Utilization of Neural Network for Disease Forecasting

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Predicting future disease incidence is important and will be beneficial in the
planning and management of a suitable policy to reduce the number of cases.
Generally, information systems play a central role in the development of an
effective and comprehensive approach to prevent, detect, respond, and manage
infectious disease outbreaks in human. The application of artificial intelligence
has motivated the use of artificial neural network in epidemiological area. This
presentation will present the use of neural network to learn the historical
patterns of disease incidence to forecast future incidence. Some works related
to the implementation of neural network for disease projection have been done
for the past several years. Different implementations of disease forecasting
using neural network are analyzed and evaluated. The results will show the
advantages of neural network for supporting policy/decision makers in
developing long term strategies regarding the number of disease incidence.

Key Words: disease incidence, forecasting, neural network