



Pregnancy Induced Hypertension

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ABSTRACT

Objective: To observe the prevalence and the incidence of pregnancy induced hypertension within the community setting.

Study Design: The community health project was conducted at Union Community Health Center, located in Bronx, NY. Prospectively collected data in the four case studies that were analyzed, one was chosen.

Results: It was observed that PIH has a higher risk with the Hispanic community. The Hispanic women displayed either family history of hypertension or was diagnosed with hypertension.

Conclusion: Women with PIH have higher rates of Intrauterine Growth Restriction and lower rates of newborn respiratory distress syndrome. It was proven that PIH is associated with hematologic complications such as leukopenia.

INTRODUCTION

In the Union Community Health Center, the demographics of the area consisted highly of Hispanic population. It was observed that there was evidence of low-income families in the community. Due to their low-income demographic, most families lacks accessibility to healthy food options and proper health care facilities. Which can cause conditions like Pregnancy induced hypertension (PIH), which negatively affects the infant and mother. Their should be an increase of patient education to prevent any conditions that patients may be at risk for.

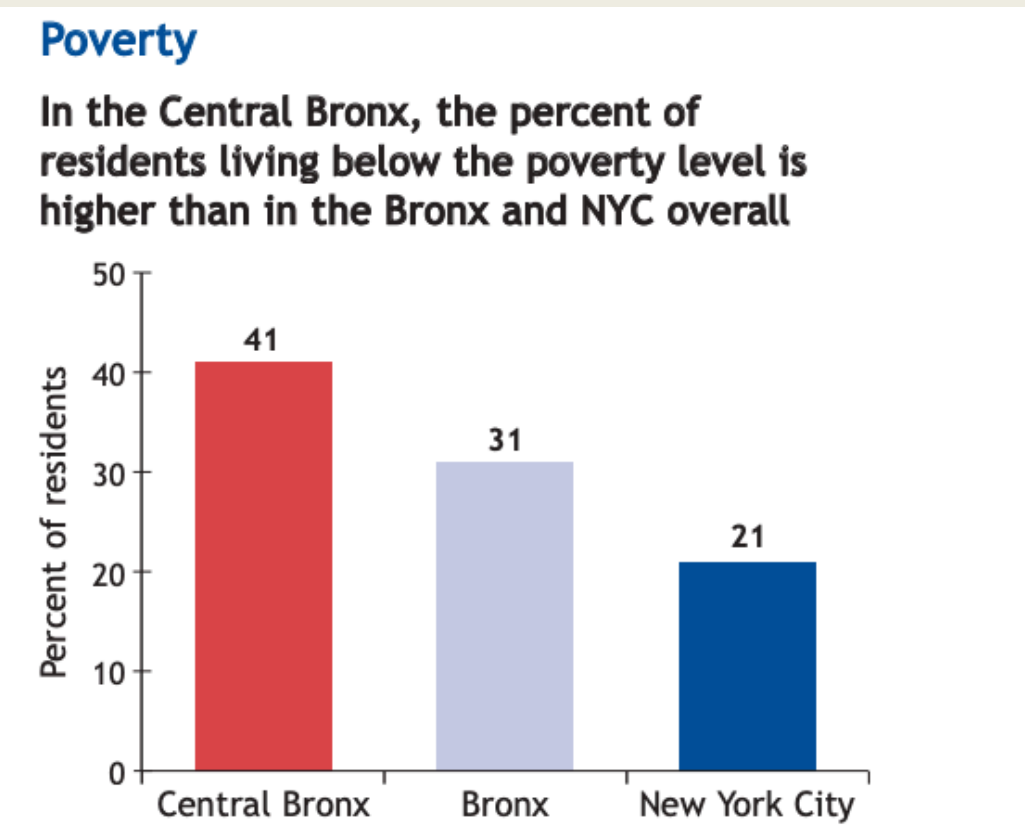


Chart 2. Percentage of Poverty in the Bronx and NYC

METHODS AND MATERIALS

The study on pregnancy-induced hypertension was conducted in Union Community Health Clinic, based on one of the four case studies.

Mothers with pregnancy-induced hypertension may exhibit conditions that impact both the mom and newborn.

The case study consisted of a 37 years old, predominantly Spanish speaking, pregnant women whom is six months pregnant (her first pregnancy) with a high blood pressure reading of 160/110.

- No history of hypertension nor take any medications for it.
- Swollen feet
- Crackles heard
- Shortness of breath
- Lab results:
 - Creatinine level 0.2 mg/dL and total bilirubin level 1.8 mg/dL.
 - Can indicate damage to the liver, possible risk for preeclampsia.

RESULTS

Based on the case study that was chosen, the prevalence of PIH in the community showed it has been increasing over time.

Risk factors:

- A family history of Pegnancy-induced hypertension
- gestational age
- Chronic kidney disease.

PIH can cause:

- Higher rates of Intrauterine Growth Restriction
- Lower rates of Newborn Respiratory Distress Syndrome (NRDS).
- PIH is associated with hematologic complications such as Leukopenia.

According to the literature review, the safest way to handle PIH would be to schedule an early delivery due to the high risk of complications.

In comparison, the case study was inconclusive in that the patient we observed because it was her first pregnancy and unable to determine the effect on the newborn. Although the patient displayed signs of pregnancy induced hypertension, it's effect on the mother and newborn has yet to be determined.

Figure 24. Severe Maternal Morbidity by Chronic Condition, New York City, 2008–2012

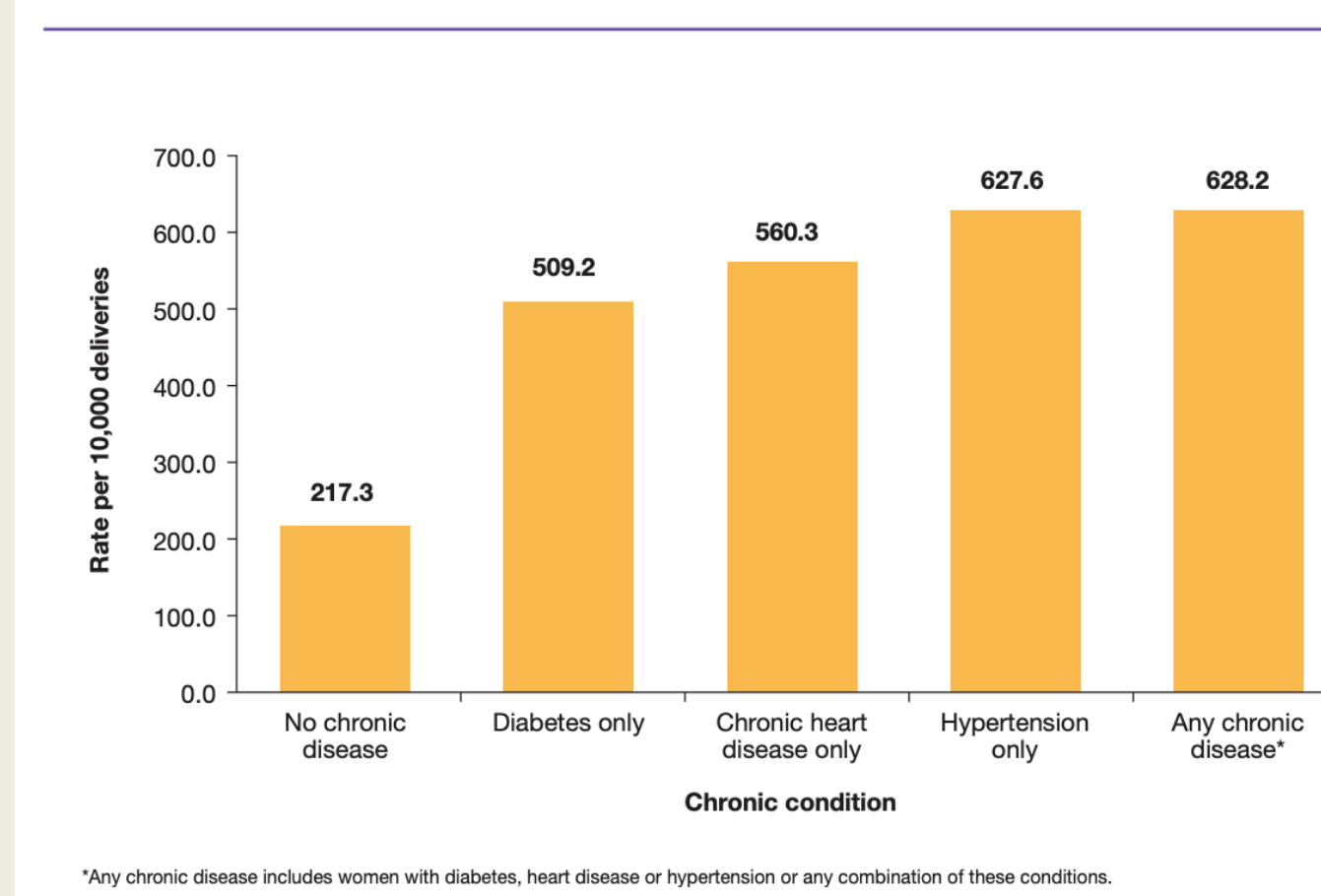


Chart 1. Severe Maternal Morbidity Rates within Women in the community.



DISCUSSION

It was found that patient health teaching was extremely important, because when by providing education it can prevent the condition. According to the literature review, they emphasized on the importance of a healthy lifestyle to control and prevent pregnancy induced hypertension, rather than a pharmacological intervention.

Diet modification education include:

- Decreasing salt intake
- Increasing water intake and avoiding beverages with caffeine.
- Regular exercise during pregnancy, preventing excessive gestational weight gain.

CONCLUSIONS

These studies showed importance of identifying women who are at high risk of developing PIH and the case study consisted of a patient with her first pregnancy with high blood pressure, resulting in risk of preeclampsia.

Related to the article, preeclampsia can inhibit the growth of the fetus, placental abruption, seizures, and death for both the mother and fetus.

In conclusion, it is essential to educate the patients with signs and symptoms of PIH. Therefore, an early diagnosis and form of treatment is a key factor to preventing an increase of morbidity in neonatal in preterm births.

Health teachings were conducted through a brochure that consisted of risk factors, preventative measures and teaching of lifestyle modifications for pregnant mothers at risk for PIH.

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