3-16-2012

Self Efficacy & Perceived Benefits and Risk in Prenatal Women

Elaine S. Marshall
Georgia Southern University

Bridget F. Melton
Georgia Southern University, bmelton@georgiasouthern.edu

Helen W. Bland
Georgia Southern University, hwbland@georgiasouthern.edu

Follow this and additional works at: https://digitalcommons.georgiasouthern.edu/commhealth-pres

Part of the Community Health Commons, Community Health and Preventive Medicine Commons, Kinesiology Commons, and the Public Health Education and Promotion Commons

Recommended Citation

This presentation is brought to you for free and open access by the Community Health, Department of at Digital Commons@Georgia Southern. It has been accepted for inclusion in Community Health Faculty Presentations by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.
INTRODUCTION

Although the positive link between prenatal health behaviors, including exercise, and maternal-infant health has been documented, it is also well recognized that exercise declines during pregnancy. Further, evidence suggests that self-efficacy is related to sustained engagement in physical activity. There is little research that explores mothers’ self-efficacy, perceptions of the benefits exercise during pregnancy, or knowledge of safety measures in physical activity.

METHODS

Participants

Sample of 88 pregnant women recruited from the waiting rooms of three regional obstetrical practices in the rural southeastern Georgia during the Spring of 2010.

Demographic and Other Characteristics of study participants (n=88).

<table>
<thead>
<tr>
<th>Demographics</th>
<th>n</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race (N=84)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Black</td>
<td>28</td>
<td>33.7</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>6.0</td>
</tr>
<tr>
<td>Age (N=82)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-22 years</td>
<td>40</td>
<td>48.8</td>
</tr>
<tr>
<td>23-35 years</td>
<td>40</td>
<td>48.8</td>
</tr>
<tr>
<td>≥36 years</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>Education (N=82)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤HS, Diploma or GED</td>
<td>28</td>
<td>34.1</td>
</tr>
<tr>
<td>≥College</td>
<td>54</td>
<td>65.9</td>
</tr>
<tr>
<td>Gestational Status (N=79)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st trimester</td>
<td>12</td>
<td>15.2</td>
</tr>
<tr>
<td>2nd trimester</td>
<td>24</td>
<td>30.4</td>
</tr>
<tr>
<td>3rd trimester</td>
<td>43</td>
<td>54.4</td>
</tr>
<tr>
<td>Physical Activity Score (N=88)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>27</td>
<td>30.7</td>
</tr>
<tr>
<td>Moderate</td>
<td>33</td>
<td>37.5</td>
</tr>
<tr>
<td>High</td>
<td>28</td>
<td>31.8</td>
</tr>
</tbody>
</table>

Table 1. Demographic and Other Characteristics of study participants (n=88).

Exercise Self-Efficacy:

I am confident...

That I can exercise even when I am tired
28(31.8) 34(39.6) 26(29.5)
That I can exercise even when I am feeling depressed
46(52.5) 26(29.5) 18(20.2)
That I can motivate myself to start exercising again after I’ve stopped for a while
77(87.9) 9(10.2) 2(2.3)

Exercise Benefits:

Exercise during pregnancy can decrease your energy levels
19(21.6) 27(30.7) 42(47.7)
A pregnant woman who exercises is more likely to deliver a normal weight baby
48(54.5) 29(33.3) 10(11.4)
A mother who is overweight is more likely to have a child who is overweight or obese
45(51.4) 26(29.5) 19(21.6)
It is important for a mother to be physically active for her child’s overall well-being
71(81.8) 11(12.5) 4(4.5)

Exercise Safety Responses:

You should avoid exercise
13(14.8) 9(10.2) 64(72.7)
You should not lift weights
49(55.7) 24(27.3) 12(13.6)
You should avoid high intensity exercise
67(78.1) 12(13.6) 6(6.8)
It is important to consume extra calories daily
51(58.0) 26(29.5) 8(9.3)

Exercise Risk:

A pregnant woman who exercises is more likely to deliver a normal weight baby
48(54.5) 29(33.3) 10(11.4)
A mother who is overweight is more likely to have a child who is overweight or obese
45(51.4) 26(29.5) 19(21.6)
It is important for a mother to be physically active for her child’s overall well-being
71(81.8) 11(12.5) 4(4.5)

**Participants**

Sample of 88 pregnant women recruited from the waiting rooms of three regional obstetrical practices in the rural southeastern Georgia during the Spring of 2010.

**Methods**

Demographic and Other Characteristics of study participants (n=88).

Exercise Self-Efficacy:

I am confident...

That I can exercise even when I am tired
28(31.8) 34(39.6) 26(29.5)
That I can exercise even when I am feeling depressed
46(52.5) 26(29.5) 18(20.2)
That I can motivate myself to start exercising again after I’ve stopped for a while
77(87.9) 9(10.2) 2(2.3)

Exercise Benefits:

Exercise during pregnancy can decrease your energy levels
19(21.6) 27(30.7) 42(47.7)
A pregnant woman who exercises is more likely to deliver a normal weight baby
48(54.5) 29(33.3) 10(11.4)
A mother who is overweight is more likely to have a child who is overweight or obese
45(51.4) 26(29.5) 19(21.6)
It is important for a mother to be physically active for her child’s overall well-being
71(81.8) 11(12.5) 4(4.5)

Exercise Safety Responses:

You should avoid exercise
13(14.8) 9(10.2) 64(72.7)
You should not lift weights
49(55.7) 24(27.3) 12(13.6)
You should avoid high intensity exercise
67(78.1) 12(13.6) 6(6.8)
It is important to consume extra calories daily
51(58.0) 26(29.5) 8(9.3)

**RESULTS**

Demographics  Exercise Self-Efficacy (a)  Exercise Benefits (b)  Exercise Risk (c)

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Exercise Self-Efficacy (a)</th>
<th>Probability</th>
<th>Exercise Benefits (b)</th>
<th>Probability</th>
<th>Exercise Risk (c)</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>0.13</td>
<td>0.86*</td>
<td>0.04</td>
<td>0.18</td>
<td>0.19</td>
<td>0.09</td>
</tr>
<tr>
<td>Black</td>
<td>0.31</td>
<td>0.86</td>
<td>0.04</td>
<td>0.18</td>
<td>0.19</td>
<td>0.09</td>
</tr>
<tr>
<td>Age</td>
<td>0.01*</td>
<td>0.01</td>
<td>0.01*</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Education</td>
<td>0.23</td>
<td>0.86</td>
<td>0.04</td>
<td>0.18</td>
<td>0.19</td>
<td>0.09</td>
</tr>
<tr>
<td>College</td>
<td>0.05</td>
<td>0.86</td>
<td>0.04</td>
<td>0.18</td>
<td>0.19</td>
<td>0.09</td>
</tr>
<tr>
<td>Gestational Status</td>
<td>0.87**</td>
<td>0.80</td>
<td>0.70</td>
<td>0.80</td>
<td>0.70</td>
<td>0.80</td>
</tr>
<tr>
<td>1st trimester</td>
<td>0.82</td>
<td>0.80</td>
<td>0.70</td>
<td>0.80</td>
<td>0.70</td>
<td>0.80</td>
</tr>
<tr>
<td>2nd trimester</td>
<td>0.82</td>
<td>0.80</td>
<td>0.70</td>
<td>0.80</td>
<td>0.70</td>
<td>0.80</td>
</tr>
<tr>
<td>3rd trimester</td>
<td>0.82</td>
<td>0.80</td>
<td>0.70</td>
<td>0.80</td>
<td>0.70</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Table 2. Exercise Self-Efficacy, Awareness of Benefits and Safety Precaution by Demographic Variables as Determined One-Way by Analysis of Variance

**DISCUSSION**

Over 50% of the women reported perceptions that exercise would decrease, rather than increase, energy levels; and over 68% reported the inability to overcome fatigue in order to exercise. Although recent research is beginning to identify a link between mother’s behaviors and childhood obesity, the results of this study found that nearly one-fourth (25.8%) of the sample did not understand that a mother who is overweight is more likely to have a child who is eventually obese.

Nearly 85% (includes neutral statements) women reported they should not engage in strength training, such as lifting weights during pregnancy, and over three-fourths of the women reported that they should decrease exercise during the last trimester of pregnancy.

The significant difference in self-efficacy scores between second and third trimesters may be explained by development of confidence across the time of the pregnancy itself. Nevertheless, some findings were remarkable, such as the finding that 42.2% of participants felt they could not exercise without the consultation and approval of the physician. 68.1% reported they could not exercise when feeling tired, and nearly 47.7% reported they could not exercise when feeling depressed.

Such findings underscore the need for education and activity interventions during pregnancy. This study represents an initial effort to explore the understanding of mothers regarding the link between their own health and the health of their children, to understand the perceptions of benefits and awareness of safety of exercise during pregnancy, and to advance the information needed to design and implement effective interventions to improve maternal health, to promote child health, and to prevent childhood obesity at its roots.