

NO SHOW APPOINTMENTS

INTRODUCTION

We have data of 110527 patients from Brazil that go or didn't go to the appointment. We have information about the patient illness and SMS (Hypertension, Diabetes, Alcoholism, Handicap, SMS received). Also the age and gender of the patients with their Neighborhood. I will try to see if there is any relationship between each variable whether they affect the patients will go to the appointment or not.

- i. [Hypertension](#) (HTN or HT), also known as high blood pressure (HBP), is a long-term medical condition in which the blood pressure in the arteries is persistently elevated. High blood pressure typically does not cause symptoms. Long-term high blood pressure, however, is a major risk factor for coronary artery disease, stroke, heart failure, atrial fibrillation, peripheral arterial disease, vision loss, chronic kidney disease, and dementia.
- ii. [Diabetes](#) is a disease in which your blood glucose, or blood sugar, levels are too high. Glucose comes from the foods you eat. Insulin is a hormone that helps the glucose get into your cells to give them energy. With type 1 diabetes, your body does not make insulin. With type 2 diabetes, the more common type, your body does not make or use insulin well. Without enough insulin, the glucose stays in your blood. You can also have prediabetes. This means that your blood sugar is higher than normal but not high enough to be called diabetes. Having prediabetes puts you at a higher risk of getting type 2 diabetes.
- iii. [Alcoholism](#) is, broadly, any drinking of alcohol that results in significant mental or physical health problems. Alcoholism is not a recognized diagnostic entity. Predominant diagnostic classifications are alcohol use disorder (DSM-5) or alcohol dependence.

Data Cleaning

- drop age less than 1
- fix data types
- fix column names

Question:

- what factor are important for us to know in order to predict if a patient will show up for their scheduled appointment?

Some info. About dataset

- 2% handicap
- 10% have scholarship
- 7.4% have diabetes
- 3% have alcoholism
- 20.4% have hypertension
- 79.7% go to their appointment

After analysis the data:

- Man 1% more likely to go their appointment
- Top Neighborhood [JARDIM CAMBURI,MARIA ORTIZ,RESISTÊNCIA,JARDIM DA PENHA,ITARARÉ]
- Patients from this Neighborhood have higher ratio to go to their appointment (Parquet industrial ,Ilha do boi,Aeroporto)
- Don't have Scholarship more like to go to their appointment in the same time the patients who have Scholarship 10% from all the patients
- Have hypertension, Diabetes more likely to go their appointment
- Alcoholism don't show a different
- Patients from age 1 to 5 and over 44 more likely to go to the appointment
- Handicap more likely to miss the appointment specially if the patient handicap with rating 2,3,4
- The rate of men with alcoholism higher than female 85 vs 75 for female
- The rate of men with Diabetes is equal to female
- The rate of men with Hypertension is equal to female