

Forecasting Cancers Cases in Algeria Using Double Exponential Smoothing Method

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Abstract : Cancers are the second cause of death worldwide. Prevalence and incidence of cancers is getting increased by aging and population growth. This study aims to predict and modeling the evolution of breast, Colorectal, Lung, Bladder and Prostate cancers over the period of 2014-2019. In this study, data were analyzed using time series analysis with double exponential smoothing method to forecast the future pattern. To describe and fit the appropriate models, Minitab statistical software version 17 was used. Between 2014 and 2019, the overall trend in the raw number of new cancer cases registered has been increasing over time; the change in observations over time has been increasing. Our forecast model is validated since we have good prediction for the period 2020 and data not available for 2021 and 2022. Time series analysis showed that the double exponential smoothing is an efficient tool to model the future data on the raw number of new cancer cases.

Keywords : cancer, time series, prediction, double exponential smoothing

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