

Perception of pregnancy risk among women with gestational diabetes and their partners: The impact of gender*

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Summary Gestational diabetes (GD) is a common complication of pregnancy, impacting 6-7% of pregnancies. While little is known about how women with GD perceive risk during pregnancy, no studies have been conducted regarding the partner's risk perception. There is a gap in gender-based pregnancy risk perception research.

1. Relevance

Empirical evidence demonstrates that risk perception influences behavioural change during pregnancy. Research also indicates that pregnant women diagnosed with GD require support to implement behavioural changes. The partner typically represents the woman's closest source of support, yet there is limited understanding of the partner's perceptions of risk related to GD.

2. Aims & Objectives

This study was designed to fill the knowledge gap in gender-based pregnancy risk perception research. **Quantitative Objectives:** Determine if there are differences in risk perception between women with GD and their male partners, and if there are gender-specific predictors of risk perception. **Qualitative Objectives:** Explore factors influencing risk perception, develop an understanding of how women and men perceive their roles in changing health behaviours and to identify gender-specific information and support needs.

3. Methods

The study used a sequential, mixed methods design, guided by a conceptual and theoretical framework. Participants were pregnant women with an index diagnosis of GD and their male partners, recruited from two Winnipeg hospitals. **Quantitative:** Participants (n=214, 107 couples) completed self-report questionnaires, including the Perception of Pregnancy Risk Questionnaire (PPRQ). Descriptive statistics, chi square, t tests, Pearson's r, and linear regression were used to analyse data. **Qualitative:** Interviews were conducted with 8 couples (n=16). Interview transcripts were analysed using content analysis.

4. Results

Women had significantly higher pregnancy risk perception scores (M 39.0 out of 100, SD 17.3) than men (M 33.6, SD16.6; paired t = 3.2; p =.002). There were unique predictors of risk perception. For women, perceived stress ($\beta = 0.32$, p = .001), and pre-pregnancy BMI ($\beta = 0.19$, p = .028) were significant predictors (adjusted R² =.288). For men, significant predictors were GD knowledge ($\beta = 0.24$, p = .010), anxiety ($\beta = 0.21$, p = .020), self-efficacy ($\beta = 0.17$, p = .045) and Winnipeg residence ($\beta = - 0.18$, p = .045) (adjusted R² =.302). Qualitative findings revealed that risk perception was shaped by factors such as simultaneously acknowledging GD risk while minimizing personal risk. Couples viewed differences in risk perceptions as related to personality characteristics, and not a function of gender. Couples felt that making changes together, and trusting in healthcare providers were helpful in making health behaviour changes. Couples agreed emotional support, prompt follow-up and personalized dietary plans were important in reducing risk perceptions.

5. Conclusions

As a disease of self-management, the efficacy of GD treatment is dependent on the woman's willingness to modify behaviour. Risk perceptions are an important element influencing efforts at behaviour change. Risk perception is a highly nuanced phenomenon. Understanding the thoughts, beliefs and attitudes of the woman's partner broadens understanding of the complex interplay of factors contributing to risk perception. Awareness of differential risk perceptions between genders may permit healthcare providers to develop specific tailored educational messages.

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