Addressing Adolescent Sexual Health Through an Educational Toolkit for Providers in Rural Alaska

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Improving Adolescent Sexual Health Through an Educational Toolkit for Providers

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Community Member: Ms. Hannah E. Warren, MPH
Project Chair: Dr. Tracy L. Brewer, DNP, RNC-OB, CLC, EBP-C
Background

- Young people (15-19) account for more than half of newly acquired sexually transmitted infections (STI)²
- Adolescents naturally engage in risky behaviors²
- Providers, on average, only spend 36 seconds discussing the topic¹
- 33% of adolescents have health visits with no mention of sexual health¹

¹Alexander et al., 2014; ²Center for Disease Control and Prevention [CDC], 2018)
1 in 5 People in the US have an STI totaling nearly 68 MILLION infections in 2018

26 MILLION new STIs in 2018

Almost HALF of new STIs were among youth aged 15-24 in the US

New STIs total nearly $16 BILLION in direct medical costs

The Clinical Problem

Educational resources for communication between providers and adolescents on sexual health were non-existent at ANTHC.

Alaska Natives experience 3.7 times higher rates of chlamydia and 3.3 times higher rates of gonorrhea\(^2\).

46.5 - 56.6\% of AN/Al students have engaged in sexual intercourse\(^1\).

Access to care and dissemination of resources in Alaska can be complex.

Family views are positive towards new life\(^3\).

(\(^1\)Alaska Native Epidemiology Center, 2016; \(^2\)CDC, 2020; \(^3\)Sacca et al., 2021)
Guiding Framework and Purpose
LARRABEE’S MODEL FOR EVIDENCE-BASED PRACTICE CHANGE

Step 1: Assess the need for practice change
- Create a spirit of inquiry
- Develop clinical question in PICOT format
- Collect internal data/ SWOT analysis
- Link problem to interventions, and outcome
- Develop project team

Step 2: Locate the best evidence
- Conduct extensive review of literature using formulated PICOT question
- Collaborate with University librarian
- Utilize CINAHL, PubMed, and Cochrane databases
- Develop inclusion and exclusion criteria

Step 3: Critically analyze the evidence
- Critically appraise selected evidence and assign a level and quality grade
- Provide comprehensive sexual health education to adolescents
- Synthesize best evidence
- Consideration of feasibility and applicability to project site

Step 4: Design practice change
- Create and design a comprehensive toolkit for providers
- Develop timeline using GANTT chart
- Creation of evaluation, implement, and data collection plan

Step 5: Implement and evaluate change in practice
- Implement pilot project and upload toolkit on the “Iknowmine.org” organization website
- Obtain data
- Evaluate outcomes of intervention
- Draw conclusions

Step 6: Integrate and maintain change in practice
- Disseminate findings of EBP project through poster presentations
- Share outcomes with key stakeholders
- Develop sustainability plan
- Defend DNP scholarly project
“In adolescents (P), how does comprehensive sexual health education (I) in schools compared to no education (C) affect sexual health self efficacy (O)?”
Project Purpose and Aim

Purpose

- Implement a comprehensive, educational toolkit including various evidence-based sexual health topics for rural health care providers to improve communication in addressing adolescent sexual health

Aim

- Improve rural healthcare providers’ access to educational material and evidence-based practice guidelines addressing adolescent sexual health
Patient and Family Preferences and Values

- Family centeredness and cultural identity
- Self-governance and autonomy
- Family is a significant protective factor to youth, confidentiality challenges
- Inclusion of CHA/Ps and use of ANTHC brand colors
Evidence
Literature Search

Records identified through database searching (n = 549)

Additional records identified through other sources (n = 3) 2 CPGS, 2 Policy Statements

Records after duplicates removed (n = 540)

Records screened (n = 82)

Records excluded (n = 37)

Full-text articles assessed for eligibility (n = 45)

Studies included for critical appraisal (n = 10)

Studies included in synthesis of literature (n = 6)

Full-text articles excluded, with reasons (n = 37)
- Non-US based study
- Approach to education was not comprehensive
- Did not address research question
- Older than 6 years
- Higher level of evidence available
- Focus on adolescents with disabilities or LGBTQ only
Non-Research Evidence

- **Integrative Review** - AI/AN youth experience increased stressors which magnify sexual risk; supports targeting youth at an earlier age; the prominence of sexual risk precursors is prevalent in AI/AN youth and targeted prevention is needed³

- **National Academies of Sciences, Engineering, and Medicine (NASEM)** - sexual health paradigm that improves services for priority population such as adolescents, expand resources to underserved populations; innovative interventions to facilitate practice change²

- **AAP Policy Statement Recommendations** - Partner with local tribes to create protective factors for youth, focus on cultural preservation and approaching sexuality should occur in office setting with Pediatrician involvement¹

¹Bell et al., 2021; ²NASEM, 2021; ³Tuitt et al., 2020
Critical Appraisal of Evidence

John’s Hopkins Nursing Evidence Based Practice (JHNEBP) Research Evidence Appraisal Tool

JHNEBP Non-Research Evidence Appraisal Tool

JHNEBP Level and Quality Guide

JHNEBP Synthesis Process and Recommendation Tool
Synthesis of Research Evidence

- Interactive programs
- Primary prevention programs
- Self-efficacy
- Comprehensive interventions
- Improves knowledge, intentions, and communication
- Providers have a profound impact on adolescent’s decisions
- Toolkits are effective in dissemination of EBP and knowledge
Recommendations

Implementation of a community-based comprehensive sexual health toolkit for providers to improve delivery of adolescent sexual health care

A toolkit that guides providers in sexual health prevention including history taking, confidentiality, increasing and improving communication, STI screening and prevention, and tips for parent involvement

The toolkit includes culturally sensitive sexual health information that is brief, available online, downloadable, and in hard copy for easy access and dissemination
Implementation
Implementation Timeline

March 4, 2022: Proposal Defense

April/May 2022: Submitted and Reviewed by the Alaska Area Institutional Review Board

July 4, 2022: Project approved; Toolkit uploaded and Implemented on Iknowmine.org

Collect survey responses; Analyze Results

February 24, 2023: Final Defense March-May; Disseminate Results at National Public Conferences

March

April

May

June - November

December

January

February-May

Finalized Toolkit Design

June 14, 2023: AAIRB Determination Received; Submitted to ANTHC Researcch Review Committee

Project Implementation

Project Completion
Implementation

Setting
- Alaska Native Tribal Health Consortium
  - iknowmine.org
- HIV/STD Prevention Program
  - 58 THOs, 160 CHA

Participants
- Healthcare providers who live in Alaska
- Healthcare providers who care for Alaska Native adolescents
 Toolkit

Comprehensive, educational toolkit on Sexual Health Topics and promoting Communication

Topics Include:

- Cultural Humility
- AI/AN Cultural Considerations
- Confidential, Youth Friendly Environment
- Being an Askable Adult
- Taking a Sexual Health History
- Answering questions from adolescents
- How to approach parents
- STI Prevention/Screening/Testing

Asynchronous zoom training recording available
Data Collection and Evaluation Plan

- Monthly collection of web analytics of toolkit usage
  - In order to understand access and accessibility
    - # of iknowmine.org website views
    - # of toolkit page views
    - # of toolkits ordered (physical copies)
    - # of toolkits downloaded

- Evaluation of Adolescent Sexual Health Toolkit
  - Survey collected and stored via Qualtrics
    - 34-item
    - Reviewed by 3 organizational content experts
Data Analysis

- Survey response data exported from Qualtrics to SPSS at the end of 4th month
- Descriptive statistics for demographic variables
- Counts, frequencies, and percentiles for categorical data
- Means and standard deviations for numerical values/scales
- Open-ended responses in narrative format as direct quotes
- Paired Sample t Tests
Ethical Considerations

- Institutional Review Board (IRB) determination sought through University of Tennessee, Knoxville
- Alaska Area Institutional Review Board Determination (AAIRB)
- ANTHC Non-Research Review Committee
Iknowmine.org Website Analytic

23,495 Website Views
Website Analytics

- 282 ASHT Webpage Views
- 25 Toolkits Ordered
- 6 Toolkit Downloads
- 9 Survey Responses
Participant Demographics

Provider Credentials

- RN/LPN: 37%
- MD/DO: 25%
- BHA: 13%
- Physicians Assistant: 13%
- Other: 13%

Years Experience

- >10: 64%
- 8 to 10: 12%
- 5 to 8: 12%
- 1 to 5: 12%
Participant Demographics

Percentage of AI/AN Patients Served

- 72%: 91-100%
- 14%: 81-90%
- 14%: 71-80%

Healthcare Practice Setting

- 60%: Village/Personal Home
- 20%: Hospital
- 20%: Clinic
Participant Specialties

- 1 Pediatrics
- 2 Family Medicine
- 2 Public Health
- 2 Surgical Services/PACU RN
- 1 BHA - Behavioral Health Aid
- 1 Substance Abuse Clinic
Geographic Practice Areas
<table>
<thead>
<tr>
<th>Most Beneficial Toolkit Topics</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering questions from adolescents</td>
<td>7</td>
<td>4.43</td>
<td>0.98</td>
</tr>
<tr>
<td>Creating a confidential environment/tips to foster youth-friendly environment</td>
<td>7</td>
<td>4.43</td>
<td>0.98</td>
</tr>
<tr>
<td>Being an askable adult</td>
<td>7</td>
<td>4.29</td>
<td>1.25</td>
</tr>
<tr>
<td>STI/HPV Prevention/Testing/Case</td>
<td>7</td>
<td>4.29</td>
<td>0.76</td>
</tr>
<tr>
<td>Additional Resources</td>
<td>7</td>
<td>4.29</td>
<td>0.95</td>
</tr>
</tbody>
</table>
# Provider Likelihood to Initiate Conversations

## Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>How likely were you to initiate a sexual health discussion with an adolescent <strong>before</strong> the toolkit?</td>
<td>7</td>
<td>4.57</td>
<td>0.79</td>
</tr>
<tr>
<td>How likely were you to initiate a sexual health discussion with an adolescent <strong>after</strong> the toolkit?</td>
<td>7</td>
<td>4.86</td>
<td>0.38</td>
</tr>
</tbody>
</table>

## Paired Sample T Test (Sig. 2 tailed)

\[ p = 0.17 \]
# Healthcare Provider Confidence Level

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>How confident were you talking with youth about sexual health before the toolkit?</td>
<td>7</td>
<td>2.86</td>
<td>1.069</td>
</tr>
<tr>
<td>How confident were you talking with youth about sexual health after the toolkit?</td>
<td>7</td>
<td>3.86</td>
<td>0.690</td>
</tr>
</tbody>
</table>

Paired Sample T Test (Sig. 2 tailed)

\[ p = .004 \]
Utility of Toolkit Information \( (N = 7) \)

- Healthcare providers were extremely likely to have a conversation with an adolescent 13-15 years old \( (M = 5.00, \ SD = .00) \)
- Healthcare providers somewhat to strongly agree that the toolkit:
  - Taught them something new \( (M = 4.43, \ SD = 1.51) \)
  - Is easily accessible \( (M = 4.43, \ SD = 1.51) \)
  - Aided in sexual health care delivery \( (M = 4.43, \ SD = 1.51) \)
Healthcare providers were *very to extremely satisfied* with the:

- Consolidated format ($M = 4.86$, $SD = 0.38$)
- Overall appearance of the toolkit ($M = 4.71$, $SD = 0.49$)
Healthcare Provider Preference for Accessing Resources

- Hard copy, printed
- Web browser, URL link
- Booklet
- PDF, downloadable
- QR Code

Percentiles
Barriers To Toolkit Use

- No or Unstable Internet Accessibility: 50.00%
- No Limitations: 60.00%
- Forgot I had Access to It: 15.00%
- Too long: 15.00%
- Not an Important Topic: 5.00%
- Other: 10.00%
“I liked the fact that there is a toolkit. I think until I reference and use the resources more, I am not sure what I like the most or least.”

“I appreciated the information and discussion guides.”

“This is so very needed in rural Alaska.”

“I liked the importance it gave to considering the cultural background when having a discussion with a youth and parent.”

“Lots of good info, nice design, clear, concise.”

“I was shocked by how small it was and expected a lot more. However, following reviewing the information found it is extremely useful and was happy for the concise format.”

“The toolkit is to the point and visually appealing.”
Next Steps:
Recommendations from Healthcare Providers

- Explain the 5P's further
- Intimate partner violence and reporting of IPV
- STI reporting requirements
- Topics for Additional Toolkits:
  - STD specific targeted diagnosis and treatment
  - Drugs and alcohol
  - Considerations of sexual health post pregnancy
  - Parents as the Targeted Audience
Implications for Practice

- The Adolescent Sexual Health toolkit available on iknowmine.org is an easily accessible toolkit that aids in healthcare provider communication.
- Increases a provider’s confidence initiating sexual health discussion.
- Providers appreciate consolidated, easily accessible resources, and keeping those resources up to date is important.
Sustainability of Toolkit

- The toolkit is maintained online through ANTHC HIV/STD Prevention Program and Marketing Department
- HIV/STD Prevention Program Manager will update the toolkit based on participant comments
  - Adolescent Sexual Health Toolkit 2.0
  - Review annually for required updates
- Continue toolkit availability on Iknowmine.org
- Seek out additional avenues for advertisement
- DNP student remains available for questions/concerns

“This is a start on a road that can be expanded”
- Participant
Dissemination

ANTHC Wellness and Prevention Department Meeting
January 19, 2023

10th International Meeting on Indigenous Child Health - Poster Presenter
March 24-26, Tulsa, OK

Annual Conference on Adolescent Health - Adolescent Health Initiative - Poster Presentation
May 11-12, 2023

Manuscript Submission
Comprehensive Child and Adolescent Nursing
Or UTK TRACE
A comprehensive list of references are available upon request

Adolescent Sexual Health Toolkit Webpage
Thank you!
Questions?