HEALTH IMPACTS OF GESTATIONAL DIABETES: RISK FACTORS AND OPPORTUNITIES FOR INTERVENTION
By: Ama Boadu

Background
Gestational Diabetes Mellitus (GDM) is a condition in which blood sugar levels are high during pregnancy. The prevalence of this disease has increased in the recent decades. The estimated prevalence for gestational diabetes in the United States is 6-9%. Gestational diabetes can harm both the mother and the baby when left untreated. More than 70% of women with a history of GDM go on to develop Type 2 Diabetes after pregnancy. Even though treatment for this disease is available, not every woman has equal access to the treatments.

Objectives
- Apply to Social Ecological Framework to examine underlying factors associated with increased risk of GDM.
- Discuss the long-term consequences of untreated GDM.
- Identify interventions to manage GDM.

Methods
A literature review was conducted to analyze:
- The underlying factors associated with increased risk for GDM.
- The long-term consequences of untreated GDM.

35 articles were selected from the following websites:
1. Pub Med
2. American College of Obstetrics and Gynecology
3. American Diabetes Association
4. Wiley online Library
5. Cochrane Library
6. BMJ

Filter features used to look for the articles
- 5-year timeframe articles (2016-2021)

Results
- Women with a history of GDM have a 7-fold higher risk of being diagnosed with Type 2 Diabetes compared to women without GDM. The risk of developing Type 2 Diabetes after GDM is significantly higher in the minority population (Black and Hispanic women).
- Pre-term birth, independent of gestational diabetes, can lead to an increased risk of Type 2 Diabetes.
- Immigrants have a higher risk of developing GDM compared to U.S. born women.
- Successful programs/interventions for GDM at all 5 socio-ecological levels include Efficient health systems intervention, Lifestyle Programs, Social Determinants of Health program, and Medicaid Expansion.

Discussion/Conclusion
Strengths
1. Large Sample Sizes
2. Diverse Populations
3. Robust Study Designs
4. Lack of Dropouts

Limitations
1. Data from Birth Certificates and Self Reports
2. Retrospective studies lead to recall and measurement bias
3. Most GDM interventions don’t have a psychosocial component.

Future Implications
- More research on gestational diabetes for black and immigrant women
- More research on the effectiveness of the psychosocial component of GDM interventions
- In policy, increase Medicaid reimbursement rates

References

Public Policy
Voluntary Medicaid Expansion

Community
Lack of Healthy food/exercise spots, Poor Housing and Transportation

Organizational
Lack of Postpartum Screening, Unclear Screening Recommendations

Interpersonal
Social Support for women with GDM

Individual
Advanced Maternal age, Family History of Diabetes, History of GDM, Impaired Glucose Tolerance

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