's inability to distribute oxygen throughout the body. Jember Plantation Hospital Clinic is one of the hospitals that handles heart failure cases with fluctuating incidence rates from 2022 to 2025, as well as an increasing mortality rate from 2022 to 2025. The mortality rate in 2022 was recorded at 6 patients and increased to 19 patients in 2025. The objective of this study is to analyze the relationship between the incidence of heart failure and its risk factors, namely age, gender, hypertension, diabetes mellitus, dyslipidemia, and coronary artery disease. The type of research used is an analytical observational study with a case-control approach, consisting of 107 heart failure case samples and 107 non-heart failure samples selected thru purposive sampling. The data analysis used is the chi-square test. The research results show that the variables related to heart failure are age ($p= 0.020$, $OR= 1.973$), hypertension ($p= 0.000$, $OR= 2.971$), dyslipidemia ($p=0.000$, $OR 5.899$), coronary heart disease ($p= 0.000$, $OR= 8.898$), and the variables that are not related are gender ($p= 0.274$), diabetes mellitus ($p= 0.128$, $OR= 1.588$). The conclusion of this study is that the risk factors associated with the occurrence of heart failure include age, hypertension, dyslipidemia, and coronary artery disease. It is recommended that the community at risk of heart failure undergo regular health check-ups, hospitals provide periodic education, and future research is expected to include additional variables and conduct further analysis such as multivariate analysis

Keywords: Case Control, chi square, Risk Factors, Heart Failure, Medical Records.