WIC Protects Against Excessive Gestational Weight Gain

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Background

- Obesity is a growing concern and has significant consequences for pregnant women such as gestational diabetes and excessive gestational weight gain. (Endres et al., 2015)
- Gestational weight gain is the amount of weight gained during pregnancy and plays a crucial role in the health of both the mother and child (Hao et al., 2022).
- Addressing the unique challenges of low-income families, including food insecurity and limited access to education, is crucial for understanding how interventions like the WIC program can bridge the gaps, enabling these families to adopt healthier lifestyles and secure better opportunities for themselves and their children (Koleilat et al., 2017).
- The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a federal assistance program aimed at providing nutrition education, supplemental foods, and healthcare referrals to low-income pregnant women and their children.

Purpose

- To conduct a comprehensive literature review on the impact of the WIC program on excessive gestational weight gain (GWG).

Methods

Literature Review

Databases used: CINAHL Complete, PubMed, Google Scholar.

Search terms used: WIC, Women Infants and Children, Gestational Weight Gain, GWG, maternal education, and pre-pregnancy BMI.

Searches were conducted in English, limited to human studies, and focused on recent (within 10 years) peer-reviewed articles.

Articles were also identified through hand-searching and reviewing reference lists of relevant papers.

Inclusion criteria: studies using relevant variables related to WIC, GWG, maternal education, and pre-pregnancy BMI, targeting human populations, focusing on recent data, and being peer-reviewed.

Exclusion criteria: studies not meeting inclusion criteria, being more than 10 years old, having invalid results, or not focusing on GWG.

The study being based on was a retrospective cohort study that used The California Office of Statewide Health Planning and Development (OSHPD) Linked Birth File between 2007 and 2012

Results

- Total number of articles include found: 16
- Total number of articles excluded: 9
- Findings:

Pre-Pregnancy BMI and GWG

- High pre-pregnancy BMI and excessive GWG are associated with poorer cognitive outcomes in children (Abebe et al., Hao et al., 2022).
- Food insecurity is associated with higher pre-pregnancy BMI and excessive GWG, leading to complications like gestational diabetes, hypertension, and other adverse birth outcomes (Crandall et al., 2020).

Maternal Education and GWG

- Maternal education significantly influences GWG; Mothers with college degrees exhibit healthier GWG compared to those with high school education or less, indicating the significant influence of education levels on weight management during pregnancy (Cohen et al., 2016; Endres et al., 2015; Huynh et al., 2013).

WIC and GWG

- Increased access to fruits and vegetables through WIC benefits leads to improved pregnancy outcomes, including reduced risks of low birth weight and preterm birth (Wang et al., 2022).

Discussion

- This literature review has highlighted the importance of the WIC program in addressing various factors affecting gestational weight gain (GWG) and maternal and child health outcomes.

Lessons Learned

- Acquired experience in writing crucial components of a scientific article, such as abstract, discussion, and strengths and limitations sections.
- Enhanced critical thinking and evaluation skills through the examination of diverse study methodologies and findings.

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