## ADLN - PERPUSTAKAAN UNIVERSITAS AIRLANGGA

## ABSTRACT

Hajj is a desirable worship event for Muslims, but however there is always an increase for the number of pilgrim's deaths. Implementation of Indonesian hajj health program has been implemented by the government over the years, but still the health problems that affect morbidity and mortality increment in jemaah is found. The number of Jemaah Hajj of East Java province who was pass away in Saudi Arabia on 2014 was 50 people, and increased to 122 people in 2015. The purpose of this study is to design an information system model of Hajj health surveillance based on mortality risk prediction index in the East Java Department of Health. Type of this research is a development that consists of two stages. Phase I is development of pilgrim's death risk prediction index using case control design. Phase II is to describes the conceptual model of health surveillance information system, based on Hajj predicted risk index of death in Data Flow Diagrams (DFD) form. Results shows that smoking habit, lack of physical activity, circulatory disease, respiratory disease, endocrine, and metabolic diseases, is the indicator that leads into pilgrim's death prediction index model. Conclusion of this study is a model of hajj health surveillance information system that developed and integrated with surveillance non communicable diseases in the primary health care to obtain risk factors data of death. For the output component, information that are generated may contains death risk factors and pilgirm's predictive of death.

Keywords : Model, Information System, Hajj, Predictive Index, Death Risk