Improving Prenatal Education in a Health Center: A Pilot Study

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Comments
Medical student Marcy Keddy Boucher participated in this study as part of the Senior Scholars research program at the University of Massachusetts Medical School.

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Improving Prenatal Education in a Health Center: A Pilot Study

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BACKGROUND

Common Health Education Practices for Obstetrical Care: Observational surveys of topics are left to the discretion of the individual provider. Lack of consistency between providers, even in a single practice.

Pros of Current Practice: Health education is highly individualized to each patient.

Cons of Current Practice: Some important subject matter may be neglected, which could ultimately improve patient outcomes and satisfaction.

Previously reported studies found evidence that improved patient education:

- Increases rates of breastfeeding.
- Decreased duration of breastfeeding.
- Increased satisfaction with prenatal care.
- Decreased preterm labor.

OBJECTIVES

1. To evaluate if prenatal patient satisfaction and knowledge about pregnancy improves if a structured prenatal education plan is implemented throughout a family medicine health center.
2. To evaluate if a structured prenatal education plan for expectant mothers will improve clinical outcomes.

PROJECT TIME LINE

Year One: Jan 1 - Dec 2011:
- Development of about 50 prenatal patients during their first trimester.
- Group A who receive care at Hahnemann Family Health Center (HFHC).
- Women will be followed through the prenatal and postpartum period.
- Prenatal care will remain the same as it was prior to the start of the study at the health center.
- Three surveys per patient will be filled out at appropriate times in their pregnancy and clinical outcomes will be tracked.

Year Two: Jan 2012 through Dec 2012:
- Development of about 50 more prenatal patients during their first trimester.
- Group B who receive care at Hahnemann Family Health Center (HFHC).
- Women will be followed through the prenatal and postpartum period.
- Three surveys per patient will be filled out at appropriate times in their pregnancy and clinical outcomes will be tracked.
- Group A and Group B surveys and clinical outcomes will be compared.

METHODS

Creation of a Prenatal Education Plan:
- Review of current prenatal education materials from around the country.
2. Patient Focus Groups:
- Current prenatal patients at HFHC were asked about their level of satisfaction with their prenatal care. Advice for improvement was also elicited.
4. Patient Feedback:
- Current third trimester prenatal patients, and women who previously attended the focus group, were invited to review the education health packet and submit feedback.
5. Physician Focus Groups:
- Attending physicians, nurses, and non-nurse practitioners, were asked to attend one of two designated staff/faculty meetings at HFHC and submit comments and feedback about the packet.

Patient Focus Groups:

Women Appreciated:
- Consistently seeing their doctor and not another resident or attending (Family Medicine program)
- Having two physicians (resident and attending)
- Personal touches such as the physician calling the patient by her/his name. Do you “own” top of everything?
- Friendly support staff
- Less wait times
- Women felt supported in their pain management decisions (epidural, no epidural)
- Mental Breathing Classes: “I totally recommend it... It was great. I loved the camaraderie.”

SUGGESTIONS FOR IMPROVEMENT:
- List of resources (books & supplies, availability at library)
- Consistently handing out the prenatal folder. Many women did not receive the current prenatal folder. One who did said it was incomplete.
- Inform us what will be talked about at the next visit. Often women had questions but were not sure if it was too easy or too hard. “Maybe it will be brought up next time.”
- “We didn’t discuss labor until 35 weeks, I wanted to talk about it during the entire process.”
- “Discussion of birth plan and what will happen when they arrive at the hospital.”
- “A resource for between visits that can be referred to before calling: “You don’t want to be THAT annoying patient (that calls all the time)”

TOPICS THAT WERE NOT CONSISTENTLY DISCUSSED WITH WOMEN:
- Lifestyle modifications: hot baths, saunas etc.
- Ways to combat stress during pregnancy.
- What will happen to the patient and the baby in the hospital.
- Why a urine test is done at each visit.
- Most common symptoms during pregnancy, management of symptoms.
- Nutrition and foods to avoid.
- Common symptoms during pregnancy: increasing stress secondary to pregnancy.
- Weight gain
- Pain management decisions (epidural, no epidural)
- Dr. only knows about my pregnancy.
- Sudden increases in blood pressure may be a warning sign.
- High blood pressure may be a warning sign of pre-eclampsia.

RESULTS

PRELIMINARY FIRST TRIMESTER SURVEY RESULTS, N = 9

<table>
<thead>
<tr>
<th>Topic</th>
<th>All</th>
<th>Somewhat</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telling care of your baby’s health</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Effect of ongoing health problems such as vomiting, diabetes or pressure on your diabetes</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Pain during labor and delivery</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Changes in your weight and body shape during pregnancy</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Whether the baby might have Down Syndrome</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Physical symptoms such as vomiting, heartburns, feet or back pain</td>
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<td>2</td>
<td>1</td>
</tr>
<tr>
<td>The quality of your medical care during pregnancy</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Pain during labor and delivery</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

CONCLUSIONS

1. Initial results indicate that there are gains in prenatal education and knowledge throughout prenatal care at the health center.
2. Based on our findings, and those of previously published studies, it can be hypothesized that by closing these gaps clinical outcomes will improve. It is important to further test this hypothesis after year two of this study.
3. Patient satisfaction cannot be assessed at this time.
4. Early survey results indicate that first trimester women seem to subjectively and objectively have some accurate prenatal knowledge.

REFERENCES