

Medical Decision Making: Need of the Hour

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Abstract—*Medical diagnosis is the art of determining a person's health status from an available set of findings. It is only possible by the intensive collaboration between physicians and mathematicians. A diagnosis procedure usually starts with the patient complaints and the doctor learn more about the patient situation interactively during an interview, as well as by measuring some metrics such as blood pressure, body temperature, some related tests etc. The diagnosis is then determined by taking into account the whole available status of the patients and on the basis of that, a suitable treatment is prescribed, and the whole process might be iterated. In each iteration, the diagnosis might be reconfigured, refined, or even rejected. The foremost task of medical science is to prevent and diagnose the diseases.*

In the proposed talk, I will discuss some set of valid methods with some specific output, which helps mankind for the purpose of easy diagnosis of a disease. This method not only help doctors in the diagnosis process but also help patients on monetary basis and are transparent. Although these methods are not more useful when patients is in last stage of the disease but they are more effective in the early stages. The working of the model is as:

Firstly, we collect medical information about the patient. The medical history of the patient is given by the patient himself. After getting the verbal information, the physician subjects the patient to a physical examination from which he obtains more or less objective data. Physicians can make mistakes, overlook important indications or fail to carry out a complete examination.

A knowledge representation mechanism of symptoms of a particular disease was developed. Based on the symptoms, we diagnose the disease by the prescribed methods on the basis of some case studies. Also, we can select the type of treatment for the diseases from the available treatments. Moreover, such methodology can also be applicable on other decision making processes.