



The Probabilistic Aspect of Chronic Diseases Based on Mining Model for Drug Review

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Abstract— Recent surveys show that in-line comments, blogs and forums of chronic diseases and drug are becoming increasingly important as the patient support resources. Extracting information from these major organizations of the text was useful and challenging. We have formulated fertility the probabilistic aspects of mining model (Mode) to identify aspects/thematic class label or clear the meta-information protection orders. As with many other non-supervisory approach or supervision of the approach, the mode with unique features that it will focus on aspects related to the find a class, rather than to find all the classes at the same time in each execution. This will reduce the chances of a combination of the concepts of different categories like COPD, Dementia and Diabetics. Therefore, the various aspects are more easily is interpreted. Various aspects are also found possessions that they are the differences between classes: they can be worn to differentiate between a class commencing other classes. The experimental results of the drug review of three different drugs in display mode is the ability to discover superior than other frequently used method Aspects Derived from Different Algorithms, when calculated by average points wise mutual information and disaggregated for correctness is less than the PAMM (Probabilistic Aspect Mining Model) algorithm.

Keywords — Drugs, Reviews, Patient, Disease.

I. INTRODUCTION

The project mainly aims to help the patients by giving its effects and side effects of the drugs. This may be due to the relatively small group of patients on the Internet, they only know that there is a specific diseases or drugs, they are going through. In addition, it can be also viewed by the other patients from medical professionals. Fresh gathering of information have shown that the patient-generated content is very useful and imperative diseases and drug effects and its disadvantages.

Numerous patients trying to obtain more knowledge from different patients with similar conditions or symptoms those patients can get the help through this review. Review consists of the details like Patient name, age, drug name, uses, advice, side effects, also ratings will be given. This will be very useful to the patients who are suffering from the same disease or conditions. Through the ratings patient easily come to know about the effectiveness its satisfaction and dissatisfaction of drugs. The patient can also share their knowledge, symptoms and side effects of drugs.

The review found that have a positive impact on the health of the patient. But General Product Quantity of medicines and a very restricted number of varieties of prices user-friendliness, dose, effects, side effects and human experience.

II. RELATED WORK

It mainly consists of drug review. The review will be given for only three diseases they are diabetics, COPD, dementia. The parameters are for review is already generated when survey is conducted and which parameter is to be add while taking the review.

Diabetics

It is a one of diseases which is related to sugar. If a blood contains more sugar then the required. That person is affected by diabetics. The symptoms of diabetics are:

- Feel more thirst
- Frequently goes for urination
- Feel hunger now and then
- Weight loss would be happen

Demantia

This disease is related to the mind. It affect to brain part of the patient. It can be anywhere into the brain. The symptoms of demantia are as follows.

- Loss of memory.
- Problem to focus or give attention.
- Language to understand and communication problem.

COPD(chronic obstructive pulmonary disease)

This disease is related to lungs. Where, it is a problem by a cough. Because, it is initial stage if the cough is longer then 3 months. The symptoms of COPD disease is as follows:

- Cough for long time.
- Feeling breathless.
- Infection to lungs.
- Loss of weight.

The main objective of this paper is Is to get opinion from the patient in the form of review, so that this feature helps other patient to know about their drug effectiveness. Review and rating in form of star this review will be shown only of related classes i.e, COPD, Demantia and Diabetics. The rating will be shown for satisfaction and dissatisfaction. Even the doctor will be giving the decision about the drug which is sent by patient that whether it positive or negative drug. The patient can ask the query to doctor about disease which they suffering and doctor will be replying them.

III. PROBABILISTIC ASPECT MINING MODEL

Probabilistic aspect mining model (PAMM) for drug review used for to classify different review of different disease. Such as, by selecting the particular disease we get those disease related to drug review, where different diseases are Diabetics, COPD and Demantia.

PAMM is a generative model which finds the experimental data $\mathbf{p} \in XY$ and the class label $q \in \{0, 1\}$ from the Gaussian latent variable $\mathbf{R} = (R1, \dots, RM)Z$ (i.e. $\mathbf{R} \in XM$) with zero mean and identity covariance matrix, i.e. $\mathbf{z} \sim S(0, \mathbf{I})$. Describes the facts and label creation process. Data points and the associated class labels are generated as follows.

- 1) Draw $\mathbf{R} \sim S(0, \mathbf{I})$;
- 2) Draw $\mathbf{p} \sim S(\mathbf{u}\mathbf{R} + \mu, \sigma^2\mathbf{I})$;
- 3) Draw $q \sim (p(q=0|\mathbf{R}), p(q=1|\mathbf{R}))$,

Where μ is the mean of the experimental data, σ^2 is the Gaussian noise level on \mathbf{p} , $\mathbf{u} \in XY \times M$ is a matrix having non-negative entries,

$$p(q=1|\mathbf{R}) \text{ and } p(q=0|\mathbf{R}) \text{ are given by } p(q=0|\mathbf{R}) = 1 - p(q=1|\mathbf{R}), \quad (1)$$

$$p(q=1|\mathbf{R}) = \varphi(\mathbf{v}\mathbf{z}\mathbf{R}) = \varphi_{-c} \prod_{i=1}^M R_i, \text{ and } (2)$$

$$\varphi(z) = 1 / (1 + e^{-z}), \quad (3)$$

where φ is a logistic function and c is a constant. The label y is binary and drawn from the Bernoulli distribution with probabilities $p(q=1|\mathbf{R})$ and $p(q=0|\mathbf{R})$. The aspects of the model can be obtained from \mathbf{u} as it can be regarded as the basis of generating the observed data. By inspecting high probability/value words of columns of \mathbf{u} , the underlying concepts of the aspects can be interpreted.

In existing world Views of the mining process extracts the information you specify (for example, positive or negative emotions of products) from a huge amount of facts or wording views otherwise comments of all net browsers. In several cases, only a review of the overall rating cannot change the conditions of the different ways of the goods or service. For instance, the mobile phone could have tremendous power life, but the poor picture quality. The extra high-level views mining practices has taken measures to obtain and group of products or services and predict their emotions or rating.

The thing which is introduced in this paper is like, find the views on the issue of the work of the review of the mining of drugs. The patient gives the review on particular drug which they have taken. That review will help the other patient to know effects and its side-effects. Even the patient can view only those re-view which they required for their disease. The patient can confirm the drug if they any dot that the drug is for that disease only or not by the doctor. The doctors verify the drug which is sent by the patient. To verify the drug doctor perform the diagnosis on that.

A. LITERATURE SURVEY

The author B Lin et.al has discussed in this wide range of technology of the excavation and it gives précis on product feedback based on data mining and NLP method. The main intension is to offer a summary of the Feature-based large volumes of buyer feedback product online sales. And the hands-on lab results indicate that the proposed technology is very promising in the implementation of their mandates [1].

The author Sha F et.al has discussed the framework of the supervisory party Information find the reduction of the multifaceted nature of the Representative. The subsequent are the operation used in this article: Bayesian operations, LDA, DISLDA, classic linear operation, the, probability model of the tool is the fisher discriminate analysis (FDA) tool. Benefit is that it can produce complex model, modularity training and it actual fact with the unverified method. The drawback is that discriminatory criteria, like the possibility of one [2].

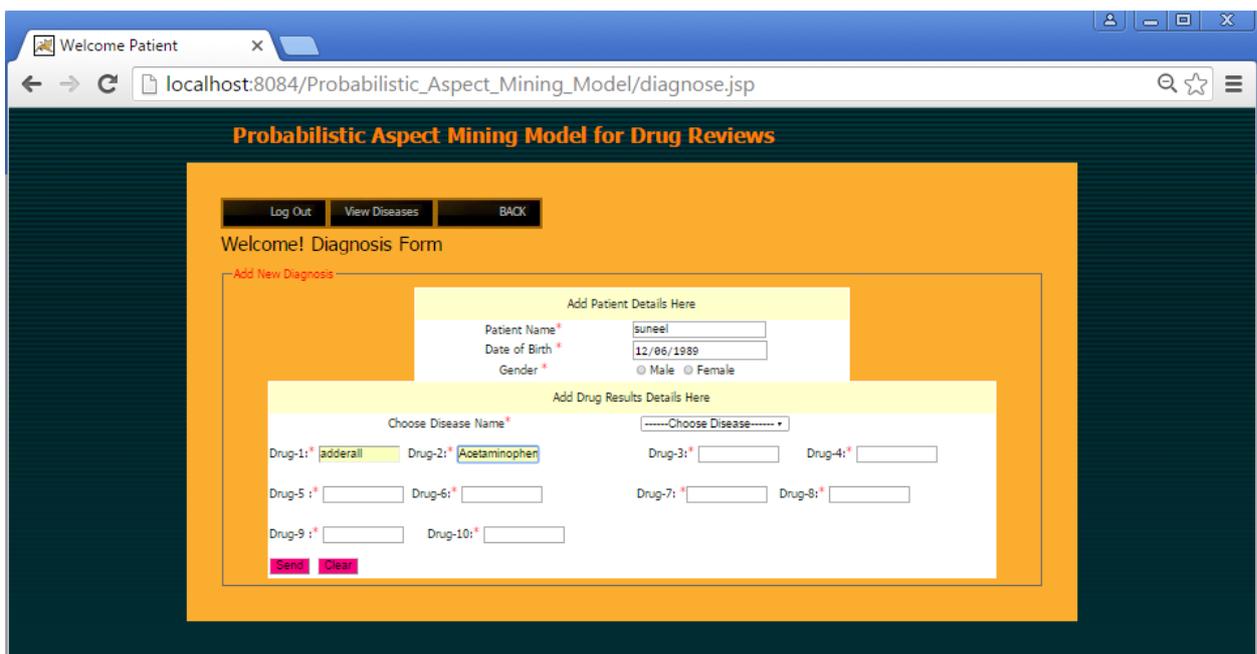
The author B Lee et.al has discussed about the covers of the technologies and methods in the hope of being able to directly make public opinion guidance - Information for the system. The focus of this article is a method to seek new challenges presented by the psychological aware applications compared to those already in existence to the more traditional fact-based analysis also includes a summary of the material, the evaluation of the letter and a much wider range of issues regarding privacy, manipulation and economic impacts [3].

The author AM Popescu et.al has discussed It introduces the annual report, unsupervised information extraction system review of mines with a view to creating a model of the key features of the product, its evaluation of the re viewers and their comparative value products. Compared to before work, and believes that the achievement of 22% higher accuracy (only 3 per cent of the low Recall feature extraction) on the task. Annual report of the novel a relaxing label found in the direction of the semantic words in their context can cause performance tasks found that phrases and their polarity [4].

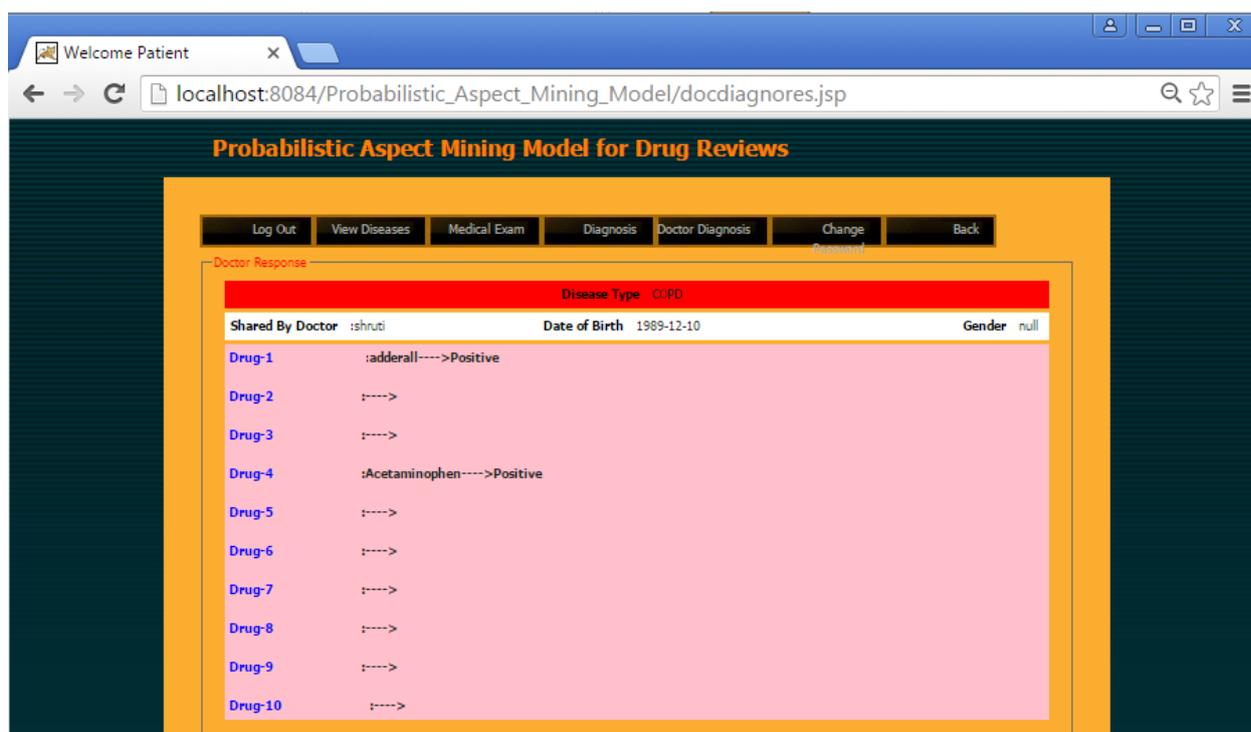
B. Results



In above home page of this paper must consider the patient, Doctor, Administrator and contact us. When we click on admin we get the login page of admin and same for the patient and doctor. As shown in above screen short.



The input as drug name which is given by patient to doctor is taken. Those input is of particular disease which must be present in that drug list.



The output of test case image which shows that the input which patient have are present in list of drug is verified by the doctor then it is set to positive drug.

IV. CONCLUSIONS

The patient want to take any drug which is described by the doctor but patient didn't new about the side effects which are going to be taken. Weather it cause any side effect on his health or not. We have implemented the probabilistic aspect mining model for drug review which may be useful for the patient to know about his drug side effect before taking it. Even patient can confirm the drugs which taken by giving the drug details to the doctor and doctor performs diagnosis on those drugs. But not least the doctor going to give the information has Positive and Negative based on the drugs which have been given by patient. Those drugs are taken and compared with the drugs which are available in database for the patient disease and decided by doctor.

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