

THE PREVALENCE OF GESTATIONAL DIABETES MELLITUS IN HISPANIC WOMEN OF PUERTO RICO: A COMPREHENSIVE STUDY



Keyla Bordonada, MD¹; Liana Cortes, MD¹; Xayisnalie Martinez, MD¹; Rodrigo Diaz, MD¹

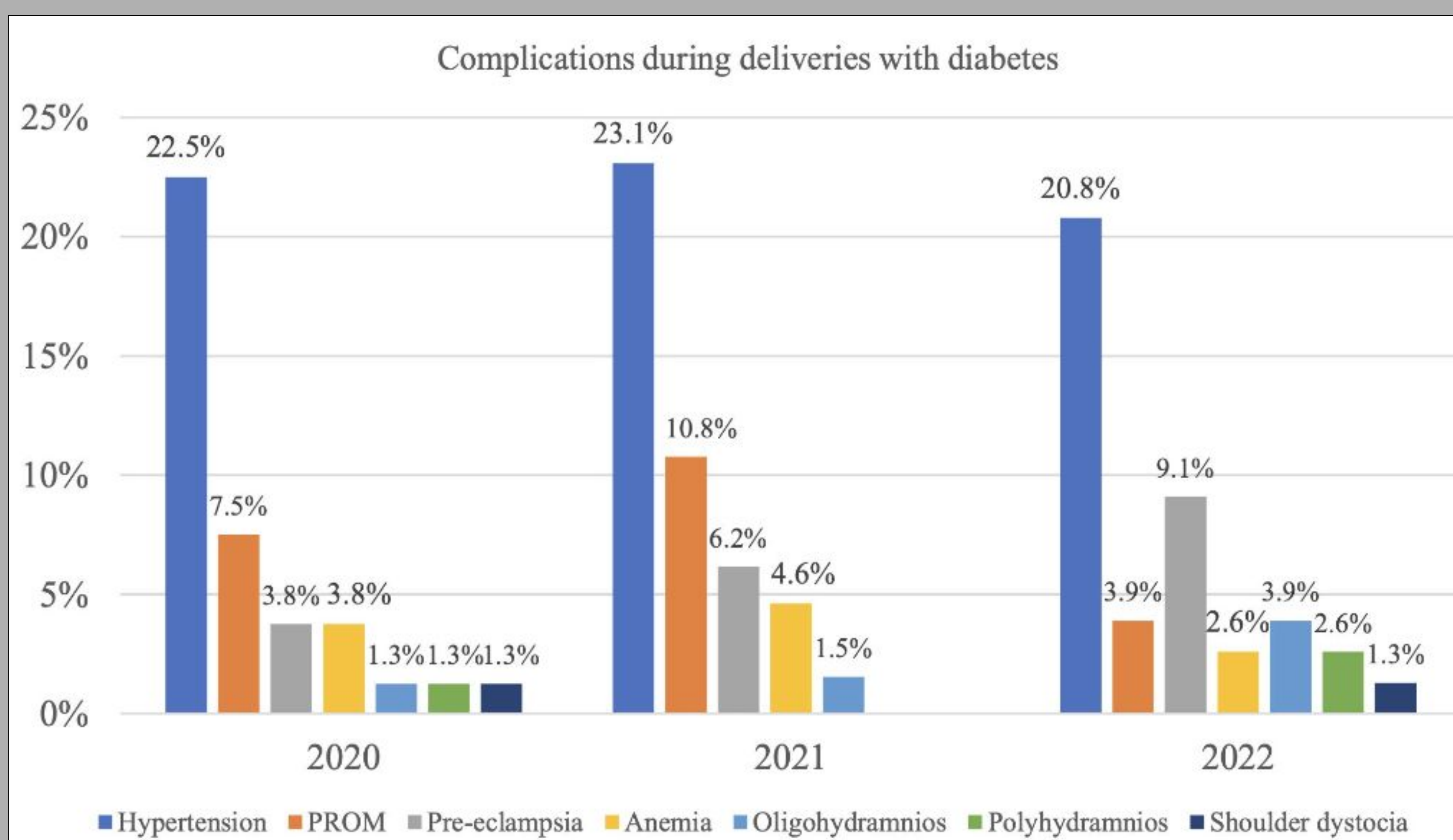
Department of Obstetric and Gynecology, San Juan City Hospital ¹

Introduction

Gestational Diabetes Mellitus (GDM) stands out as one of the most prevalent complications during pregnancy, affecting 1% - 14% of pregnancies in the USA, increasing the risk of developing Type 2 Diabetes Mellitus (T2DM) within five years post-delivery, Latin American women, particularly showing a higher risk of 60%. The latest available data from Puerto Rico in 2001, reported a GDM prevalence of 2%, with notable complications during delivery including macrosomia (14%) and pre-eclampsia (6.4%). We aim to evaluate the prevalence of GDM in Puerto Rican women, emphasizing demographic characteristics, common risk factors, and maternal outcomes.

Methods

Retrospective, cross-sectional study. Data will be collected from hospital medical records.

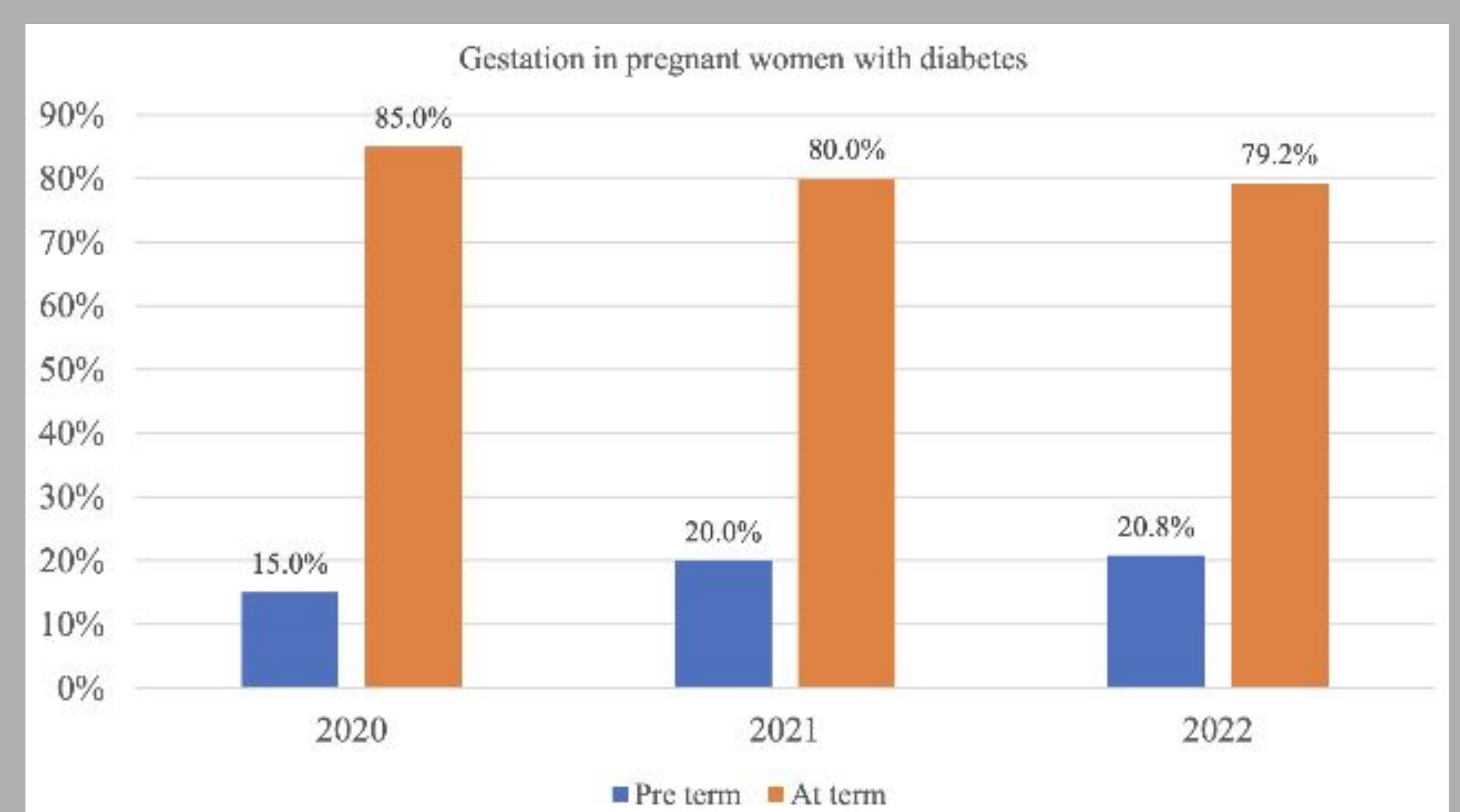
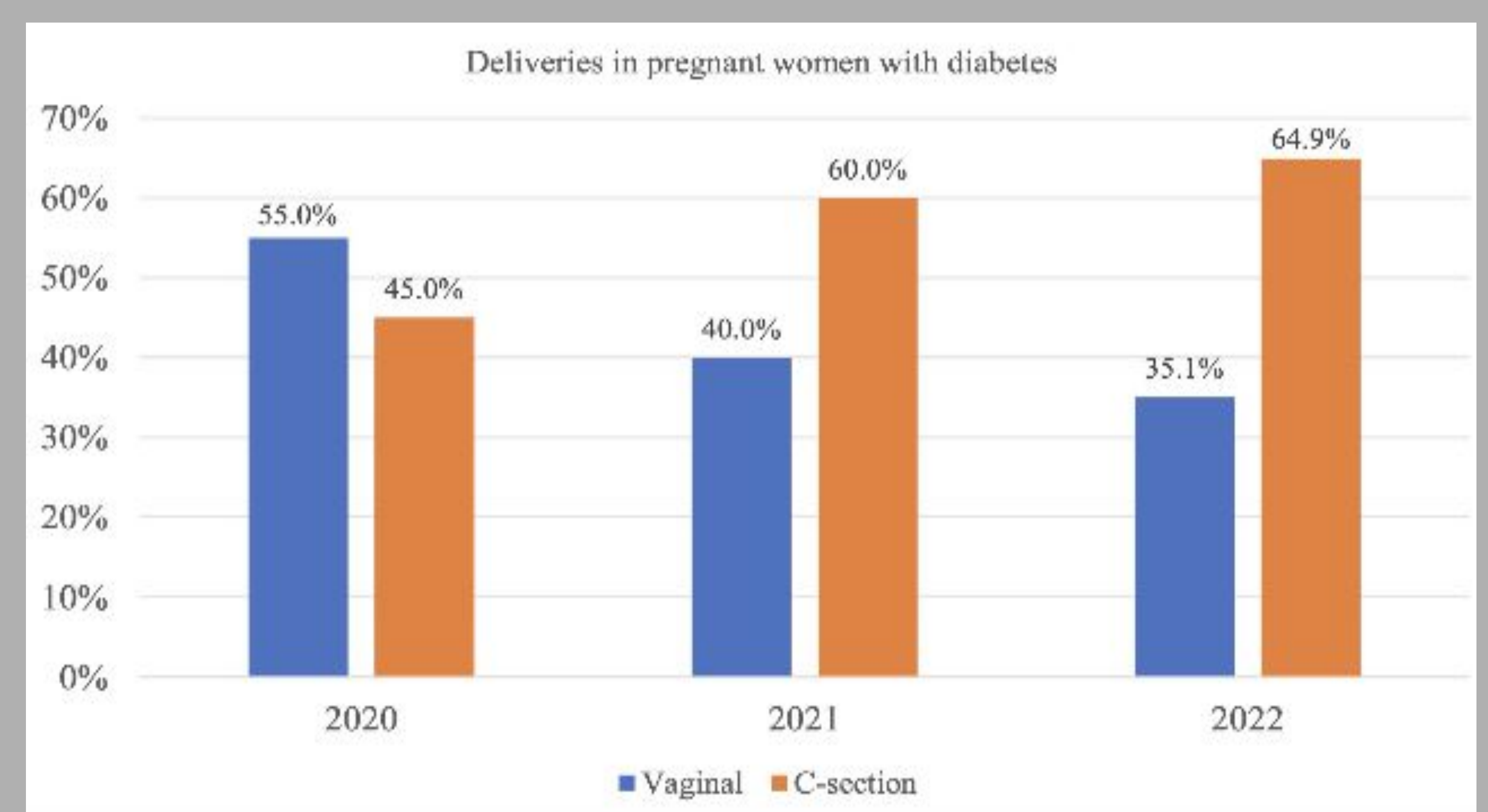


| YEAR | CESAREAN | VAGINAL | TOTAL DELIVERIES |
|------|----------|---------|------------------|
| 2020 | 482 | 723 | 1,205 |
| 2021 | 582 | 771 | 1353 |
| 2022 | 684 | 763 | 1447 |

| YEAR | CESAREAN | VAGINAL | TOTAL DELIVERIES DIAGNOSIS OF GDM |
|------|-----------|-----------|-----------------------------------|
| 2020 | 36 (3.0%) | 44 (3.7%) | 80 (6.6%) |
| 2021 | 39 (2.9%) | 26 (1.9%) | 65 (4.8%) |
| 2022 | 50 (3.5%) | 27 (1.9%) | 77 (5.3%) |

Results

- Study analyzes 222 women diagnosed with GDM.
- Results showed that vaginal delivery rate has decreased from 2020 to 2022, 55% to 35.1% respectively.
- Average BMI was 34 in 2022, increasing C-section rate. 20.8% of the women with GDM present with preterm deliveries within 2022.
- Prevalence has decreased over time: 2020 (6.6%), 2021 (4.8%) and 2022 (5.3%).
- Most common complication in 2022 during the pregnancy was Hypertension (20.8%) and Pre-eclampsia (9.1%)



Conclusion

The occurrence of GDM has increase over time, associated with short and long-term effects on the mother and the baby. Hispanic population faces an elevated risk due to ethnicity and incidence of overweight. Recognizing these factors, understanding pregnancy outcomes, and determining prevalence are crucial for implementing appropriate medical management and enhancing the overall quality of life.

IRB APPROVAL: 00002788