

Prediction of Heart Diseases and Diabetes Using Data Mining Techniques, A
Study of MOI Health Center, Kingdom of Bahrain

Ammar Aldallal and Amina Abdul Aziz Al-Moosa (July – August 2017)

Journal Of The Association For Information Science And Technology, volume,
issue 9, pp.1-22

Abstract:

Data mining is a relatively new field of research whose major function retrieve knowledge from a large amount of data. It is a process of selecting, exploring, and modeling large amounts of data to discover unknown patterns. Modernization and commercialization of life lead to an unhealthy lifestyle that results in increasing non-communicable diseases like heart diseases and diabetes. Non-communicable diseases have direct result of inaction, inactivity, and idleness of people. Heart diseases and diabetes are two of the most dangerous killers affecting the society. This research aims to produce application software that doctors and other medical practitioners can use to predict the occurrence or recurrence of non-communicable diseases (NCDs). With a huge volume of patient data available, which is not mined for forecasting purposes, a necessary requirement is to utilize this data productively. Data collection and analysis were conducted in two stages: first stage involved secondary data collection and literature review of previous studies. Secondly, primary data was collected to understand the needs and importance of having a tool for doctors to aid prediction of NCDs. Developed software is to be made incorporating relevant secondary data to enable practitioners to use an application which can predict with accuracy, the chances of occurrence or recurrence of NCDs'. The research objective is to develop a software application that doctors can rely on for predicting NCDs. The researcher developed a new software application that can use data mining techniques for harvesting patient information and in making predictions