

METHODOLOGY ADOPTED:

The current system of diagnosis is based on urine examination using the serum creatinine level. Many medical methods are used for this purpose, such as screening, ultrasound method.

During the screening, patients with hypertension, cardiovascular disease in the anamnesis, diseases in the past and patients who have relatives with kidney disease are examined.

This technique involves calculating an estimated GFR from the serum creatinine level and measuring the urinary albumin-to-creatinine ratio (ACR) in the first morning urine sample.

This paper focuses on machine learning techniques such as ACO and SVM by minimizing features and selecting the best features to improve prediction accuracy.

PROPOSED METHOD:

A proposed framework for developing a prediction engine learning models and their comparison. The main goal of current research is to design a machine learning techniques to predict CKD using associative and classification algorithms.

The proposed technique generates classification association rules (CARs) to determine techniques with a high percentage of correctly classified cases and identified classifiers may facilitate early diagnosis of CKD and a comparative analysis of the proposed technique is performed. using other state-of-the-art techniques. It briefly describes different stages:

(i). Data set selection phase:

The data set is selected to predict CKD for data analysis and effective knowledge. Enough data is needed to implement the machine learning technique for the selected data set. In this set of experiments, CKD data are obtained from UCI machine learning repository.

(ii). Pre-processing and transformation phase:

Data set is prepared in file format with 16 attributes. The data set is converted to binomial format to implement associative techniques. Moreover, it is missing records, duplicate records and unnecessary fields removed for standard data format.

(iii). Feature Selection Phase:

The most promising features of the CKD dataset are selected using the WEKA tool for better results. Feature evaluators and search methods are used for this purpose. A function based on correlation as the selection subset evaluator is used as the function evaluator, and a greedy stepwise search method is used.