# Too Busy To Exercise: Examining Pregnant Women's Exercise Preferences

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#### BACKGROUND

- Gestational diabetes mellitus (GDM) is glucose intolerance first recognized during pregnancy.
- GDM is diagnosed between 24 and 28 weeks of pregnancy and affects 4-10% of pregnancies in the United States.

# Adverse Health Outcomes Associated with GDM

- Short Term Risks
- Large infant size
- Delivery complications associated with large infant size
- Long Term RisksChild at increased risk of obesity
- Both mother and child at increased risk of diabetes
- First line therapy for GDM includes medical nutrition therapy and physical activity (PA), though clinical practice focuses more on diet, due in part to a lack of consensus regarding the benefits of PA for blood glucose control in women with GDM.<sup>1</sup>
- The most common mode of PA reported by pregnant women is walking.<sup>2</sup> A behavioral PA intervention that encourages women to set walking goals, self-monitor and receive feedback may benefit women with GDM.

### **PURPOSE**

In preparation for behavioral PA intervention for women with GDM, to elicit thoughts and feelings about PA and to understand how they may fit at least 30 minutes of walking, or stepping in place when they cannot walk, into a typical day.

## **METHODS**

- 15 semi-structured interviews, lasting approximately 20 minutes, were conducted by study staff.
- The proposed behavioral intervention strategies were based on Bandura's Social Cognitive Theory and the Transtheoretical model.<sup>3</sup>
- Interviews were audio recorded and transcribed verbatim using InqScribe 2.2.4.
- The interview aimed to gather descriptions on:
  - → A typical day for a women with GDM
  - → Opportunities to engage in PA
  - → Challenges that accompany PA during pregnancy
  - → PA preferences
  - → Thoughts about the use of a Fitbit to track PA
- Transcripts were analyzed to identify themes, noting similarities and differences among the women.

#### RESULTS

- Participants varied by marital status, employment status, and family size.
- Themes identified were:
  - Motivation
  - → Bettering health of self and unborn baby, managing blood glucose
  - → Willing vs. able–integrating exercise into daily life, work, chores
  - → Barriers such as work, family, children, no time
  - → Overall complexity of women's lives
- → Flexibility

Motivation: "It would be healthier for me and the baby...

I don't want to put anything bad on the baby"

**Barriers:** "I live on a farm, so there is a lot of chores and things to be done"



Motivation/Barriers: "I don't exercise, but I run around all day with my kids...I do feel that the days that I'm out about and going my blood sugars are better managed"

#### DISCUSSION

Women were *willing* to engage in PA for both the potential long- and short-term health benefits (i.e., blood glucose control, personal health, and health of their baby). However, there are many barriers that may prevent them from doing so. These include having other children or family members to care for, full and part-time jobs, or typical discomforts that accompany pregnancy.

Convenience was a significant factor and a consistent trend among many women. Based on their thoughts and opinions, it was clear that anything that simplifies engaging in PA, increases convenience, or integrates PA into the activities of a typical day is key in the development of PA interventions for women with GDM due to the wide variation in lifestyles.

The participants demonstrated a wide and diverse range of personal and economic situations: city-living vs. living on a farm, night vs. day shift, full vs. part time, having many children vs. first pregnancy, and relationship status, whether married or single. However, busyness and complexity of life was a universal factor in the feasibility of the various PA protocols proposed.



# CONCLUSIONS

- The findings of this study will inform the development of a behavioral PA intervention for GDM and suggest the intervention should consider the many factors that influence the ability and feasibility of completing the recommended PA protocols.
- Overall, it is important to acknowledge the distinct and multifaceted components of each woman's life in the development of future PA interventions.
- Every effort to integrate PA into daily life and offering the option of multitasking while engaging in PA will increase the practicality of the intervention for women with GDM.



- 1. Colberg, S., Sigal, R., Yardley, J., et al., (2016). Physical Activity/Exercise and Diabetes: A Position Statement of the American Diabetes Association. *Diabetes Care*, *39*(11), 2065–2079. https://doi.org/10.2337/dc16-1728
- 2. Evenson, K., Savitz, D., & Huston, S. (2004). Leisure-time physical activity among pregnant women in the US. *Paediatric and Perinatal Epidemiology*, 18(6), 400–407.
- 3. Bandura A. *Social foundations of thought and action: a social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall; 1986.