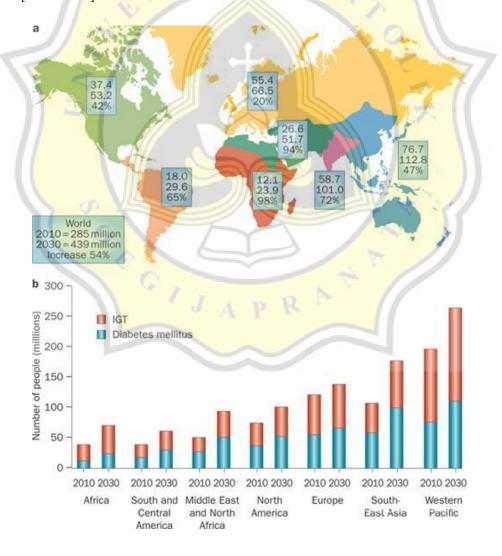
# CHAPTER 1 INTRODUCTION

# 1.1. Background

Diabetes Mellitus (DM) is a disease caused by a lack of insulin production (a hormone produced by the pancreas and which regulates glucose levels) in the human body. For most people who are obese (overweight), Diabetes Mellitus (DM) is a disease that is worrying, although not everyone who is obese (overweight) can develop this disease. some experts conclude that Diabetes Mellitus (DM) is a disease caused by the body's lack of production of insulin which works to maintain the balance of glucose in the blood[kemenkes].



#### Figure 1.1 Growth chart of diabetes mellitus graphic

Based on the background above, in this problem, use the Forward Chaining method with the consideration that the Forward Chaining method is an advanced sequential method that performs a search process from a set of data or facts so that this method is suitable for use in detecting or diagnosing a problem or disease by inputting a data or fact, from these facts conclusions can be sought to get a solution to the problem as well as the level of accuracy of the possibility of Diabetes Mellitus (DM) being suffered.

With this application, it is hoped that it will make it easier for us to find conclusions and get solutions and increase the level of accuracy and possibility of Diabetes Mellitus (DM).

#### 1.2. Problem Formulation

The problem formulation raised in this proposal is:

- Is the Naive Bayesian Classifier method capable of being automated classify the patient's diabetes correctly, and how is the application form to determine it?
- What is the level of classification accuracy with the Naive method Bayesian Classifier, if used to classify the type of Diabetes Mellitus?

## **1.3. Scope**

So that the preparation of this proposal is more directed, the following restrictions are made:

- Users who can use this expert system are the general public
- Expert System that the author designedthis is for diagnostic only diabetes mellitus disease.
- The search method used is the Forward method Bayes

### 1.4. Objective

This project aims to:

- To know implementation of data and facts diagnose internal medicine Expert system.
- Knowing how big method accuracy rate Deep Naïve Bayes Expert System to help diabetes diagnosis Mellitus (DM).

