Suicide Prevention in the Non-Psychiatric Hospital Setting: A Nurse Education Process

Terry Bird, DNP, RN-BC
ArnotHealth

- Not-for-profit, regional healthcare system
- Three affiliate hospitals
- Multispecialty physician group
- Serving the Twin Tiers of New York & Pennsylvania
• Most health care professionals lack adequate education/training in suicide prevention 1-5

• Survey of licensed nurses at ArnotHealth6
  • Little if any current training in suicide
  • Low suicide knowledge scores

• Existing policies/practices in suicide education lack currency and relevance to practice setting

Patient suicide in the hospital setting has been one of the most frequently reported sentinel events \(^1, 2\)

Unique challenges in suicide prevention exist for nurses working on general hospital units \(^1-4\)

Unfavorable attitudes toward suicide influence decision making and behaviors in relation to suicide prevention \(^1-4, 5\)

\(^1\)TJC, 2010; \(^2\)Tishler & Reiss, 2009; \(^3\)Neville & Roan, 2013; \(^4\)Ouzouni & Nakakis, 2013; \(^5\)Bolster, Holliday, O’Neal, Shaw, 2015.
Aim & Design

**Aim**
- Engage and mobilize stakeholders
- Conduct an evidence-based suicide education pilot
- Build organizational capacity to advance evidence-based suicide education policies and practices
- Effect long-term system change to advance training efforts and clinical competence in suicide prevention

**Design**
- Single comparison group pre/post testing design
System Change Framework

➢ Three Phase System Change Framework
  • Phase I: Adopt
  • Phase II: Adapt
  • Phase III: Evolve
Target Population

- Primary purposive sampling was used to recruit initial target population of nurses
  - Unit directors, nurse supervisors, clinical coordinators, nurse educators, frontline nurses working on general hospital units at AOMC, SJH, IDMH
- Secondary network sampling was used to broaden recruitment to include other clinical disciplines in and outside of the organization
Data Collection Methods

• Pretest and post-test questionnaires were used to collect primary quantitative data before and after ASIST intervention.
• Pretest and post-test questionnaires were developed using selected items from two existing questionnaires with documented validity and reliability testing.¹,²
• Questionnaires were pretested with registered nurses and content experts.

¹Chen, Moore, & Gibbs, 2009; ²Ouzouni & Nakakis, 2009.
Implementation Strategies

1. Identify & engage key stakeholders
2. Mobilize a Project Advisory Team
3. Adopt EB suicide education intervention – Applied Suicide Intervention Skills Training (ASIST)
4. Partner with key internal/external stakeholders to coordinate delivery of ASIST at project site
5. Recruit target population to participate in the ASIST education intervention
Ethics and Quality

• Completion of Collaborative Institutional Training Initiative (CITI) course
• Anonymous pre & post-test questionnaire design
• Protocols to address participant distress due to sensitive subject matter
• Debriefing statement
• Boise State University, Institutional Review Board (IRB) approval
## Evaluation Analysis

<table>
<thead>
<tr>
<th>Intended Outcome</th>
<th>Outcome Analysis</th>
</tr>
</thead>
</table>
| 1. Achieve ASIST completion rate of 75% | Outcome achieved  
- 30 participants  
- 100% completed ASIST  
- 29 completed pre/post-test questionnaires |
| 2. Describe characteristics of ASIST participants | Outcome achieved  
- Descriptive summary of participants completed |
| 3. Increase pre to post-test suicide-related knowledge scores by 10% | Outcome achieved  
- 13.1% increase in mean total post-test score for knowledge  
  \( n=29; t(2)=2.05; p<0.05; CI 6.1, 20.1 \) |
## Evaluation Analysis

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<thead>
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| 4. Increase pre to post-test suicide-related attitude scores by 10% | Outcome achieved  
• 11% increase in mean total post-test score for attitude  
(n=29; t(2)=2.01; p<0.05; CI 0.2, 0.7) |
| 5. Evaluate participant satisfaction with ASIST education intervention against threshold of 40 | Outcome achieved  
• Total mean satisfaction score 46.5 |
| 6. Effect system change in suicide education policy at project site | Outcome ongoing |
## Participant Characteristics

<table>
<thead>
<tr>
<th>Primary Work Place</th>
<th>n (%)</th>
</tr>
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<tbody>
<tr>
<td>ArnotHealth</td>
<td>21 (72)</td>
</tr>
<tr>
<td>Other</td>
<td>8 (28)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Role</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse</td>
<td>8 (28)</td>
</tr>
<tr>
<td>Social Worker</td>
<td>8 (28)</td>
</tr>
<tr>
<td>Nurse Education</td>
<td>7 (24)</td>
</tr>
<tr>
<td>Chaplain</td>
<td>4 (14)</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>2 (7)</td>
</tr>
</tbody>
</table>
Previous Suicide Training

72% Yes
28% No

Yes (21)  No (8)
## Experience With Suicide

<table>
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<tr>
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<th>n (%)</th>
</tr>
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<tbody>
<tr>
<td>Cared for Patient Who Attempted Suicide</td>
<td>23 (79)</td>
</tr>
<tr>
<td>Cared for Patient Who Died by Suicide</td>
<td>8 (29)</td>
</tr>
<tr>
<td>Family or Friend Attempted Suicide</td>
<td>16 (68)</td>
</tr>
<tr>
<td>Family or Friend Died by Suicide</td>
<td>16 (55)</td>
</tr>
<tr>
<td>Personally Considered Suicide</td>
<td>10 (35)</td>
</tr>
</tbody>
</table>

National Academy of Medicine, 2016
Change in Knowledge/Attitudes

Statistically significant pre to post-test change in suicide-related knowledge and attitude was found among ASIST participants.

<table>
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<th>Pretest</th>
<th>Post-test</th>
<th>% Change</th>
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<tr>
<td>Mean knowledge score*</td>
<td>63.8</td>
<td>76.9</td>
<td>17%</td>
</tr>
<tr>
<td>Mean attitude score**</td>
<td>3.5</td>
<td>3.9</td>
<td>11%</td>
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*t(2)=2.05; p<0.05; CI 6.1, 20.1
**t(2)=2.01; p<0.05; CI 0.2, 0.7
Satisfaction With ASIST

Post-test satisfaction scores for ASIST exceeded desired threshold of 40 indicating the intervention met or exceeded the needs of participants.
Satisfaction With ASIST

Additional Comments/Feedback
• 15 participants wrote in comments on post-test
• All comments reflected high degree of satisfaction with training, trainers, and good use of time
• “This was the best training of any kind that I have attended”, “Can’t say enough about this training...everyone should have it”
Unanticipated Consequences

Three unanticipated situations during project implementation

• Two participants experienced emotional distress during workshop sessions
• One participant was repeatedly interrupted during the workshop due to work responsibilities
• Interprofessional cross-pollination

¹Sullivan, Kiovsky, Mason, Hill, & Dukes, 2015
# Affordability

## Statement of Operations

<table>
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<th>Revenues</th>
<th></th>
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<tbody>
<tr>
<td>Internal training budget in-kind contribution</td>
<td>$63,691</td>
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<td>External stakeholders in-kind contribution</td>
<td>$4,650</td>
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<td>Contingency-10% of project expense</td>
<td>$6,834</td>
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<td><strong>Total</strong></td>
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*Operating Income* $0
Conclusions

- Evaluation of ASIST proved favorable in the project setting.
- Nurses serve a vital role in suicide prevention but barriers to gaining, maintaining, and increasing suicide-competence exist.
- An organization wide, team-based approach to suicide prevention that includes interprofessional education is recommended.
Organizational-Level

• Implementation of policies mandating suicide education across disciplines upon hire with annual updates (CPR model)

• Adoption of system-wide EB suicide education intervention
  • Common knowledge, language, approach
  • Enhance continuity, communication, care transitions
  • Suicide risk management & prevention
Policy Implications

• Mandatory continuing education in suicide prevention as a condition for professional licensure and renewal

• Achieving a suicide-competent clinical workforce will require incremental system change at multiple levels across disciplines
  • Health care organizations
  • Professional education institutions
  • Professional licensing entities
  • Professional associations
Acknowledgements

• ArnotHealth

• Project Advisory Team
  – ArnotHealth
    • Linda MacAuslan, Rebecca Drake, Mary Vosburg
  – Chemung County Suicide Prevention Coordinator
    • Shannon Oakes
  – ASIST Master Trainers
    • Pat Breux, Lee-Ellen Marvin
References

Available upon request