DIABETES PREDICTION ANALYSIS

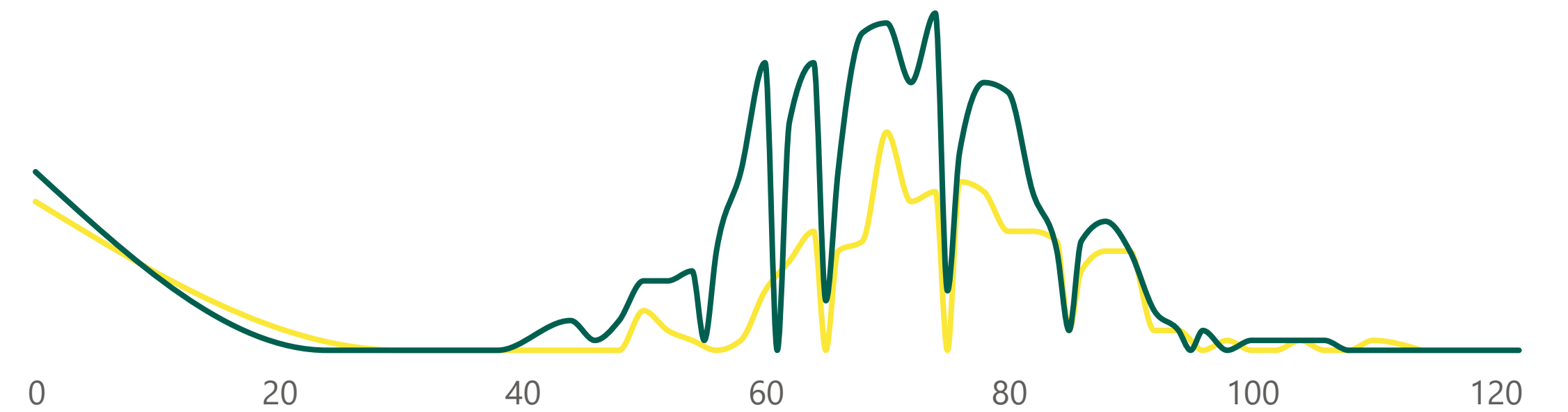| 768	268	500	33.18	69.10	32.46	29.15
Total Patients	Diabetic Count	Non_Diabetic Count	Average Age	Avg Blood Pressure	Avg BMI	Average Skinn Thickness

Diabetic & Non-Diabetic By Pregnency

1304 (44%)
1649 (56%)
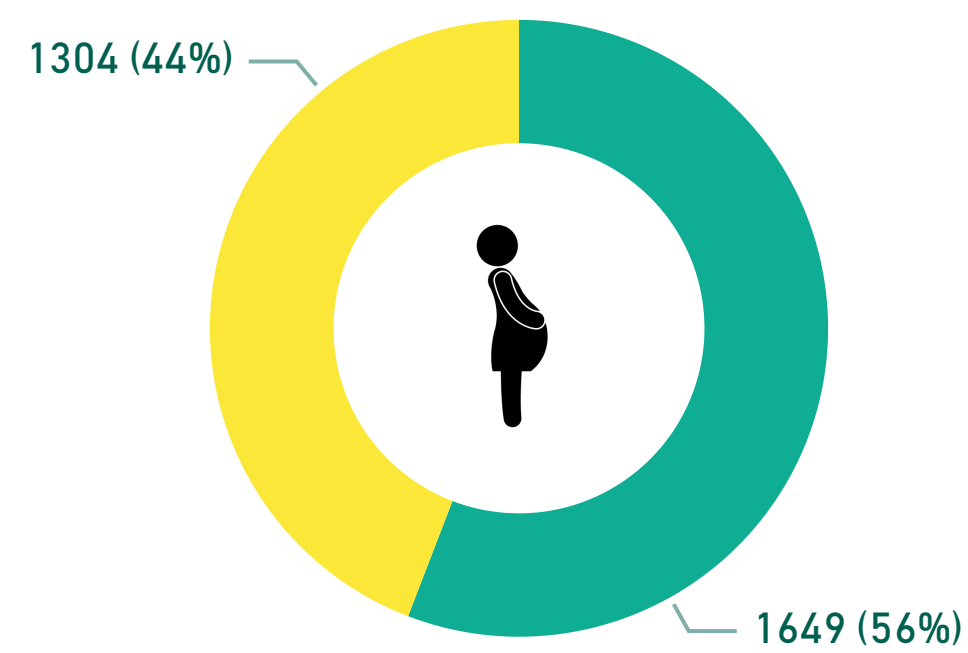
Diabetic Count by BMI (groups)

- Underweight: 2
- Normal weight: 7
- Overweight: 40
- Obese: 219
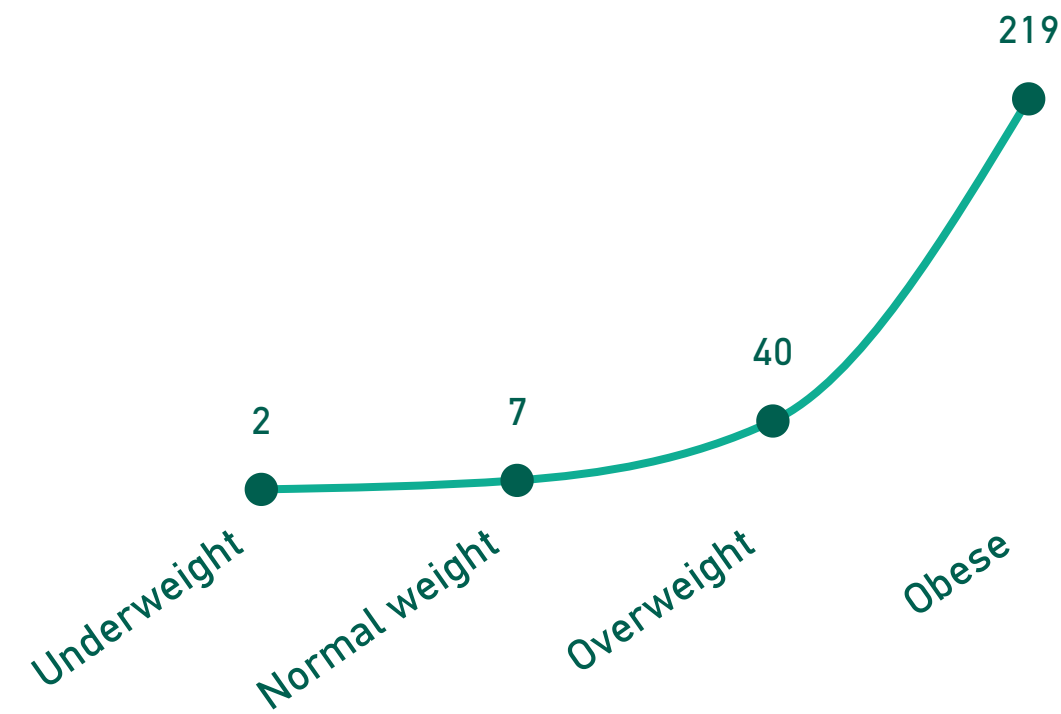
Diabetic and Non_Diabetic BP Count

0 20 40 60 80 100 120

Diabetic & Non-Diabetic By Age Group

- 20-30: 90
- 31-40: 76
- 41-50: 64
- 51-60: 31
- 61-70: 7
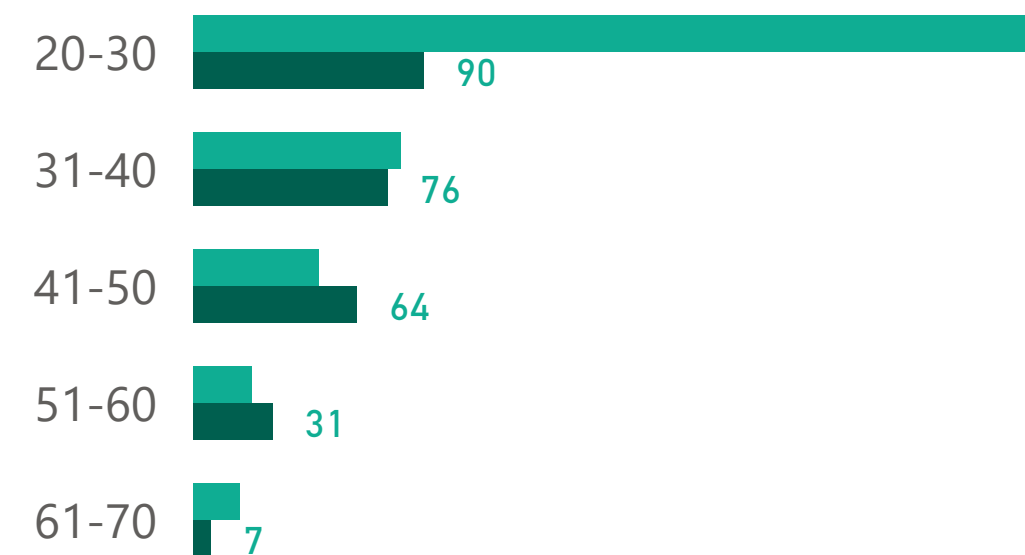
Is Diabeti... ● Non-Diabetic ● Diabetic

N-DB,DB Count by Insulin (groups)

- 0: 373 | 235 | 138
- High: 243 | 132 | 111
- Moderate: 140 | 123
- Low
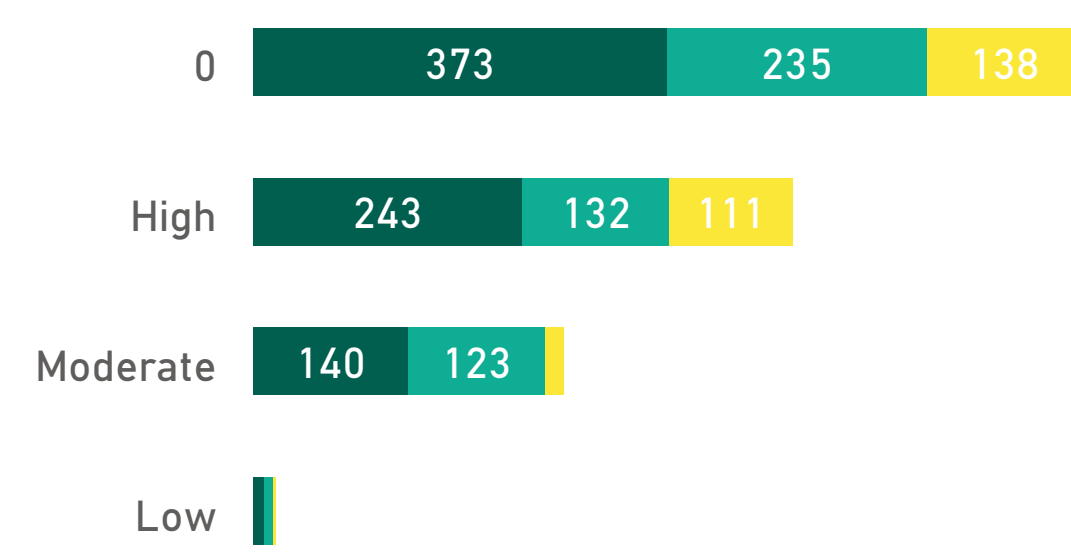
● Total Patients ● Non_Diabetic Count ● Diabetic Count

Total Patient By Glucose and Age group

40-99   100-125   126-200
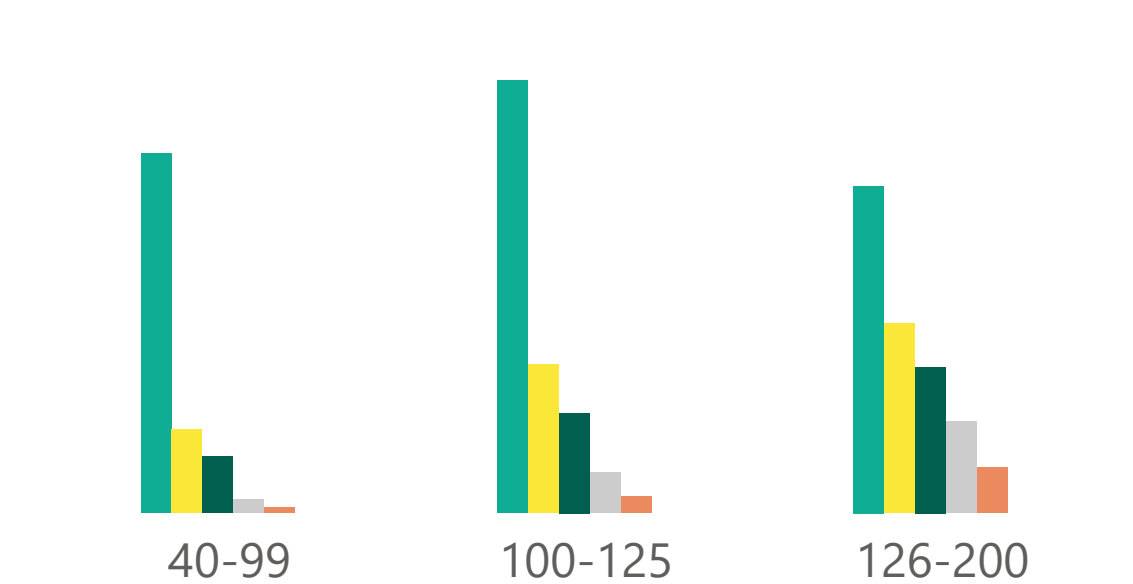
Age group ● 20-30 ● 31-40 ● 41-50 ● 51-60 ● 61-70

Total Patients Distribution
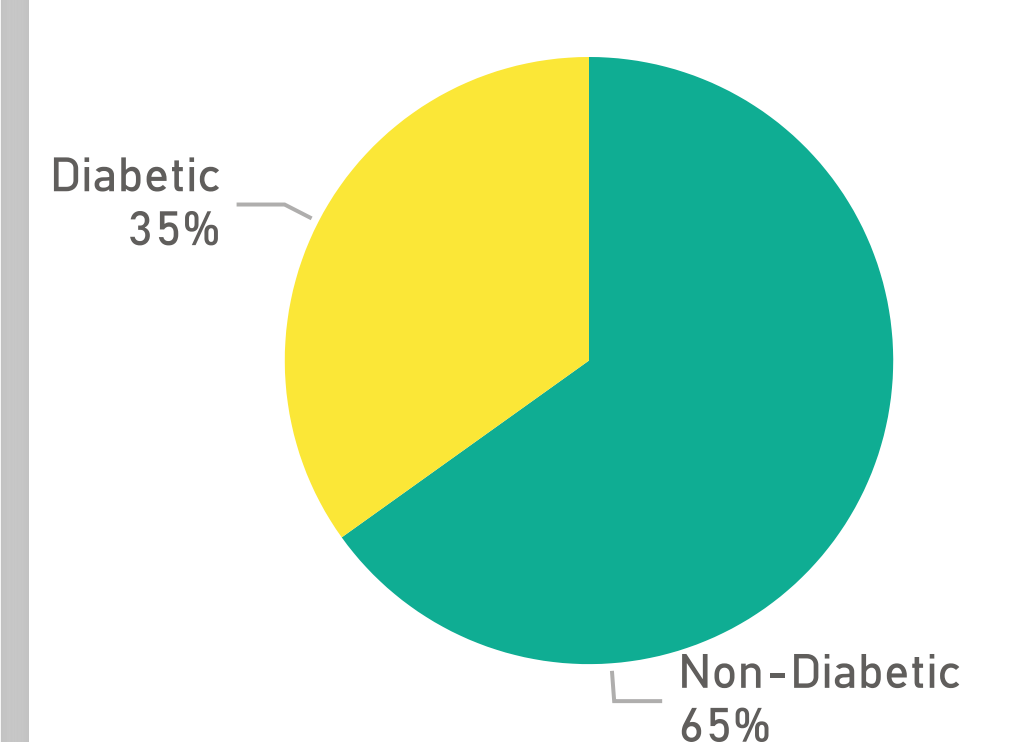
Diabetic 35%
Non-Diabetic 65%

DIABETES PREDICTION ANALYSIS

768	268	500	33.18	122.30	80	29.15
Total Patients	Diabetic Count	Non_Diabetic Count	Average Age	AVG Glucose-level	Average insulin	Average Skinn Thickness

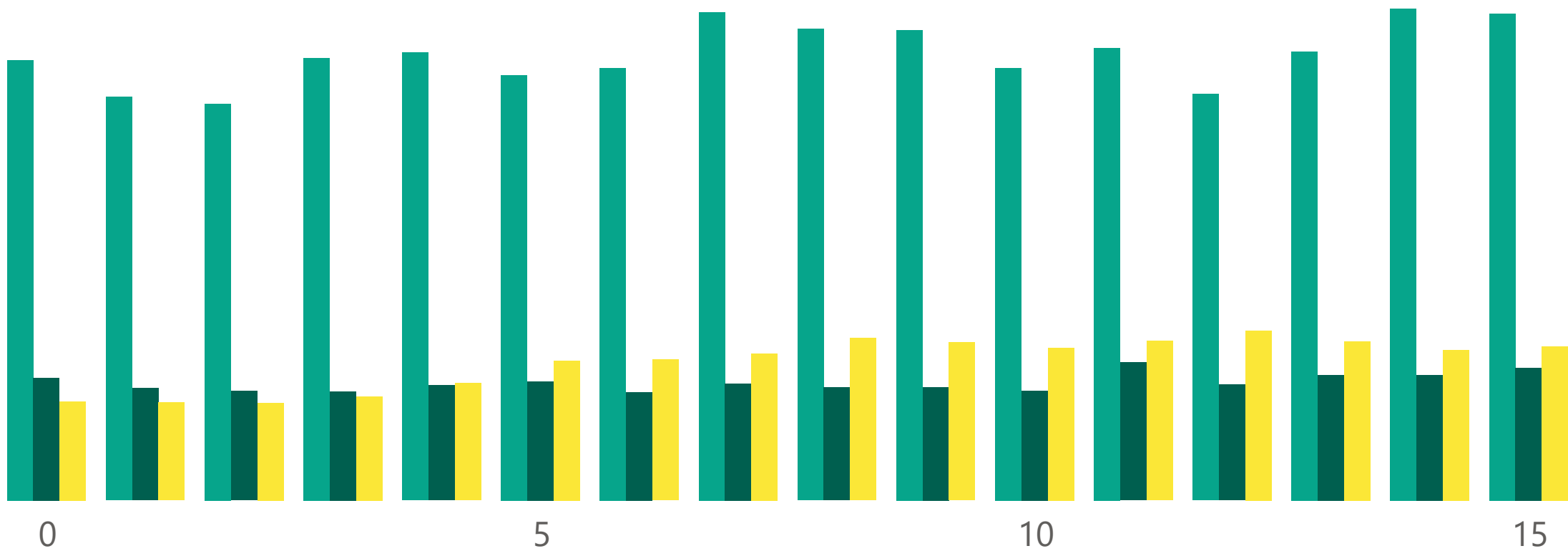## Average Skinn Thickness by Age group and Is Diabetic ?

20-30 31-40 41-50 51-60 61-70
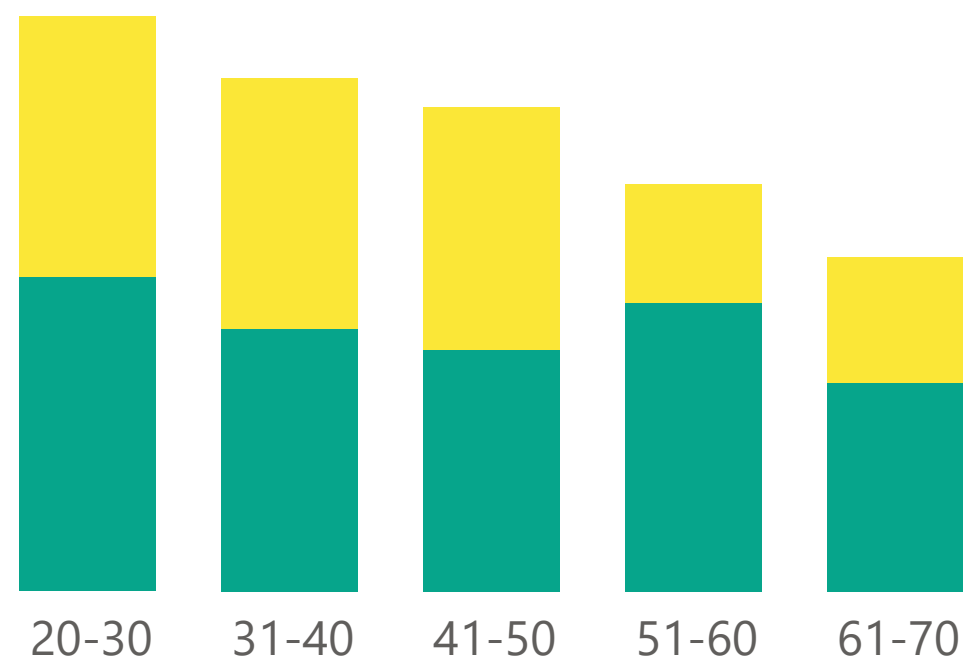
AVG Insulin By Age
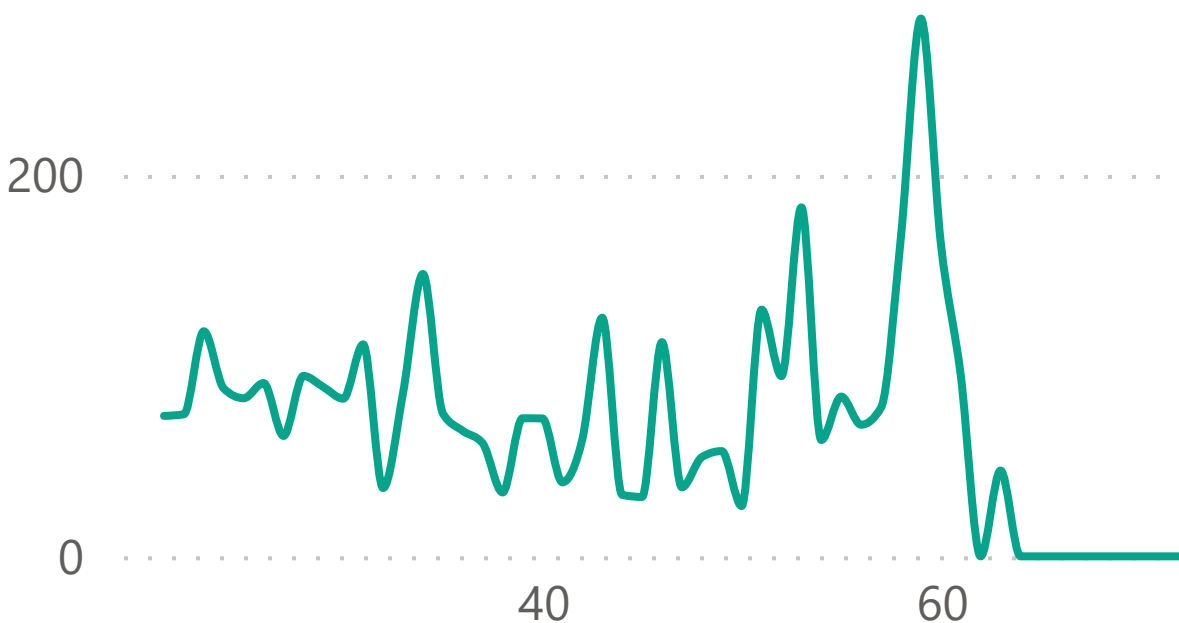
AVG Glucose, Avg BMI, Avg Age by Pregnancies

0   5   10   15

🔒 **Is Diabetic ?**
Diabetic

🔒 **Age group**
20-30

🔒 **BMI (groups)**
Obese

Glucose group ✕
126-200

Insulin (groups) ✕

Total Patients 768	Non-Diabetic 500	20-30 90	Obese 77	126-200 52	High 29
	Diabetic 268	31-40 76	Overweight 11	100-125 19	0 21
		41-50 64	Normal weight 1	40-99 6	Low 1

Total Patients by DPF (groups)

High Risk 6%

Moderat... 29%

Low Risk 65%
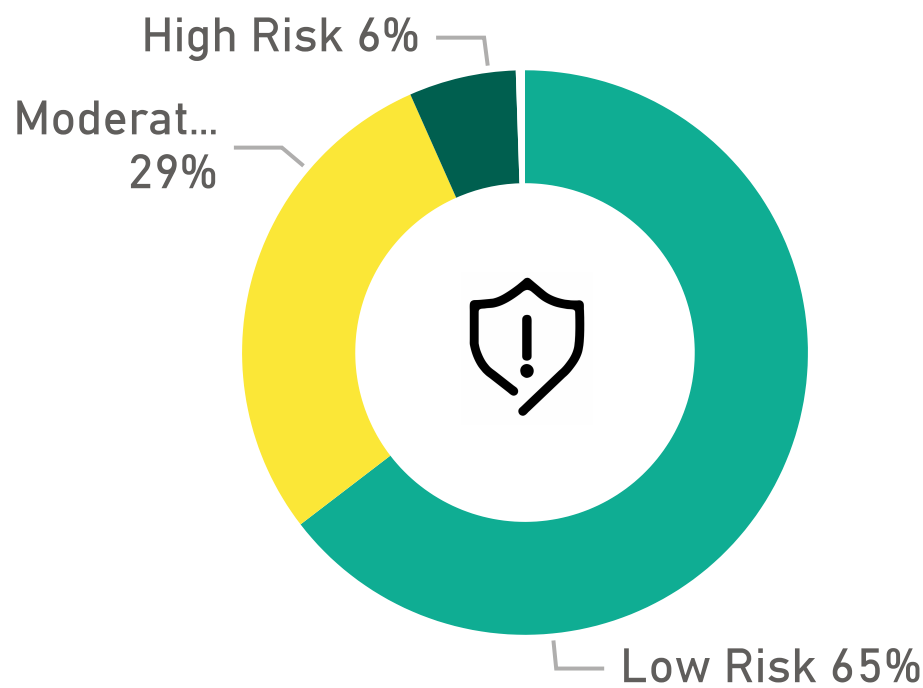
INSIGHTS

➡️ Out of a total of 2,954 pregnancies, 44% (1,304) were diagnosed as diabetic, while the remaining 56% (1,650) were categorized as non-diabetic.

➡️ Among the 768 individuals surveyed, it was found that 268 of them were suffering from diabetes. Additionally, within this group, 219 patients were classified as obese, with a BMI exceeding 30, while 34 patients were identified as overweight, with a BMI ranging from 25 to 30.

➡️ In the survey of 768 individuals, 268 of whom were diabetic patients, it was observed that 167 had a diastolic blood pressure reading within the healthy range of 50-80 mm Hg, while 77 fell within the range of 80-120 mm Hg, and 24 exhibited a diastolic blood pressure below the recommended healthy threshold of 50 mm Hg.

➡️ A notable observation in the study is that the majority of diabetic women are within the age range of 20-60. Among this group, 90 women fall within the 20-30 age bracket, 76 are in the 30-40 age range, 64 belong to the 40-50 age category, and 31 are situated in the 50-60 age group.

➡️ In the diabetic patient group, 138 individuals showed an insulin reading of 0 mu U/ml, often linked to type 1 diabetes, where the immune system damages insulin-producing cells.
Also, 111 diabetic patients had high insulin levels (>105 mu U/ml), while 17 had moderate levels (<100 mu U/ml). These varied insulin profiles provide insights into diabetes management.

➡️ The majority of diabetic patients exhibit plasma glucose concentrations between 126 and 200 mg/dL during a 2-hour oral glucose tolerance test.

➡️ The majority of diabetic patients typically exhibit an average skin thickness ranging from 16.71 mm to 25.22 mm.

➡️ A majority of patients, specifically 65%, fall within the low-risk category based on the Pedigree Function group, falling between values greater than 0.1 and less than 0.5. Additionally, 29% of patients are classified as being at moderate risk, with values ranging from greater than 0.5 to less than 1. Only a smaller subset, comprising 6% of patients, are positioned in the high-risk category, characterized by Pedigree Function values exceeding 1.