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Improving Prenatal Education in a Health Center: A Pilot Study

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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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BACKGROUND
Common Health Education Practices for Obstetrical Care: Fireing and Spice of Topics are left up to the discretion of the individual provider. Lack of consistency between providers, even in a single setting.

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 patients outcomes and satisfaction.

Previously reported studies found evidence that improved patient education:
- Increases rates of breastfeeding.
- Increases duration of breastfeeding.
- Decreases preterm, low birth weight, infants.
- Increases seatbelt use during pregnancy.
- Common symptoms during pregnancy, management of symptoms
- Smoking status during pregnancy
- stages of pregnancy
- delivery?
- Goal for birth?
- Baby?

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 2011 through Dec 2011:
- Development of about 50 prenatal patients during their first trimester, Group A who receive care at Nathanieluh Family Health Center. 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:
- New prenatal health education will be implemented.
- About 50 more HFHC prenatal patients (Group B) will be enrolled in the study during their first trimester and receive the new prenatal health education throughout pregnancy.
- Three surveys per patient will be filled out at appropriate times in their pregnancy and clinical outcomes will be compared.
- Groups A and B surveys and clinical outcomes will be compared.

METHODS
Creation of a Prenatal Education Plan:
1. 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 health education packet and submit feedback.
5. Physician Focus Groups:
   - HFHC attending and resident physicians, nurses, and 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:

<table>
<thead>
<tr>
<th>WOMEN APPRECIATED</th>
<th>SUGGESTIONS FOR IMPROVEMENT</th>
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<tbody>
<tr>
<td>Consistently seeing their doctor (and not another, availability at library)</td>
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<tr>
<td><strong>Consistently seeing their doctor</strong> (and not another, availability at library)</td>
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<td><strong>Increasing two physicians (resident and attending)</strong></td>
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<td><strong>Increasing two physicians (resident and attending)</strong></td>
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<tr>
<td><strong>Personal touches such as the physician calling the patient her/him/ by Dr.</strong> or was on top of everything.**</td>
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<tr>
<td><strong>Personal touches such as the physician calling the patient her/him/ by Dr.</strong> or was on top of everything.**</td>
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PATIENT FOCUS GROUPS:

1. List of resources (books, journals, availability at library)
2. Consistently handling out the medical directory: women did not receive the current prenatal folder. One who did said it was incomplete.
3. Info on what will be talked about at the next visit. Often women had questions but were not sure if it was too early to ask.
4. Maybe it will be brought up next time.
5. “We didn’t discuss labor until 35 weeks. I wanted to talk about it during the entire process.”
6. Discussion of birth plans and what will happen when they arrive at the hospital.
7. A resource for between visits that can be referred to before coming:
   - “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.
- Why 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:
   - “I thought they were looking for drugs.
- Dental Care
- Pre- and Early Labor
- Nutritional and foods to avoid:
   - “Maybe my doctor just knows I am pregnant.”
- This is my pregnancy.
- Weight gain
- Breastfeeding: newborn feeding
- Development of the baby during pregnancy
- Common symptoms during pregnancy, management of symptoms
- Stages of pregnancy
- Messing with what will happen during labor, stages of how one knows the labor is over
- Safe medications to take during pregnancy:
   - “I had bad headaches and excessive tiredness...I couldn’t say anything...my grandmother said ‘nothing but Tylenol’.”

Clinical Outcomes:

<table>
<thead>
<tr>
<th>CHART</th>
<th>PHONE CALL</th>
<th>UROGENITAL ISSUES</th>
<th>BREASTFEEDING STATUS</th>
<th>PREMENSTRUAL SYMPTOMS</th>
</tr>
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<tbody>
<tr>
<td>Chart reviews will be performed on each enrolled patient after delivery of each monthly tailored outcomes will include:</td>
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<tr>
<td>Number of phone call for prenatal issues between appointments</td>
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<tr>
<td>Number of trips to the emergency room for prenatal related issues</td>
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<td>Situation status during pregnancy</td>
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<tr>
<td>Premenstrual labor</td>
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<td>Breastfeeding intent and actual rate at discharge</td>
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<tr>
<td>Pregnancy complications</td>
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RESULTS
PRELIMINARY FIRST TRIMESTER SURVEY RESULTS, n = 9

<table>
<thead>
<tr>
<th>N</th>
<th>Not at all</th>
<th>Somewhat</th>
<th>Very Much</th>
<th>Total</th>
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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. We cannot make the same hypothesis after year two of this study.
3. Patient satisfaction will be assessed at this time.
4. Early survey results indicate that first trimester women seem to understand and objectively have some accurate prenatal knowledge.

REFERENCES