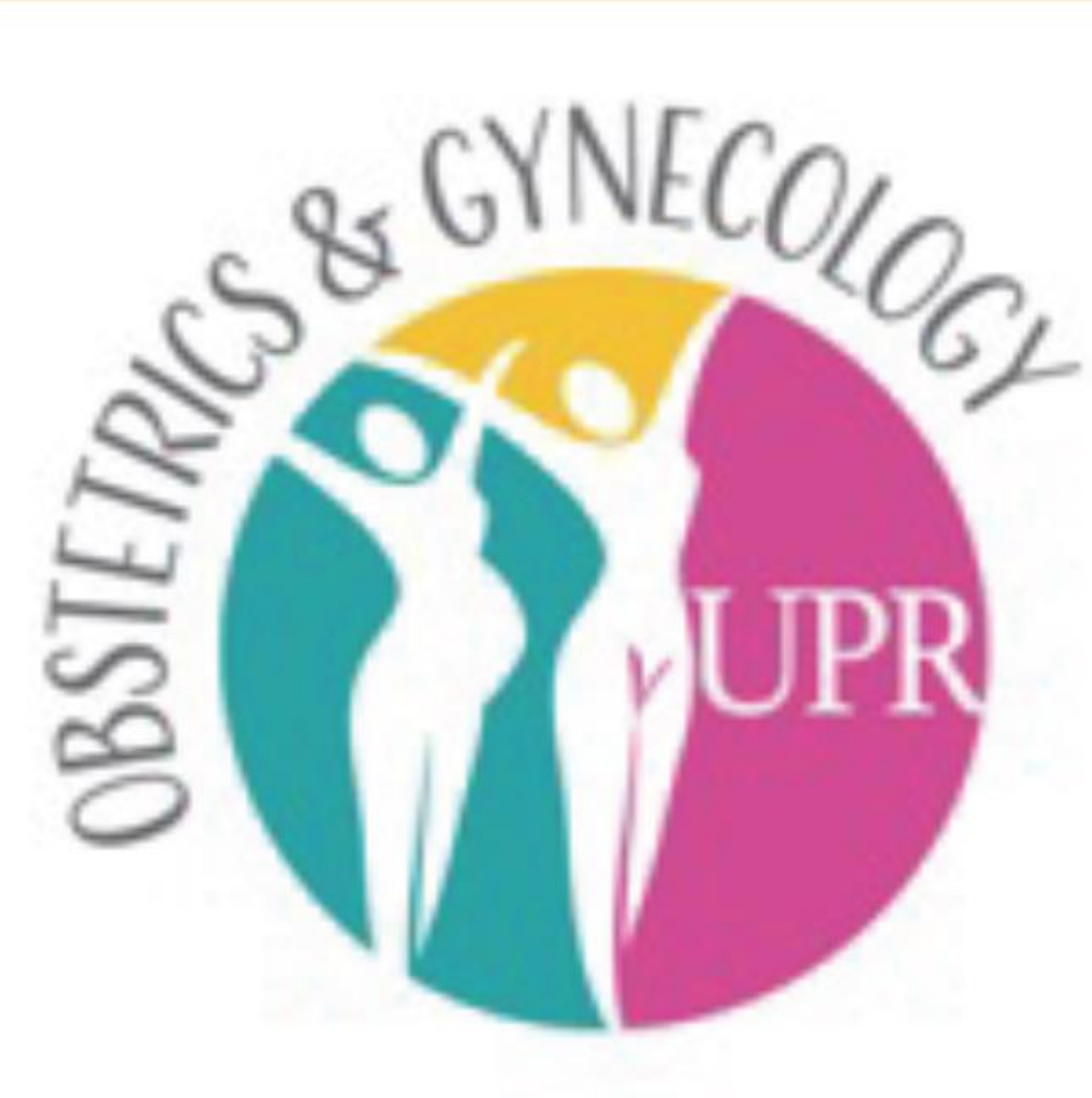




The impact of hypertensive disorders in pregnancy on maternal and neonatal outcomes in a Hispanic population isuog2025.0050015

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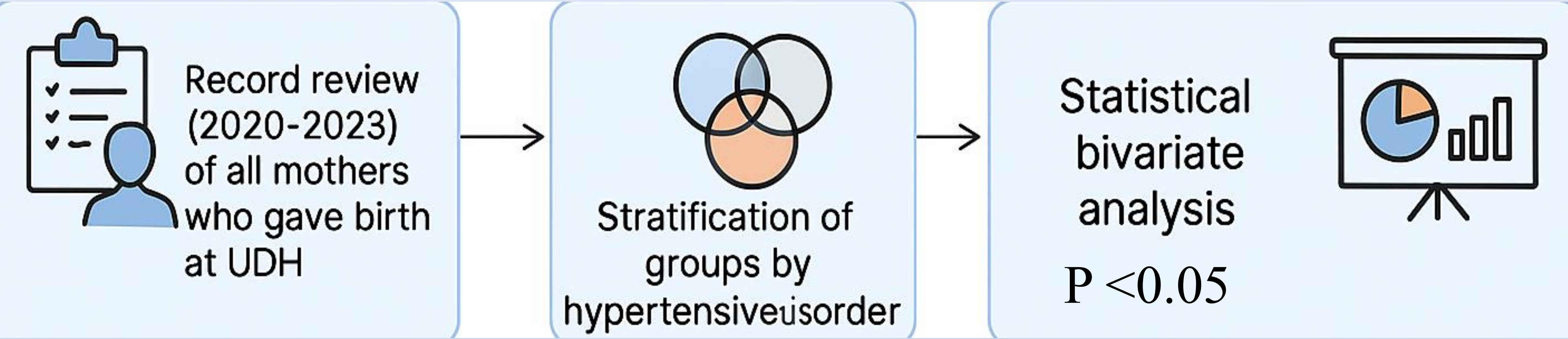
Introduction

- Hypertensive disorders in pregnancy (HDP)—including gestational hypertension, preeclampsia, superimposed preeclampsia, and chronic hypertension—are major contributors to adverse perinatal outcomes, particularly low birth weight and small for gestational age (SGA) infants, largely due to impaired uteroplacental perfusion. Preeclampsia exerts the greatest impact on fetal growth, with severe cases linked to markedly smaller abdominal circumference, while chronic and gestational hypertension also increase risks for preterm birth, neonatal morbidity, and SGA.
- Although these associations are well established, data in Hispanic populations remain scarce despite higher HDP prevalence. In one large study, any hypertension during pregnancy increased the risk for SGA (RR 1.6) and stillbirth (RR 1.4), with both mild and severe forms contributing to growth restriction.
- These findings highlight the need for early detection and targeted management strategies to improve outcomes in high-risk populations.

Objectives:

- Describe the clinical profile and outcomes of SGA neonates and their mothers in this Hispanic population using bivariate statistical tests.
- Analyze the effect of maternal hypertension in the pregnancy clinical profile of these mothers using bivariate statistical tests.
- Assess the contribution of maternal hypertension in explaining neonatal outcomes while considering other pregnancy associated factors using multiple logistic regression analysis.

Methods:



Results:

Table 1: General demographic data observed.

Variable (n=278)	Mean	SD or Percentage
BMI	33	8.68
Maternal Age	28	6.14
Obesity (Class I-III)	162	--
Diabetes type 2	21	--
Preterm Premature Rupture of Membranes	18	6.47
Antenatal steroids administered	22	7.91
Type of Delivery	N=278	
Vaginal Delivery	99	
Assisted Vaginal Delivery	24	
Cesarean section	155	
Fetal Data	Frequency	Percentage
Weeks of Gestation	37.9	2.81
Apgar score 1 minute	7.52	1.37
Apgar score 5 minutes	8.56	1.22
Apgar score 10 minutes	6.91	1.78
Weight (grams)	3095	684.76
Small for Gestational Age	8	3.09

Graph 1: Tendencies of fetal weight at birth when compared with gestational age.

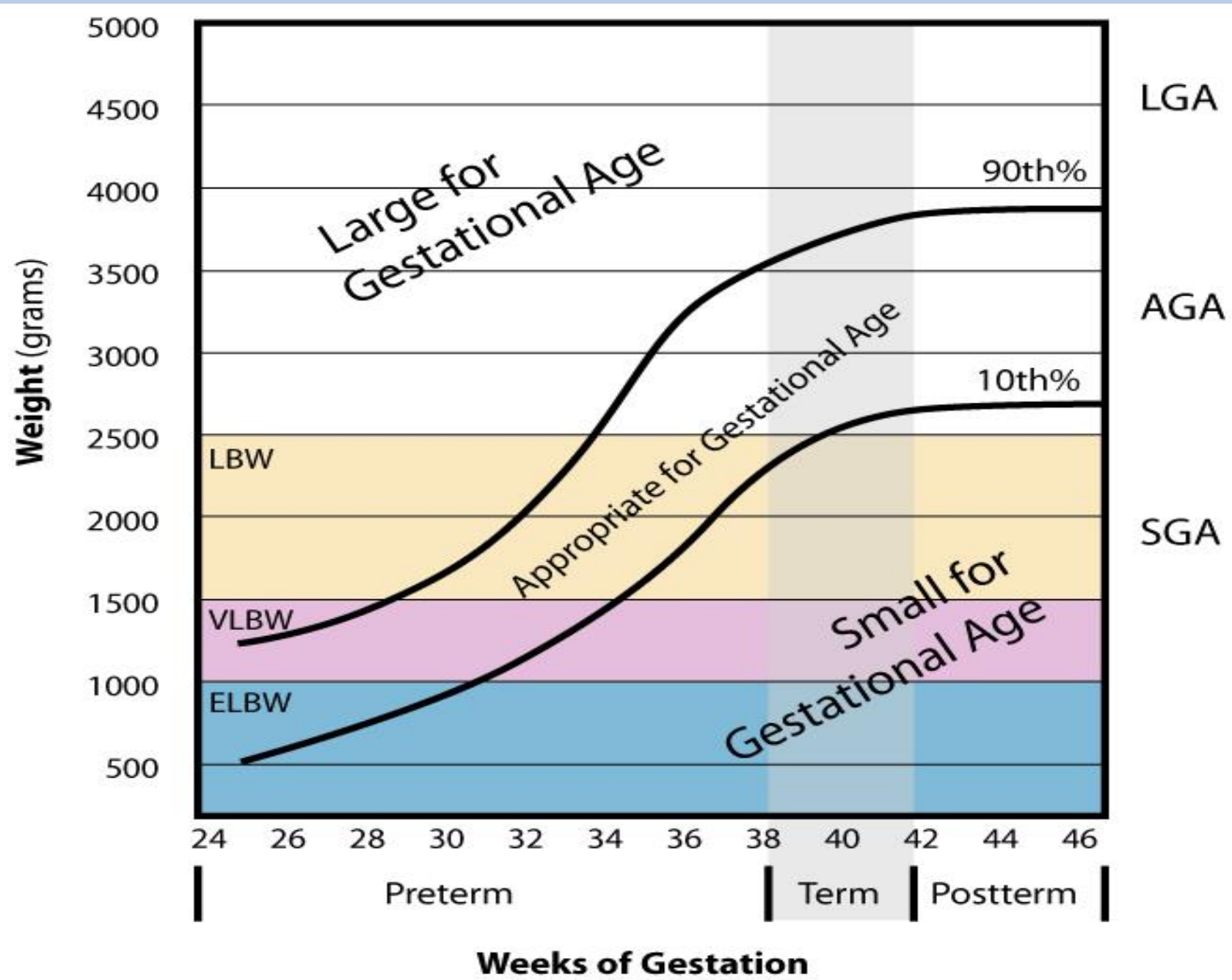


Table 2: Relationship between SGA and HTN

HTN	No SGA (<10%)	Yes SGA (<10%)
No	152	2
Yes	99	6
Total	251	8

Discussion and Conclusions:

- Maternal BMI was significantly associated with hypertension, but no link was found between gestational diabetes and hypertensive disorders.
- Hypertension did not increase the likelihood of cesarean delivery.
- No significant association was found between hypertension and intrauterine growth restriction, though a marginal link was observed with small-for-gestational-age neonates.
- These findings highlight the importance of tailored management strategies to optimize maternal and neonatal health.

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