Application of data mining in medical disease interventions

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As the data repositories is growing, there is an increasing need of data mining tools, which are able to glean information from the data sets which are not easily understood by traditional observation experiments. Medical informatics plays a very important role in use of clinical data. Data mining is the analysis of observation of datasets to find unsuspected relationship and it summarizes the data in novel ways that are understandable and useful to the common man and the medical fraternity. Globally the prevalence of NCD (Non Communicable Diseases) such as blood pressure, Cardiovascular disease (CVD), obesity, diabetes, hypertension etc, has steadily increased from the past 30-35 years. Emphasis is on gaining the insight of medical data through data mining. The Oracle Data Miner software tool is highly appreciable tool for building the predictive model to find the hidden patterns. This research will be based on regression, clustering and classification techniques of data mining to investigate the intervention of these NCD diseases. The medical dataset has been required to make an analysis and to build the good ranking classification is highly desirable for better performance of prediction as well as establishment of relationship. The increasing prevalence of Non Communicable Diseases within developed and developing nations is having a huge impact at a number of levels. These diseases have a complex relationship. Regression and Classification based ROC (Receiver Operating Characteristics) technique approaches are applied. The purpose of this study is to give awareness of the benefit of the health care, to explore the hidden pattern of the NCD patients, to evaluate and predict the performance of NCD risk factors and to find out how to intervene the NCD diseases.

Biography

Mohammad Khubeb Siddiqui received his Engineering degree in Computer Science & Engineering from Uttar Pradesh Technical University, India. His main area of research interest is in Databases, Data Warehousing and Application of Data Mining. Currently he is working as a Researcher in College of Computer Engineering and Sciences, Salman bin Abdulaziz University, Saudi Arabia. He has worked as an Oracle DBA for various telecom based project. He has done funded projects by Deanship of Scientific Research, Salman bin Abdulaziz University, Ministry of Higher Education, Saudi Arabia. Eng. Siddiqui published research papers in Springer’s, IEEE, ASME, Elsevier, Scientific Research etc. He is also an Editor in Chief for Journal of Knowledge Discovery in Databases, and reviewer of various reputed Journals.

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