Reality Check

A Peer-led Program to Prevent Teen Pregnancy and
Empower Chicago Adolescents

Jacqueline Lagman & Abbey McGrath
Rush University, College of Nursing
Reality Check Program Steps

Needs Assessment & Literature Review

- Recommendations for Improvement
- Planning & Design
- Evaluation
- Implementation

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## Needs Assessment: Problem

Rates for Pregnancy and STI’s among Adolescents age 15-19

<table>
<thead>
<tr>
<th>Condition</th>
<th>Auburn Gresham</th>
<th>Cook County</th>
<th>Chicago</th>
<th>Illinois</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy (2009)*</td>
<td>83.1</td>
<td>--</td>
<td>57.0</td>
<td>33.0</td>
<td>39.1</td>
</tr>
<tr>
<td>Pregnancy (2013)*</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>26.5</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>787.8</td>
<td>230.8</td>
<td>150.5</td>
<td>141.0</td>
<td>107.5</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>1951.0</td>
<td>727.3</td>
<td>1039.0</td>
<td>526.0</td>
<td>456.7</td>
</tr>
<tr>
<td>Syphilis</td>
<td>32.8</td>
<td>13.0</td>
<td>21.4</td>
<td>6.2</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Rates are cases per 100,000 population. *Rate per 1,000

(Chicago Department of Public Health, 2012; Centers for Disease Control [CDC], 2014; Martin et al., 2015)
Needs Assessment: Problem

- Economic Stability: 28% homes below poverty line, 28% unemployment rate
- Education: Teen parents less likely to receive GED
- Social and Community Context: Key Informants: Early sexual activity correlates with high rates of single-mother households, Laissez-faire attitude, Active pursuant
- Health and Health Care: Teen pregnancy, STIs, Babies of teen mothers: increase risk of birth defects, prematurity, LBW
- Neighborhood and Built Environment: Ralph Ellison High School (Ellison)

(Sources: City of Chicago, 2011; Harris, Duncan, & Boisjoly, 2002; M. Rabbitte, personal communication, January 5, 2015; Office of Disease Prevention and Health Promotion, 2015)
Needs Assessment: Ralph Ellison High School

Non-selective, CICS: Chicago International Charter School

- 471 students in 9-12th grade (ages 14-19)
  - 98.1% African American
  - Serves 20 zip codes in West & South sides
  - 80% low income
  - 83% 5 year graduation rates

Weaknesses
- Low parent involvement
- No transportation system
- High faculty turnover
- Poor attendance

Strengths
- Prioritization of health and wellness
  - Social services
- Administrative & faculty support:
  - Healthy CPS sexual education
  - STI testing

(CICS, 2015; M. Rabbite, personal communication, November 20, 2014)
**Needs Assessment:** Problem Statement

**Key Informants:**
- Laissez-faire attitude
- Active pursuit
- Lack of knowledge: Safe sexual behaviors & consequences of teen pregnancy
- Early sexual activity correlates with high rates of single-mother households

**Current sexual education program:**
- Emphasis on increasing *knowledge*
- ~80% lecture-based material

**Reality Check:**
- Annual 8-week, after-school program
- Peer-led, small group discussions, baby simulator
- Comprehensive: pregnancy, STIs, contraception, pregnancy options, and child-care skills

(Harris, Duncan, & Boisjoly, 2002; M. Rabbitte, personal communication, January 5, 2015; Office of Disease Prevention and Health Promotion, 2015)
**Literature Review**

**Databases**
- MEDLINE (PubMed)
- Cumulative Index of Nursing and Allied Health Literature (CINAHL)
- Cochrane Library

**Search Terms**
- Pregnancy in Adolescence/prevention & control
- Health Education/methods
- Risk Reduction Behavior
- Unsafe sex/statistics & numerical data
- Chicago (Yielded 101 articles)
- Health Education
- Sexual Health (Yielded 29 articles)
- Sexual health education
- Adolescent (Yielded 13 articles)

**13 Articles**
- 4 Systematic Literature Reviews
  - 3 RCTs
  - 1 Professional Guideline
- 1 Expert opinion
- 1 Retrospective Cohort Analysis
- 2 Pilot studies
- 1 Quality Improvement Study

**Findings**

**Comprehensive Sex-education**
- Lowered unintended pregnancy rates
- Increased use of condoms & contraception
- Decrease in number of sexual partners
- Decrease in UPIC
- Decrease STI rate

**Peer-Led Interventions**
- Increase sexual health knowledge
- Increase self-efficacy
- Increase dialogue among peers and teachers
- Increase knowledge of resources

**Baby-simulators**
- Increased realistic views of parenting
- Increased self-efficacy to resist sexual pressure
- Increased conservative views on premarital sex

(Beveridge & Thompson, 2010; Chin et al., 2012; Coles, Makino, & Stanwood, 2011; Community Preventive Task Force, 2012; Fongkaew, 2011; Goesling et al., 2014; Herrman, 2011; Lavin & Cox, 2012; Lee, Cintron, & Kocher, 2014; Layzer, Rosapep & Barr, 2014; Norton, 2012; Oringanje et al., 2009; Somers, 2014)
Reality Check Program Steps

Needs Assessment & Literature Review

Planning & Design

Recommendations for Improvement

Evaluation

Implementation
Planning: Bandura’s Social Cognitive Theory

- Knowledge
- Socio-structural Factors
- Goal Formation
- Self-efficacy
  - Vicarious experience
  - Enactive attainment
- Outcomes expectancy
  - Reinforcement

(Bandura, 1986)
Planning: Adolescent Growth & Development

Adolescents...
- Value peer interactions
- Are developing moral codes and social norms
- Can “step into another’s shoes”

Strategies:
- Senior student peer-leader
- Realistic case studies
- Group Discussions
  - Safe space, circular
  - Interact, learn from each other
- Content on: peer-pressure, social media, alcohol use, family influence

(CDC, 2015a; Saewyc, 2011)
Planning: Outcomes Approach Logic Model

<table>
<thead>
<tr>
<th>Resources/Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Baby Think It: Over baby simulators with supplies</td>
<td>Advertise program with application to all students</td>
<td>Senior student leader will recruit 18 students to enroll in program</td>
<td>Student leader will successfully complete senior project</td>
<td>The senior leader will have improved group leadership skills.</td>
</tr>
<tr>
<td>Baby Think It Over curriculum</td>
<td>Chose 18-20 students to participate</td>
<td>Student leader will co-lead 7 out of 8 hours of program content</td>
<td>Student leader will verbally express increased confidence in group facilitation by the end of the program</td>
<td>The senior leader will be empowered to implement leadership skills in other contexts.</td>
</tr>
<tr>
<td>Healthy CPS Sexual Education Curriculum</td>
<td>RUCON nursing students train student leader as discussion co-facilitator</td>
<td>Student leader will facilitate 25% of lessons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertisement for Reality Check</td>
<td>Weekly team meetings</td>
<td>Program feasibility:</td>
<td>Program sustainability: The Reality Check program will be...</td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td>Obtain administration approval</td>
<td>• Information regarding the process, presentation, and applicability of the program will be collected from students to inform future programming</td>
<td>• Cost-effective</td>
<td></td>
</tr>
<tr>
<td>IRB approval</td>
<td>Schedule program dates</td>
<td>Self-efficacy: Students will report...</td>
<td>• Revised, improved, and implemented annually at Ellison.</td>
<td></td>
</tr>
<tr>
<td>Pre- and post-surveys</td>
<td>Design curriculum content</td>
<td>• Increased confidence in ability to make healthy sexual decisions as measured by the mean between pre- and post-surveys.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course evaluation form</td>
<td>Reserve a space</td>
<td>Outcome expectancy:</td>
<td>Health behavior change:</td>
<td></td>
</tr>
<tr>
<td>30 male and female condoms</td>
<td>Team trial of BTIO stimulators</td>
<td>• Students’ belief that healthy sexual choices will have a beneficial result will increase as measured by the mean between pre- and post-surveys.</td>
<td>• Students will delay pregnancy until they are holistically ready.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RUCON nursing students receive training as CPS sexual health educators</td>
<td>Goal formation: Students will...</td>
<td>• Students will feel empowered to carry out healthy sexual behaviors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disperse pre-surveys</td>
<td>• State intention to change sexual health behavior in the post-survey.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carry out 8 after school lessons</td>
<td>• Create individualized, attainable goals for action related to increasing positive sexual behaviors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disperse post-surveys and course evaluation</td>
<td>Recruit Ellison student for 2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recruit 2 new RUCON nursing students for 2016</td>
<td>Challenges:</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Identify and address barriers to program implementation.</td>
<td></td>
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</tbody>
</table>

(W. K. Kellogg Foundation, 2006)
Planning & Design

IRB approval

Weekly team meetings

Determine data collection
- Pre/post surveys
- Course evaluation

Curriculum design

Resource gathering
- Reserve classroom, schedule lessons
- Baby simulator testing

Communicate vision & recruit students
- Hand-outs, announcements, word of mouth, baby simulator incentive
- Led by senior student, disseminated applications

→ Selected 18 students from pool of 40 applicants
Implementation: Participant Population

- **Gender:**
  - 87% Female
  - 13% Male

- **Student Ages:**
  - 14 years: 2
  - 15 years: 0
  - 16 years: 1
  - 17 years: 8
  - 18 years: 4

- **Race:**
  - 100% African American

- **Experience:**
  - 67% had previous experience taking care of babies
  - 100% had previously completed a sex-education class
Implementation: Reality Check Curriculum

Resources: Healthy CPS, BTIO® curriculum, National Health Education Standards, RUMC birth and child care class

- Day 1: Orientation, ice-breakers
- Day 2: Risks of Unprotected Sex: Consequences and Prevention
- Day 3: Myths & facts of infant and child care; Cost activity
- Day 4: Mock pregnancy and birth class (part 1)
- Day 5: Mock birth and child care class (part 2)
- Day 6: Contraception methods, hands on banana practice
- Day 7: Pregnancy options & legal issues (WIC, TANF, safe haven)
- Day 8: Action plans, goal formation, group debrief and conclusion
Implementation: Additional Components

Senior student leader mentorship, peer-leadership training
  o Training in group facilitation
  o Increase confidence in program content

BTIO® simulator care experience as student incentive
  o Minimum attendance requirement
  o One-night experience, simulator score and feedback

2015 Project Role Termination
  o Hard copy and electronic copy of curriculum provided to school nurse
  o Nursing students recruited from Rush for 2016
  o Rising senior identified for 2016 senior project
- Walk
- Rest & sleep
- Take a shower or bath (safety)
- Eat and drink
- Massage
- Engage in distraction activities
  - TV
  - Play games
  - Watch movies
  - Listen to music
  - Don't change the patient
Implementation: Barriers

Completing Intervention

- Chicago Winter weather → delayed start of program, postponed meetings, condensed content
- End-of-year testing schedule changes → delayed start times
- Transportation
- Concurrent Senior Projects

Creating Content

- Healthy CPS sexual health education curriculum unavailable
- IRB approval → long process
- First time using BTIO® simulators → user error, simulator error, short battery life
### Implementation: Facilitators

<table>
<thead>
<tr>
<th>Change Agents</th>
<th>Ellison Staff</th>
<th>Ellison Students</th>
<th>CICS and CPS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Sexual health educators at Ellison → partnership</td>
<td>● Strong working relationship (RUCON &amp; Ellison) → entrance to the community</td>
<td>● Access to resources → logistics of program activities</td>
</tr>
<tr>
<td></td>
<td>● Strong working relationship (RUCON &amp; Ellison) → entrance to the community</td>
<td>● School nurse → Team planning, guest speaker, BTIO® simulators</td>
<td>● CICS and CPS support for comprehensive sex education</td>
</tr>
<tr>
<td></td>
<td>● Written support from administration → IRB approval</td>
<td>● Peer-leader → cultural capital &amp; developmental appropriateness</td>
<td>● Healthy CPS sex education curriculum</td>
</tr>
<tr>
<td></td>
<td>● School nurse → Team planning, guest speaker, BTIO® simulators</td>
<td>● Students → active engagement</td>
<td>•</td>
</tr>
</tbody>
</table>
Reality Check Program Steps

- Needs Assessment & Literature Review
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- Recommendations for Improvement
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- Implementation
Evaluation: Self-efficacy & Outcome Expectancies

- Data Collection: Likert scale pre/post-surveys
  - BTIO® survey
  - Supplemental 10-question survey

- Outcome expectancies (3 questions)
  - ↑ on average from 4.47 to 4.69 between pre/post survey

- Self-efficacy (8 questions)
  - ↑ on average from 3.82 to 4.51 between pre/post survey
Evaluation: Students’ Lessons Learned

In their own words...

“Wait until you're ready to have a baby. Be extremely careful.”

“I learned a lot [about] dealing with the actual after you have a baby. So like going back to the doctor; you have to feed your baby like 12 times a day, changing diapers all day, going back to work [and] pumping. I just never really thought about stuff like that.”
Evaluation: Satisfaction & Sustainability

- Data collection: Attendance and course evaluation
  - measured student satisfaction in presentation, process, and applicability of program

- Attendance: 18 students enrolled → average attendance 11.75 students

- Student satisfaction: (scale of 1-3)
  - 2.8 satisfaction for presentation
  - 2.9 satisfaction for process
  - 2.97 satisfaction for applicability
  - Overall satisfaction of 2.93

- The vast majority of students would recommend Reality Check to other students
Reality Check Program Steps

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Recommendations

1. Maintain facilitators for success
   a. Relationship and communication with school nurse

2. Winter weather plan

3. More extensive baby simulator testing

4. Validated data collection tool other than BTIO® survey

5. Explore use of qualitative data

6. Add or adapt curriculum content to equally target STI/HIV prevention
Recommendations: Future Vision

1. Improving outcomes in preventing STI/HIV
2. Increasing male participation
3. Increasing peer-leadership
   a. More rigorous leadership education and training
   b. More peer-leaders
Acknowledgements

Thank you to everyone at Ellison who contributed a tremendous amount of work and support!

• Maureen Rabbite
• Shante Parker
• Ellison students!

Thank you to those at Rush who advised and helped us along the way!

• Amber Kujath
• Diane McNaughton
• Chelsea Humpal & Tiffany Aossey
References


References


References


Questions?
### Estimated Program Costs for One Year

<table>
<thead>
<tr>
<th>Costs</th>
<th>Details</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staffing costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Nurse(^1)</td>
<td>Estimated 20 hours</td>
<td>$460.00</td>
</tr>
<tr>
<td>Change agents</td>
<td>Not quantifiable</td>
<td>--</td>
</tr>
<tr>
<td>Student leader</td>
<td>Not quantifiable</td>
<td>--</td>
</tr>
<tr>
<td><strong>Materials costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTIO batteries(^2)</td>
<td>4 C-batteries for 5 simulators and 18 nights</td>
<td>$180.00</td>
</tr>
<tr>
<td>Printing paper(^3)</td>
<td>1 ream</td>
<td>$8.95</td>
</tr>
<tr>
<td>USB(^4)</td>
<td>1 8GB memory stick</td>
<td>$6.99</td>
</tr>
<tr>
<td>Bananas</td>
<td>7 bananas</td>
<td>$4.00</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td></td>
<td>$659.94</td>
</tr>
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</table>
Summary of Surveys

<table>
<thead>
<tr>
<th>Perceived Self-Efficacy</th>
<th>Pretest</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am comfortable talking to my partner about using birth control or condoms.</td>
<td>3.82</td>
<td>4.51</td>
</tr>
<tr>
<td>2. I am comfortable talking to my partner about STIs/HIV.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I know how to get tested for STIs/HIV, if I feel I need to be tested.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. If a close friend became pregnant and asked me, I would know how to advise her on how to seek abortion services.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. If a close friend became pregnant and asked me, I would know how to advise her on how to seek prenatal care.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. If I, or my partner, became pregnant, I would feel comfortable talking to them about pregnancy options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. If I, or my partner, became pregnant, I would feel comfortable talking to my parent(s) about pregnancy options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I feel comfortable talking to a trusted adult about sex.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcome Expectancies</th>
<th>Pretest</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is important to use birth control or condoms when having sex.</td>
<td>4.47</td>
<td>4.69</td>
</tr>
<tr>
<td>2. It is important to get tested for STIs/HIV regularly.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Realistic Beliefs</th>
<th>Pretest</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parenting involves a great deal of commitment and time.</td>
<td>4.64</td>
<td>4.47</td>
</tr>
<tr>
<td>2. Caring for a baby does not require much money.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I could easily raise a child and continue my education.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Taking care of an infant is a large responsibility.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Summary of Course Evaluation

<table>
<thead>
<tr>
<th>Process</th>
<th>2.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>How organized were the lessons?</td>
<td></td>
</tr>
<tr>
<td>How helpful were the written handouts?</td>
<td></td>
</tr>
<tr>
<td>How easy to use were the written handouts?</td>
<td></td>
</tr>
<tr>
<td>How helpful were the activities?</td>
<td></td>
</tr>
<tr>
<td>How helpful were the group discussions?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application</th>
<th>2.97</th>
</tr>
</thead>
<tbody>
<tr>
<td>How applicable was this course for Ellison students?</td>
<td></td>
</tr>
<tr>
<td>How practical were the tools/ideas?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Presentation</th>
<th>2.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>How was the presentation style?</td>
<td></td>
</tr>
<tr>
<td>How well did instructors know the information for each lesson?</td>
<td></td>
</tr>
<tr>
<td>How clear was the information for each lesson?</td>
<td></td>
</tr>
<tr>
<td>How well were questions answered?</td>
<td></td>
</tr>
</tbody>
</table>

**What was your overall satisfaction?** 2.93