

Tuberculosis in the Terengganu region: forecast and data analysis.

ABSTRACT

In this study we analyse tuberculosis (TB) data from Jabatan Kesihatan Negeri Terengganu (2008) by applying linear trend, quadratic trend, simple moving average, simple exponential smoothing and Holt's trend corrected exponential smoothing. Accuracy of these time series approaches are measured by computing the variance between the extrapolation model and the actual data. The study shows that Holt's trend corrected exponential smoothing is the best forecasting model, followed by the quadratic trend model. The results also show that people aged between 35–44 years old, male, Malay, unemployed or have an income lower than RM 1000 per month are in a high risk group to be infected by TB. We also forecast TB cases for 2009 until 2013 and the result suggests that the numbers of TB cases are expected to increase.

Keyword: Time-series forecasting; Data analysis.