Statistical Machine Learning Approaches to Liver Disease Prediction

PROBLEM STATEMENT:

According to the latest WHO data published in 2020 Liver Disease Deaths in India reached 268,580 or 3.17% of total deaths. The age adjusted Death Rate is 22.24 per 100,000 of population ranks India #83 in the world. Review other causes of death by clicking the links below or choose the full health profile.

Our project aims in :

- Detecting liver disease at early stage
- Cut costs throughout the sceptical stages
- Assists in cross validation of laboratory reports

Question	**Description**
Who does the problem affect ?	Patients who are affected by liver disease or even those who are doubtful that they might be affected.
What are the boundaries of the problem ?	People who are showing symptoms such as • loss of appetite. • fatigue. • Feeling sick. • diarrhoea. • feeling generally unwell. • abdominal (tummy) pain.
What is the issue ?	In medical aspects ,if a person is affected by liver disease their health gets adversely affected. Since the symptoms are very common ,our model helps in predicting whether they are affected by liver disease or not, and also shows an approximate percentage of the possibility that the prediction is true.
When does the issue occur ?	Liver problems can also be caused by a variety of factors that damage the liver, such as viruses, alcohol use and obesity ,also by genetic disorders
Where is the issue occurring ?	Countries like Egypt, Mongolia, Cambodia and Zambia typically exhibit a higher ratio of people commonly prone to liver diseases. Also, patients who are earlier affected by disease such as viral hepatitis and cirrhosis tend to probably have liver diseases.
Why is it important that we fix the problem?	If our model turns out to be successful ,the percentage of people reaching the final stage of liver disease will get reduced. Also it might be an efficient tool to cross reference with reports in medical field.