

**TIME-SERIES ANALYSIS OF UNDER FIVE MORTALITY
IN ALEXANDRIA**

By

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ABSTRACT

The aim of this study is to analyze levels, trend and seasonal patterns of under-5 mortality in Alexandria. In order to fulfill this aim, a retrospective study is conducted to collect recorded data about under-5 deaths and live births from 1996 to 2001 from Health Information Center and CAPMAS in Alexandria. Causes of death are categorized using the ICD-10. Several trend equations were tried to select the best fit trend equation. Seasonality is tested using the 12-month moving average method. The predicted value for under-5 mortality rates for the year 2002 is calculated using the best-fit trend equation and the seasonal index and compared to the actual levels to test the validity of the prediction models. The study revealed a significant downward trend of U5MR, PNMR and CMR while the NMR does not show significant