# Vital Signs & Pregnancy: A Data-Driven Risk Assessment Dashboard

RiskLevel

Record Count 452

Avg. Age of Popula...

Avg. Age 29.19

Highest Glucose le...

BS(mmol/L)

Risk Level

Riskl evel

high risk

Heart rate(bpm)

Heart rate(bpm)

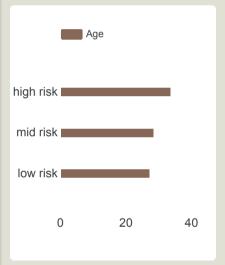
73.95

#### **INSIGHTS:**

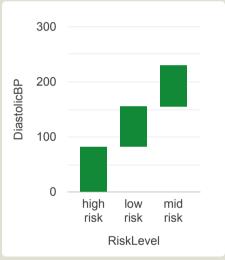
- 1. Blood Pressure (BP) both systolic and diastolic blood pressure values rise with increasing risk. Meaning that high-risk pregnancies show high systolic BP, often a warning sign of preeclampsia. Diastolic BP on the other hand increases progressively from low to high risk, reinforcing the role of hypertension in maternal risk classification. Blood pressure values offer a clear diagnostic path for early detection and monitoring of hypertensive disorders.
- 2. Blood Sugar (Glucose) Patterns: The highest recorded blood sugar level is 19 mmol/L, a strong outlier indicative of possible gestational diabetes. It is important to note that blood sugar levels vary significantly across risk categories: Mid-risk show the highest cumulative blood sugar levels. Low-risk maintains moderate glucose levels. High-risk exhibit elevated but relatively lower summed values compared to mid-risk.
- 3. Heart Rate: The average heart rate among participants is 73.95 bpm. While heart rate variations across risk levels are not extreme, high-risk pregnancies trend slightly higher, potentially reflecting elevated cardiovascular strain.
- 4. Age and Risk Level: The average age across the dataset is about 29 years. High-risk pregnancies are more prevalent among older women compared to mid and low-risk groups. Age appears to play a subtle but notable role in risk stratification, suggesting potential age-related vulnerabilities.

Conclusion: This dashboard uncovers actionable insights that connect physiological metrics with pregnancy risk levels: High blood pressure (both systolic and diastolic) is a critical risk signal. Blood glucose monitoring is essential for identifying and managing gestational diabetes. Age and heart rate, while less pronounced, also show meaningful trends trends that may influence maternal risk classification.

# Age vs RiskLevel



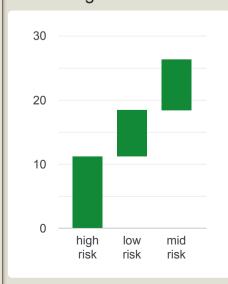
### Diastolic BP vs Risk Lev...



#### Systolic BP vs Risk Level



# Blood Sugar vs RiskLevel



# Heart Rate by RiskLevel

