

Evaluation of current nursing research about metabolic disease for perinatal care, and maternal and infant outcomes

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Objectives: The purpose of this study was twofold: 1) To evaluate nursing research and evidence that focuses on metabolic disease for perinatal care, and 2) To identify gaps in evidence that impact nursing care during perinatal timeframe.

Background: Maternity and infant outcomes in the U.S. too often include complications and safety events, e.g., infections, readmissions, and also maternal and infant mortality. Wisconsin's infant mortality rate is the highest in the nation, reported as 6.3 infant deaths per 1,000 live births. A multitude of factors impacts outcomes, including the rise of metabolic disease and the high complexity of care required. This study aims to investigate the research knowledge and evidence available about metabolic disease for nursing to implement in their practices.

Methods: A Pubmed search took place to assess the research available for nursing practice. The search strategy included the term "metabolic disease", identified research taking place within the past ten years, focused on pregnancy, and, specifically whether the perinatal period was included. Comparison searches, using the same search strategy, took place for "diabetes", "hypertension", and "obesity".

Results: A total of 581,856 manuscripts contained the term "metabolic disease" and 75% of the manuscripts were released within the past ten years. However, only 3.9% of the papers related to pregnancy and only 0.1% of these manuscripts addressed issues related to metabolic disease during the perinatal period. Similar statistics were found for topics focus on diabetes, hypertension, and obesity.

Conclusions/implications: Results indicate that minimal nursing research has focused on metabolic disease and its associated comorbidities for pregnancy and during the perinatal period. Despite the presence of many protocols and guidelines, the limited research focusing on nursing is concerning, giving the impact of metabolic disease on women and their infants. Gaps in evidence-based practices, due to lack of research, hamper proper implementation and monitoring of progress adopting best practices. The findings of this study indicate the need for further development of evidence that focuses on nursing care related to metabolic disease and its impact on maternal and infant outcomes.