**ABSTRACT**

Diagnosis of mental health disorders can be challenging even for experienced professionals. An interview is conducted by medical professionals and based on the interview the disorder is identified. World Health Organization (WHO) has predicted that nearly one in five people suffer from mental illness. If mental illness is diagnosed at an early age it can be easier to treat, therefore, the focus is on the age group of 5-24. Real data about the patients and their symptoms is collected for the project, with the collaboration of psychiatrist Dr. Anand Pandurangi. A Web Application developed with MEAN stack is provided to the clinic. Receptionists at the clinic operate the application to collect the preliminary details of the patient. The Doctor also uses the application to write the diagnosis and prescription. Based on this diagnosis, the symptoms are generated and stored in a database. This data is used to build a predictor model. GradientBoost Classifier, LogisticRegressionCV and KNeighbor classifier are used to classify the disorder based on the data of the patient. The best performing model was LogisticRegressionCV which yielded Precision of 0.72 Recall of 0.8 and F-1 score of 0.757. The predicted output is given to the doctor as a suggestion. With this method, inaccurate diagnoses can be avoided and subsequently prevent the irreversible damage to one’s mental health. Data analysis is performed to identify the causes and relationships between the symptoms and diseases. These relationships of co-occurrence of symptoms is represented in the form of Association Rules. These rules are evaluated using Support, Confidence and Kulczynski score.

Keywords: Cross validation, Logistic Regression, KNeighbor classifier, MEAN stack, WHO.

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