Women’s Reproductive Knowledge and their Ability to Teach their Daughters about Reproductive Changes

Yenupini Joyce Adams, PhD Candidate
Michigan State University, College of Nursing

Adejoke B. Ayoola, PhD, RN
Calvin College, Department of Nursing
Background

- Unintended pregnancies contribute to health disparities among low income and minority women in the United States

- Knowledge of the anatomy of the female body, ovulation and menstrual cycle will increase women’s understanding of the structure and function of their bodies and related changes

- This knowledge would assist women to understand pregnancy risks and plan appropriately

(Dehlendorf & Rodriguez, 2010; Finer & Henshaw, 2006; Zolna & Lindberg, 2012; Ayoola, Nettleman, & Brewer, 2007; Nettleman, Chung, Brewer, Ayoola, & Reed, 2007)
Background

• High adolescent pregnancy rates in the United States
• Initiating reproductive education early
• Mothers could be the easiest and best sources of information
• Mothers could only effectively teach their daughters if they have good reproductive knowledge

Purpose

This study examined the association between women's reproductive knowledge and their perception of their ability to teach their daughters about the reproductive changes occurring in their bodies.
Methods

- Survey completed by a convenience sample of women recruited to be part of a larger “Women’s Health Promotion Program”
- Women of childbearing age, 18 years and above, and not pregnant
- Self-administered questionnaire to assess reproductive knowledge and women’s confidence in teaching daughters
- “Knowledge of the Female Body” (KFB) scale
  - female reproductive system and hormones, ovulation and its timing, menstrual cycle, signs of pregnancy, mechanism of action of common birth control methods
Results: Selected Sample Characteristics

- Mean Age 30.6 years (SD = 7.3; Range: 18-51 years)
- 58.4% not married (n=73)
- 69.6% had 1-3 children (n=87)
- Majority (70.4%) had annual total household income less than $20,000.00
Results: Reproductive Knowledge

- KFB scale range 0 to 27 (27 items)
- Low knowledge: scored 15 and below
- High knowledge: scored above 15
- Mean correct reproductive knowledge score: 16 (SD = 5.73)
- 40% of women had low knowledge
Results: Perceived Ability to Teach Daughter

Bivariate Associations between Women’s Knowledge and their Perceived Ability to Teach Daughter …

<table>
<thead>
<tr>
<th>Activity</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>About reproductive system</td>
<td>p-value 0.011</td>
</tr>
<tr>
<td></td>
<td>(fishers exact 0.015)</td>
</tr>
<tr>
<td>To keep a calendar to monitor their ovulation</td>
<td>p-value 0.033</td>
</tr>
<tr>
<td>To keep a menstrual calendar to monitor their period</td>
<td>p-value 0.053</td>
</tr>
</tbody>
</table>

- Women with higher knowledge scores were confident they could teach their daughters whereas women with lower knowledge scores were not confident about their ability to teach their daughters.
Results: Racial Diversity in Knowledge

- Race was significantly associated with women’s knowledge ($p = 0.001$)
- Average knowledge score for African Americans the highest at 19.36 (SD 3.8, range 11 to 26)
- Lowest average knowledge score among Hispanic women at 13.57 (SD 5.51, range 0 to 27)
Results: Multivariate Analysis

- Age, parity, race, household income, and marriage were not significantly associated with perceived ability to teach daughters.

- High reproductive knowledge was significantly associated with perceived ability to teach daughters ($p = 0.013$, OR = 3.36).
Conclusions

• Higher reproductive knowledge is associated with higher confidence in mothers’ ability to teach their daughters

• Educating mothers about their reproductive system will provide opportunities for them to teach relevant reproductive content to younger girls early in their developmental years
Acknowledgements

• Robert Wood Johnson Foundation Nurse Faculty Scholar program
• Calvin College Science Division Summer Research Assistant Award, Calvin Alumni Association, and the Calvin College Department of Nursing (CCDON) Marian Petersen Fund
• CCDON community health workers (CHWs)
• CCDON neighborhood coordinators, local clinics, and group/health team members
• Calvin College Center for Social Research
• Research assistants, and the CCDON students
Thank you!