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Chronic or Acute Disease with Doctor Specialist Using Data Mining

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Abstract - *For ceaseless sickness, Medical history reproduction is fundamental for review database investigations. It significantly affects the measurement of further analysis result. It shows the prescription development structure for the medicinal history of patients with chronic, or acute diseases. The main goal is to identify the disease name and predicting the solutions. Suggesting the medicine to the patients for using data mining (prediction) user find the location of doctor specialist from the analyzed datasets.*

Key Words: **Data mining Techniques, Medications, chronic or acute diseases**.

1. INTRODUCTION

Nowadays, people are keen interest in taking care about their health. So people are running behind the medicines such as ayurveda, siddha etc. Medication is one of the important roles in our day-to-day life. In this most of the diseases are occurred by some deficiency and some health disorders even from small kids to age peoples. There are some symptoms knowing and some are unknowing to the people. With the symptoms it can be judged by two diseases. One of them is the chronic and other is the acute disease. The chronic disease is said to be a long-lasting disease that is said to be of cancer, diabetes, etc. Acute disease is said to be a short term disease such as fever. By both diseases a proper medication is a given to the patients by a specific doctor specialist in our locality. There can also be some disease said as a communicable and non-communicable disease. Communicable diseases are disease which can be easily transmitted from the affected person to the unaffected person. For example if one person has cold, cough it get easily transmitted to the person who is communicating with them or using their personal things. Non-communicable diseases are the disease which is an internal communicated disease. For example, AIDS is one of the best examples transmitted internally through blood. We only created the incurable disease by some irregular activities. Disease can be any form like bacteria, fungi or virus in our natural world. It has much prevention and curing through medication in proper. One word we are saying that doctors are equal to god because they give life to us by providing some medication. In this we have to specify the doctor specialist with a specific department (i.e. entomology, cardiologist etc) In this paper chronic or acute can be finding out, and identifying by the symptoms with the duration. So, we are collecting the datasets and giving a predicted data using data mining. Data mining is one of the methods to predict the future basis.

1.1 RELATED WORK

In this session discussed about some papers

A. Dhara B.Mehta, Nirali C.Varnagar proposed Newfangled Approach for Early Detection and Prevention of Ischemic Heart Disease using Data Mining. The main aim of this paper is to detect the risk of Ischemic stroke at early stage by using Naïve Bayes, Support Vector Machine (SVM).

B. R.Rosso, G.Munaro, O.Salvetti, S.Colantonio, F.ciancitto aims to Chronious: An open, Ubiquitous and Adaptive Chronic Disease Management Platforms for Chronic Obstructive Pulmonary Disease (COPD), Chronic Kidney Disease (CKD) and Renal Insufficiency. They are using smart patient monitor unit (PMU) device provided using the Bluetooth. By using the algorithm of decision support system.

C. Masha Soudi Alambari, Mehdi Teimouri, Farshad FarzadFar, Amir Hashemi-Meshkini have aimed to Disease Detection in Medical Prescriptions using Data Mining Tools. In this paper a set of data collected from 1412 prescriptions is used with 414 kinds of drugs. They have used Naïve Bayes algorithm.

D. M.Ilayaraja and T.Meyyappan aimed to Mining Medical Data to Identify Frequent Diseases using Apriori algorithm. This study useful to identify frequent diseases in a large medical dataset.

E. Purnomo Husnul Khotimah, Yuichi Sugiyama, Masatoshi Yoshikawa, Akihiro Hamasaki, Osamu Sugiyama, Kazuya Okamoto, and Tomohiro Kuroda have aimed to develop a Medication Episode Construction Framework for Retrospective Database Analyses of patients with Chronic Diseases. This system presents a medication episode construction for the medical history of patients with chronic diseases. In this they used the multitherapy datasets by Allen's method.

1.2 METHODOLOGY

A. DATA

The data collected is to predict diseases, chronic, or acute diseases, symptoms, medicines, location, and doctor

specialist name. The dataset which we collected is comfortable for the users and it is text format.

B. **SYMPTOMS**

User can enter their symptoms in a text format. C. DURATION It includes the patient's symptoms duration. (i.e. days, month)

D. **DISEASES**

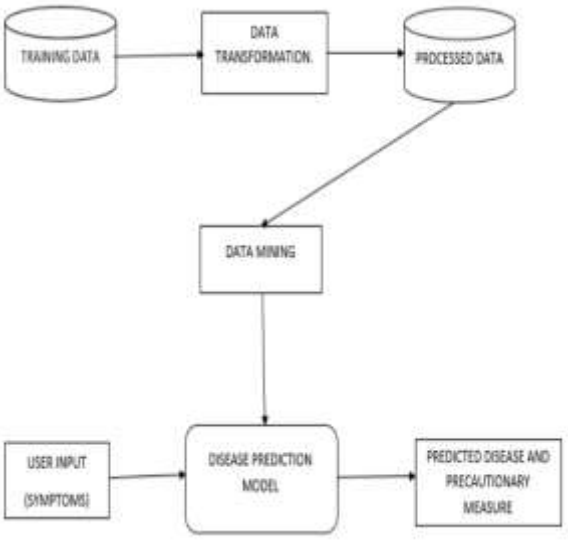
By analyzing the symptoms and duration, we can specialist predict the disease using data mining. E.CHRONIC, Or ACUTE DISEASES From the symptoms, duration, diseases we are going to predict whether it is chronic or acute disease.

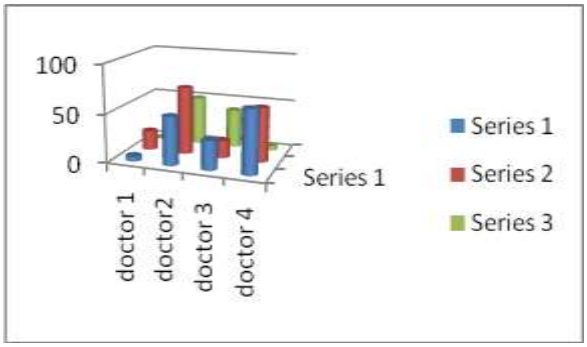
F.**LOCATION**

By knowing the disease the concern specialist is suggested with the location. G.DOCTOR SPECIALIST In this, we are checking with high percentage in which doctors are famous in their specific department and displayed with their name.

2. NAÏVEBAYES

NAÏVE BAYES is a classification of objects. It is strong and an attribute of data points with independently. It also includes spam filters (unrelated information), text analysis, and medical diagnosis. This is also called as simple bayes or independence bayes. It was supported by oracle data mining. It is easy to build and in a particular use of large datasets. The formula is as follows P(c/x) = p(x/c) p(c)/p(x) Where P(c/x) is the posterior probability of class P(c) is the prior probability of class. P(x/c) is the likelihood which is the probability of predictor given in a class. P(x) is the prior probability of predictor.





3. RESULT

The dataset includes chronic, or acute diseases, locations, doctor specialist. This method implemented using Naïve Bayes by collecting the datasets and giving percentage to each doctor for their better treatment with the specified location.

4. CONCLUSION

This research work proposes a Naïve Bayes data mining techniques. It is clear that enter the symptoms we can predict the diseases and doctor specialist. Further it can improve the specialist number and notification sends to the person it can be easier

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