

ABSTRACT

Indonesia, as a tropical country, is prone to seasonal diseases. One of them is typhoid fever. The seasonal diseases, including typhoid fever, are influenced by weather elements. The weather elements is able to change because of a climate change which occurs due to the global warming. The change of the weather elements may influence the diseases transmission media. This research aimed to identify the prevalence of typhoid fever, to identify the trend of the typhoid fever, and to analyze the influence of weather change on the typhoid fever prevalence in Kecamatan Pakis in 2007-2011.

This research was a quantitative research that used secondary data analysis. Based on the research time, this research was a time series one. This research used Double Linear Regression statistical test, with the Backward model in data processing. The object of this research were a dependent variable and some independent variables. The dependent variable was the prevalence of typhoid fever. The independent variables were the weather elements that included the air temperature, the air humidity, the rainfall, and the air pressure.

The typhoid fever prevalence in 2007-2011 was 1.23% of the total Kec.Pakis population during the five years. During those years, the cases of typhoid fevers occurred more often among the population with the ages of 20-44 years old and more often among the female population. The trend of typhoid fever was increased in the rainy season and in the transitional season, with the increases of the air temperature, the air humidity, and the wind speed. Test of Double Linear Regression showed that the change of weather elements influenced the typhoid fever prevalence as much as 11.1%. The influencing weather elements were the wind speed ($p = 0.035$) and the air pressure ($p = 0.039$).

The change of the weather elements influenced the bacterial metabolism and the life cycle of flies as the transmission vector of the typhoid fever. It is suggested to take effort in eradicating the flies vector, to create a team of food and beverage sanitation, and to give a routine counseling.

Keyword: *the weather change, the typhoid fever.*