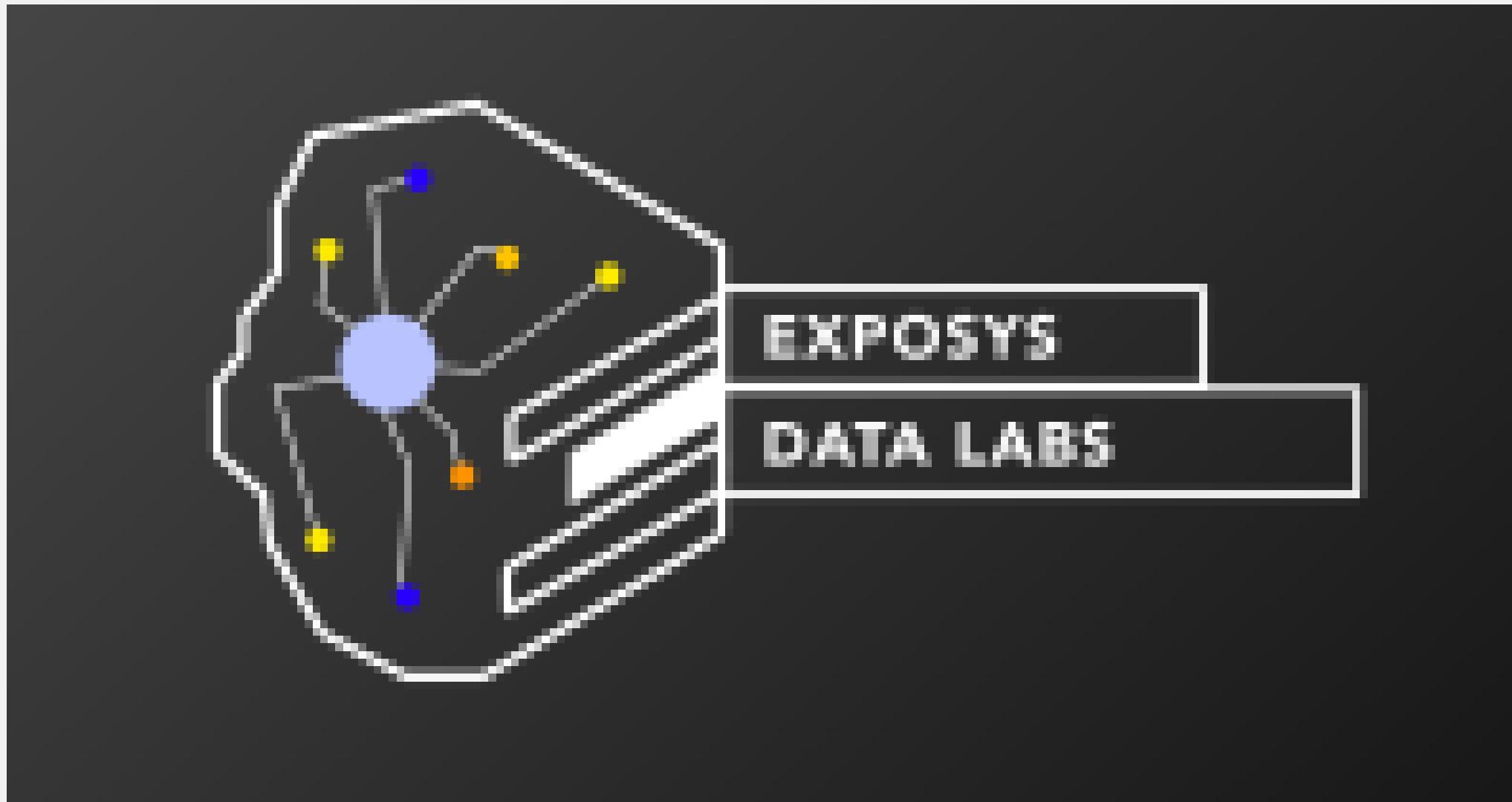


# PROJECT PRESENTATION

## Diabeties Prediction Using Machine Learning



**Presented By**  
**Ramanjaneya Reddy Jilella**

# Introduction

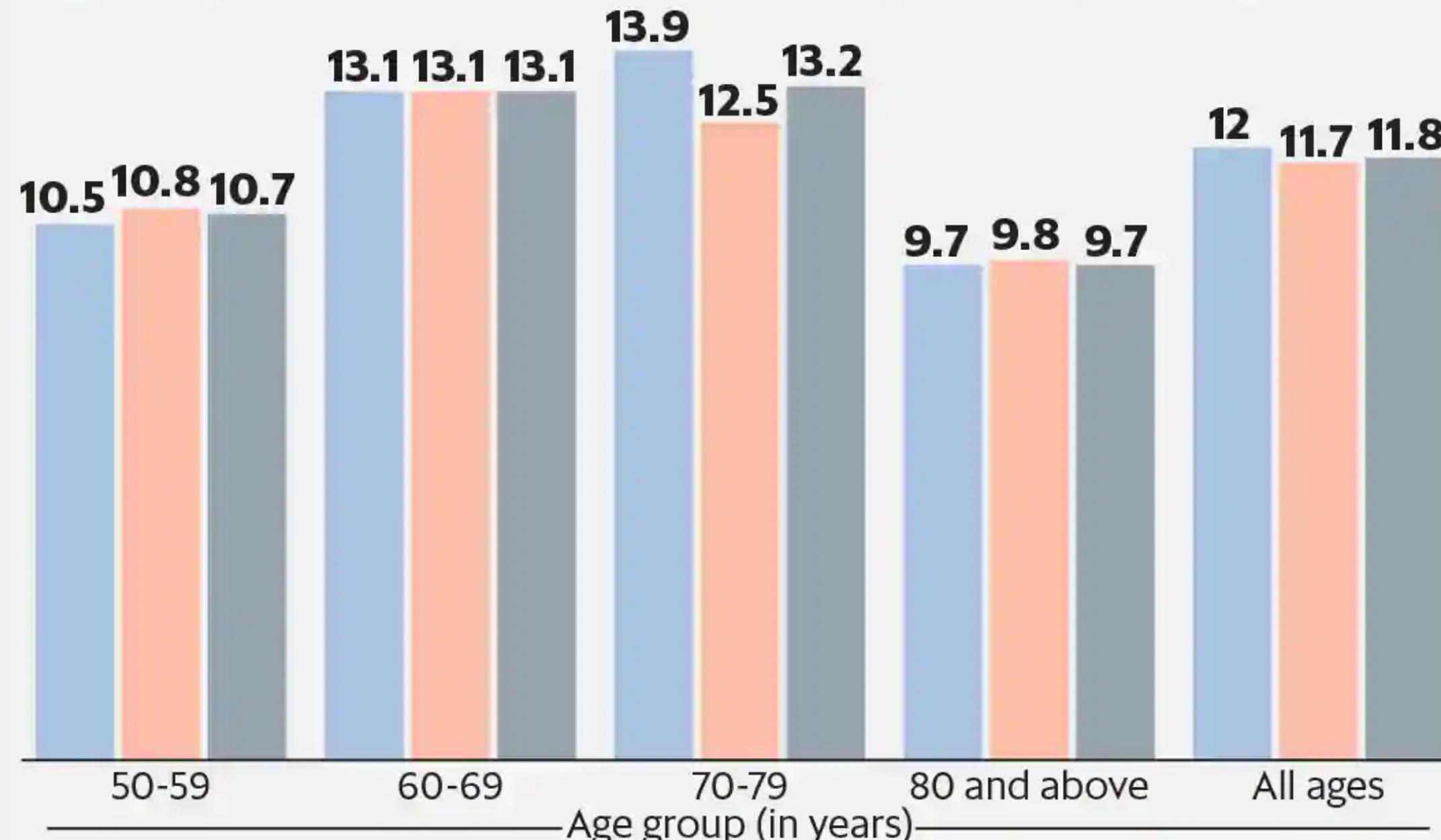
- Day by day people succumbing to diabetes is Increasing exponentially
- Approximately 463 million adults (20-79 years) were living with the diabetes; by 2045 this will rise to 700 million.
- The proportion of people with type 2 diabetes is increasing in most countries.
- 79% of adults with diabetes were living in low and middle-income countries.

## Health risks

The prevalence of diabetes is 11.8% in people aged above 50, according to a govt survey. Highest prevalence of diabetes was observed in the 70-79 years age group at 13.2%.

Male   Female   Total (in %)

Age- and gender-wise prevalence of diabetes in population aged  $\geq 50$  years

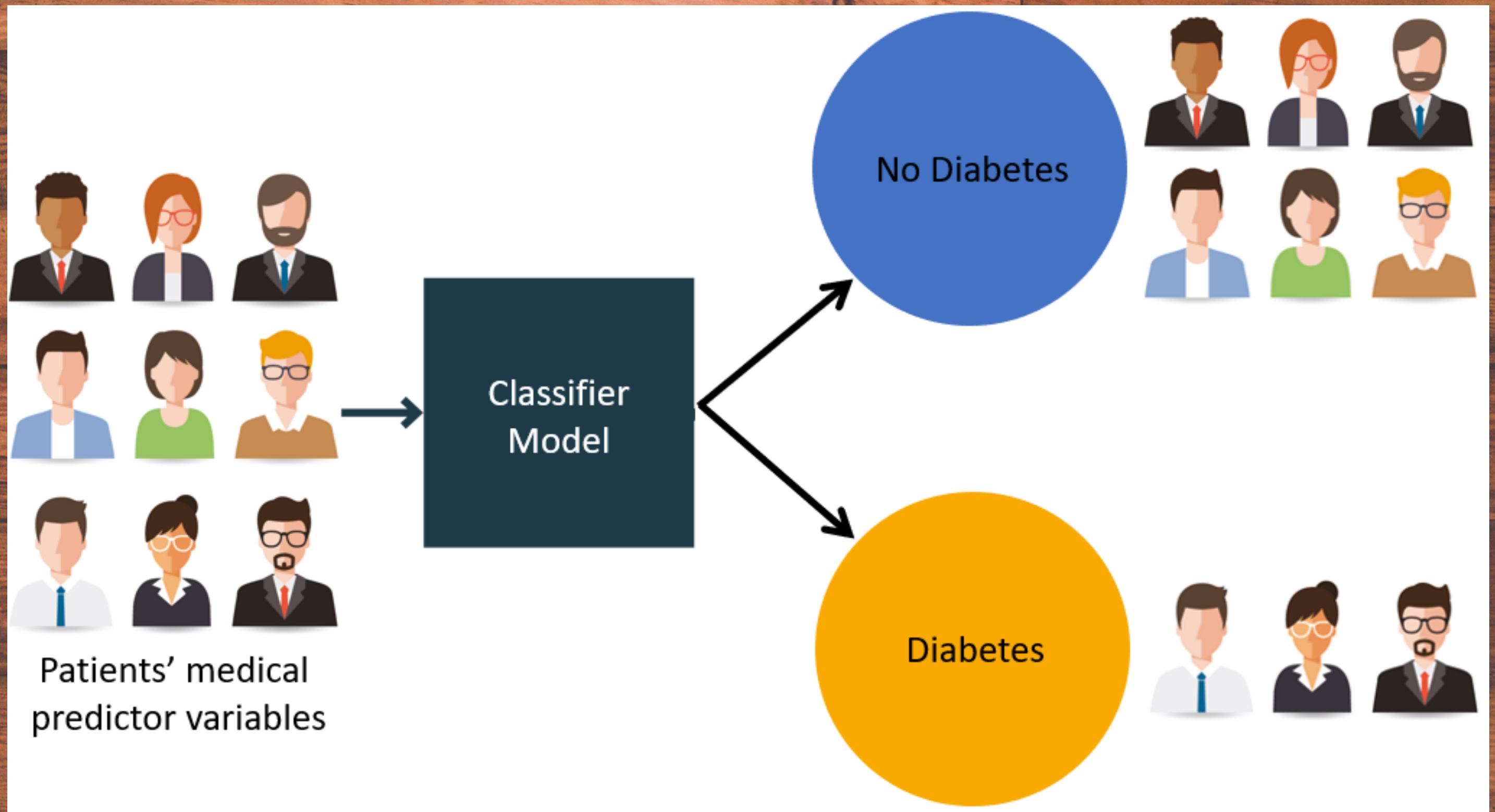


Source: National Diabetes and Diabetic Retinopathy Survey report 2019

- For Predicting Diabetes as earliest as Possible and helping the patients to take necessary Precautions
- I came with up a Solution to decrease the deaths due to the Diabetes at the early Stage
- By using Data Science we can get Insights from the past data



- By using Machine Learning We can Build a model which predict Whether Patient is Diabetic or Not



# Libraries Required

- Numpy
  - Pandas
  - Matplotlib
  - SeaBorn
  - Scikit Learn
- 
- Data Set is collected from Kaggle and dataset is Structured data
  - Used Google Colaboratory to implement the algorithms

# Algorithms Used

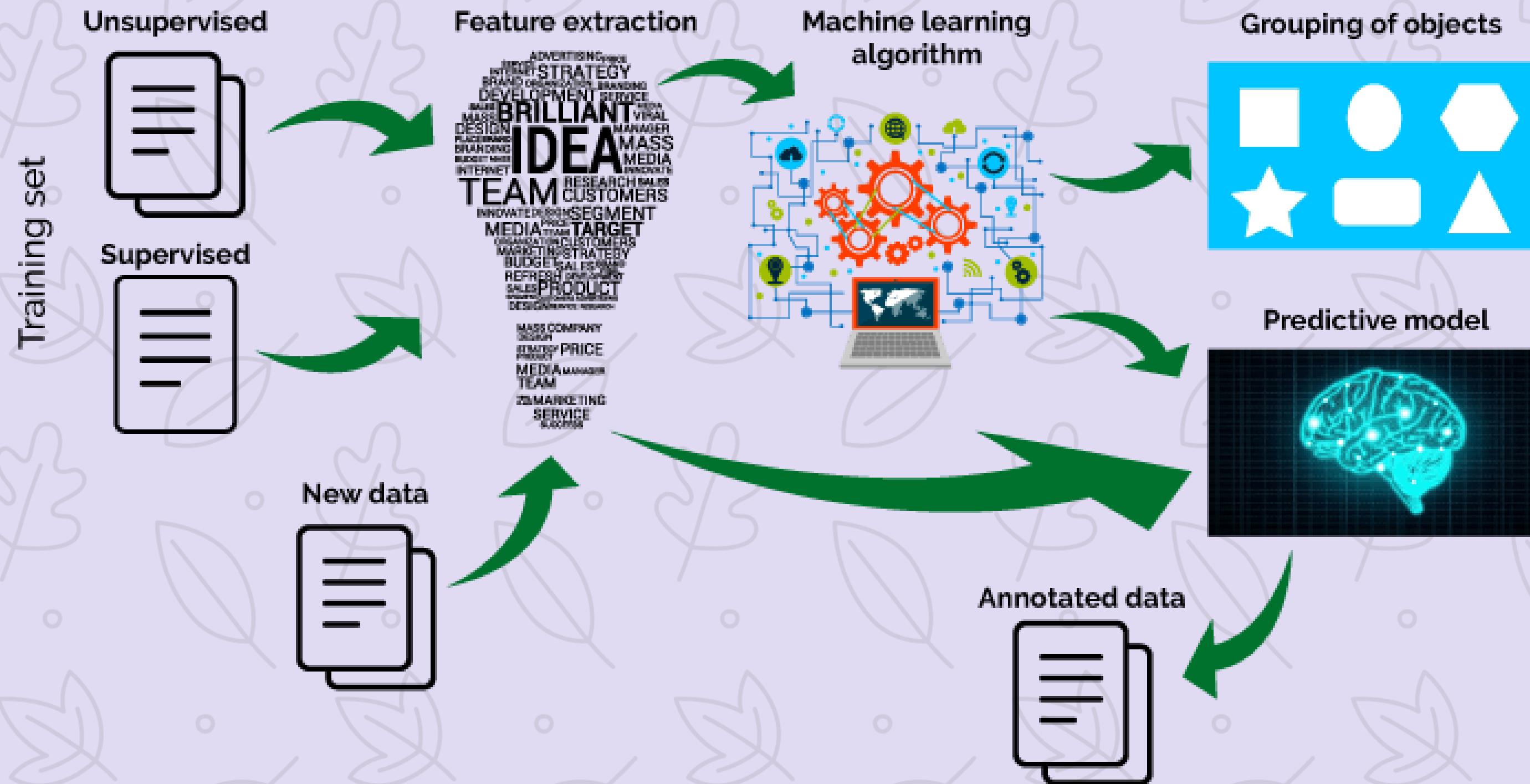
- Decision Tree Classifier
- Logistic Regression
- K-Nearest Neighbours
- Support Vector Machines
- Naive Bayes

# Ensemble Methods

- Adaboost Classifier
- Random Forest

# Steps Involved In Machine Learning Algorithms

## Machine Learning



# Conclusion

- From the aforementioned Algorithms Random Forest is Performing well with an accuracy of 81.81 %
- By using above Machine Learning Algorithms we can predict the whether the Patient is Diabetic or Not
- This models can use in real world applications and can prevent patients from the Diabetes by giving assistance to health care officials



**EXPOSYS DATA LABS**