Implementation of a health educator in two urban high schools to promote reproductive health and reduce unintended pregnancies
Introduction

• Background
• Project overview
• Unique challenges
• Next steps
Background: Adolescent Pregnancy

- Adolescent pregnancies in the US
  - 750,000 pregnancies per year
  - Pregnancy rate of 68 per 1000
  - Birth rate 34.2 per 1000
- Disparities in adolescent pregnancies
- Focus on contraception
Background: Long-acting reversible contraception (LARC)

- LARC options for adolescents
  - Nexplanon implant: 3 years
  - Mirena intrauterine device: 5-7 years
  - Paragard copper intrauterine device: 10-12 years
- First-line contraceptive recommendation for all adolescent patients
- Safe and efficacious in adolescents
- Knowledge and acceptability of LARCs are much lower in adolescents than adults
Background: LARC in school-based health centers

• Neighborcare school-based health centers
  • Primary care services
  • Confidential reproductive health and mental health services
  • LARCs available since 2007
• Disparities in acceptance of LARC
Health educator program

- Supported by private donors
- Goals
  - To promote use of SBHC for reproductive health services.
  - To improve knowledge and acceptability of LARC methods
- Timeline
  - Health educator to begin Fall 2013 with support planned for 3 academic years
- Implementation and evaluation
Objectives

(1) To assist in development of health promotion curriculum for a full-time health educator at Chief Sealth High School and West Seattle High School.

(2) To evaluate effect of health educator intervention on acceptability of the school-based health center family planning services and uptake of LARC methods.

(3) To collect qualitative data on adolescent experiences with health educators to inform development of LARC counseling protocols for adolescents.
Hypotheses

• Exposure to health educator curriculum will be associated with:
  • Increased acceptability of the school-based health center
  • Increase awareness and acceptability of LARC methods

• Qualitative data will identify key themes important to adolescents when receiving reproductive health counseling and preferred styles of information delivery.
Conceptual framework

Health Educator

- One-on-one counseling
- Groups for students
- Parent and community education
- Knowledge campaign

Increase knowledge and skills
Increase self-efficacy
Change individual attitudes
Change school norms
Increase acceptability of SBHC
Increase awareness and acceptability of LARC methods
Project overview

Development of health educator curriculum and activities

Collect quantitative data prior to exposure to health educator

Collect quantitative and qualitative data after exposure to health educator

Summer 2013  Fall 2013  Winter 2013
### Variables of interest

<table>
<thead>
<tr>
<th>Baseline Characteristics</th>
<th>Individual outcome variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age/grade level</td>
<td>Acceptability of SBHC</td>
</tr>
<tr>
<td>IEP in place</td>
<td>Awareness of LARC</td>
</tr>
<tr>
<td>School lunch (socioeconomic status)</td>
<td>Acceptability of LARC</td>
</tr>
<tr>
<td>Maternal age when patient born</td>
<td></td>
</tr>
<tr>
<td>Post-high school plans</td>
<td></td>
</tr>
<tr>
<td>Presence of chronic illness</td>
<td></td>
</tr>
<tr>
<td>Presence of mental health condition</td>
<td></td>
</tr>
<tr>
<td>Sexual identity and behaviors</td>
<td></td>
</tr>
<tr>
<td>History of sexually transmitted disease (STD)</td>
<td></td>
</tr>
<tr>
<td>History of pregnancy</td>
<td></td>
</tr>
<tr>
<td>Prior contraceptive methods used</td>
<td></td>
</tr>
</tbody>
</table>
Qualitative data collection

• When do you feel is the right time to have a first pregnancy?
• How do you decide what contraceptive method to use?
• Where do you get the majority of information about contraceptive methods?
• Would you like or dislike about potential LARC methods?
• Have you heard from others about their experiences with LARC?
• What do your parents or other family members think about LARC?
• What services at the school-based health center do you use?
• Did you interact with the health educator?
• What services would you like the health educator or the school-based health center to provide?
Unique challenges

- Obtaining consent/assent
- Variability of health educator curriculum
- Partnership with school board and parent groups
Conclusions and next steps

- Development of survey tools
- Application for Institutional Review Board (IRB)
- Presentation to the school board
- Data collection and analysis
Acknowledgements

- Laura Richardson, MD, MPH
- Kym Ahrens, MD, MPH
- Janet Cady, ARNP, MPH
- Cari McCarty, PhD
- Valerie Tarico, PhD
- Kelly Gilmore, MPHc
Questions?
References

• Washington State (2011)
  • Teen pregnancy rate 60 per 1000
  • Teen birth rate 24.9 per 1000
• King County (2010)
  • Teen pregnancy rate 33 per 1000
  • Teen birth rate unavailable
Racial and ethnic disparities in birth rates

Birth Rates (Live Births) per 1,000 Females Aged 15–19 Years, by Race and Hispanic Ethnicity, 2000–2011

- All
- Non-Hispanic White
- Non-Hispanic Black
- American Indian/Alaska Native
- Asian/Pacific Islander
- Hispanic

Rate per 1,000 females in age group for each race and ethnicity

Year

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010* 2011*
Process model for IUD adoption

1. First awareness
2. Initial reaction
3. Information gathering
4. Adoption
5. Adjustment and reassessment
Process model for IUD adoption

First awareness

Initial reaction

Information gathering

Adoption

Adjustment and reassessment