A WALKING PLAN FOR PREGNANT WOMEN WITH GESTATIONAL DIABETES: A FEASIBILITY STUDY

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Purpose
- Determine the feasibility of a structured walking plan for pregnant women diagnosed with gestational diabetes mellitus (GDM) within a maternal fetal medicine practice

Background and Significance
- Diabetes affects nearly 7% of all pregnancies
- Diabetes is the most common co-morbid condition during pregnancy

Uncontrolled diabetes in pregnancy can lead to:
- Physical activity (PA) in combination with nutritional therapy has been shown to achieve glycemic control in women with GDM
- Recommendations for PA in pregnancy include 150 minutes of moderate intensity exercise spread out over the week that is adjusted as necessary
- Walking is safe for women with GDM

Evidence
- Walking at a brisk pace can reduce serum blood glucose (BG), preeclampsia, and excessive gestational weight gain
- A walking plan is an effective intervention to lower BG & for meeting PA recommendations during pregnancy

Outcomes
- 50% (n=4) completed survey
- 100% agreed that the walking plan was useful
- 100% agreed that their awareness was increased about PA and walking during pregnancy
- 75% agreed the walking plan was trustworthy

Method
- Setting: A maternal fetal medicine practice in the Southwestern United States
- Population: Females with a singleton pregnancy, over 18 years old, less than 34 weeks gestation, and a diagnosis of GDM
- Intervention: Participants were recruited using a recruitment flyer
- Interested participants were screened for study qualification using the PARmed-X for Pregnancy
- Participants received verbal and written instruction on an unsupervised 4 week walking plan that was set up to gradually increase PA to 150 minutes most days of the week
- A chart audit tool to evaluate walking plan completion and Survey Monkey® to evaluate participant satisfaction were used

Outcomes

<table>
<thead>
<tr>
<th>Walking Plan Minutes Versus Participant Walking Minutes Achieved</th>
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<tbody>
<tr>
<td>Participants (n=8) Walking Plan</td>
</tr>
<tr>
<td>Week 1</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>Participants</td>
</tr>
<tr>
<td>Walking Plan</td>
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</tbody>
</table>

Conclusions
- Overall, an increase in walking was noted (statistically significant, p < 0.025)
- Positive movement towards first line therapy for controlling BG levels shown with increase of PA every week above participants baseline
- Follow-up is needed after the initial walking plan teaching as higher rates of participation were noted in week 1 and 2
- Participants who completed the survey believed the walking plan had the right amount of information and was not judgmental

Implications for Practice
- Walking is a common and popular PA choice during pregnancy because of its high accessibility
- The addition of a walking plan in GDM teaching is an effective strategy to lower BG levels and for meeting PA recommendations during pregnancy
- The use of a pedometer could be beneficial in participant uptake of PA
- Project limitations
  - Small sample size (n=8)

Future Research
- Reduction of oral medication and insulin use in GDM patients on a structured walking plan
- Examine outcomes of BG control using PA among women with GDM in a larger sample of patients in this practice

For More Information
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