Introduction
- Type 2 Diabetes (T2D) affects 462 million people globally.
- Female patients and patients from minority races reportedly receive lower quality treatment and attain less treatment targets in European countries and the United States.

Objective of the Study
1) Analyze disparities in treatment and treatment outcomes based on race and sex among Malaysian patients with T2D.
2) Identify characteristics for more accurate diagnosis of patients with early-onset T2D.

Methods
- Compare the effectiveness of treatment therapies on important biometric signs.
- Quantify the alignment of treatment methods with clinical guidelines.
- Develop a predictive model to classify early-onset vs. late-onset T2D.

Results
Analysis by sex
- At baseline, females:
  - Had more central obesity.
  - Had higher risk of blood disorders.
  - Had a greater prevalence of high total cholesterol, triglycerides, and non-HDL cholesterol.
- During treatment, females:
  - Were less likely to attain target LDL-C levels.
  - Had equivalent alignment of treatment therapies with ADA/AHA clinical guidelines.

Analysis by race
- Minority races are less likely to be prescribed the correct intensity of statin medication therapy as outlined by ADA/AHA clinical guidelines.
  - Melayu = 41.3%
  - Chinese = 28.9%
  - Indian = 37.9%

Percentage of Population Attaining Target LDL-C Level by Sex

Discussion
- Treatment therapies must be sex-based in order to address varying responses to medications.
- Medical providers must be educated on racial bias to inform treatment.
- Baseline HbA1C, blood pressure, and LDL-C levels can be used to classify patients with early-onset T2D.

Questions
- What treatment therapies and approaches are more effective for treating female T2D patients?
- How does clinician-patient interactions differ between patients of different races?

Conclusion
- Treatment and treatment outcomes for T2D vary based on race, sex, and disease onset. It is important to develop treatment therapies that are specific to patients to ensure the best outcomes.

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