Understanding Suicide Risks with Deaf and Hard-of-Hearing People to Inform a Suicide Prevention Intervention Adaptation

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Agenda & Acknowledgements

Agenda

- Suicide research with the Deaf, hard-of-hearing, (d/D/HH) & people with hearing loss
- *Research challenges, strategies & methodology with d/D/HH & people with hearing loss*
- Research project Experiences of Deaf and Hard-of-hearing College Students

Acknowledgements

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<th>Topics</th>
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Suicide Risk

- Many of the risk factors that influence suicide behaviors rates in hearing people would be expected to do so in *d/D/HH* people.
- Poor quality of life & mental distress are associated with increased odds of completed suicides & suicide attempts in hearing people [5, 6].
- Factors known to contribute to this relationship include:
  - *Low educational attainment* [7,8,9]
  - *Lack of stable employment* [7]
  - *Socioeconomic deprivation* [10]
  - *Presence of psychiatric disorders* [11-13]
  - * Substance use disorders* [7,14,15]
- Generally, *d/D/HH* people report lower quality of life & increased mental distress compared to hearing people [16, 17].
- Deaf & deaf-blind individuals experience higher rates of mental health problems than hearing individuals [4,5].
Possible Suicide Risks

Compared with hearing people, d/D/HH people have relatively

- Low educational attainment [18]
- Low socioeconomic status (SES) [19, 20]
- High rates of untreated psychopathology [21]
  - Multiple reasons
- High risk of substance abuse within some segments of the community [22]
- Unstable employment [16]

d/D/HH people have high rates of characteristics associated with suicide

- Emotional distress [4]
- Unemployment [21]
- Child abuse histories [4]
d/D/HH-related Suicide Risk

Risk factors that are more specific to d/D/HH people

- Critchfield, et al. (1987) identified
  - Lack of role models
  - Alienation from family & peers
  - Increased risk of abuse
  - Social isolation
  - Acceptance of self; self image
  - Separation of parent and child
  - Peer and relationship problems

- Others have suggested
  - Fund of information (FOI) gaps
  - Language fluency & acquisition
  - Acculturation stress

- Hearing-related problems (e.g. medical issues related to cause of hearing loss, tinnitus, Usher syndrome) ‘major contributing factor’ in 29% of suicides [15]

- Increased difficulties for d/D/HH people in accessing mental health & social services [3,5]
Risks hearing population

\[+\]

\[d/D/HH\text{ specific risks}\]

\[+\]

Limited access to treatment

\[\text{Age of onset}\]

\[\text{Perceived burdensomeness}\]

\[\text{Thwarted belongingness}\]

\[\rightarrow\]

Suicide risk
Prevalence & Incidence Rates

- De Leo et al (1999) found 0.2% of suicide cases to have sensory impairment.
- Boyechko (1992) found high prevalence rates of suicidal behavior & ideation among d/D/HH college students:
  - During their lifetime:
    - 40% reported having felt that life was not worth living
    - 44% had experienced suicidal thoughts
    - 30% reported having attempted suicide
  - 18% had attempted suicide during the previous year
  - No completed suicides

- Critchfield et al. (1987) examined deaf students at deaf-only and deaf & hearing educational programs:

<table>
<thead>
<tr>
<th></th>
<th>Deaf-only programs</th>
<th>Deaf &amp; hearing program</th>
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<tbody>
<tr>
<td>Suicidal attempts &amp; gestures</td>
<td>2.2%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Verbalization of suicide</td>
<td>4.6%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Hospitalization for suicidal or depressive episode</td>
<td>1%</td>
<td>0.6%</td>
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# Suicide & Deaf People

NTID (deaf) vs. RIT (hearing) Freshman Suicide Survey Responses vs. National College Health Assessment

<table>
<thead>
<tr>
<th>Item</th>
<th>NTID deaf 2005 (N=168)</th>
<th>RIT hearing 2005 (N=578)</th>
<th>NCHA† 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicidal ideation past 12 months</td>
<td>12.0%</td>
<td>14.0%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Suicide attempt past 12 months</td>
<td>8.3%</td>
<td>3.1% ‡</td>
<td>2.0%</td>
</tr>
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</table>

† Undergraduate students (any year)
‡ NTID vs. RIT p<.05
## Suicide & Deaf People

Two Deaf Adult Samples’ Suicide Survey Responses vs. Monroe County (hearing) BRFSS Responses

<table>
<thead>
<tr>
<th>Item</th>
<th>Rochester Deaf Health Survey Sample 2008 (N=339)</th>
<th>Rochester Deaf Health Survey NTID Alumni Sample 2008 (N=162)</th>
<th>Monroe Cty. BRFSS 2006 (N = 2546)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicidal ideation past 12 months</td>
<td>9.6%</td>
<td>10.7%</td>
<td>(not asked)</td>
</tr>
<tr>
<td>Suicide plan past 12 months</td>
<td>2.5%</td>
<td>4.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Suicide attempt past 12 months*</td>
<td>2.2%</td>
<td>1.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Ever attempted suicide</td>
<td>14.6%</td>
<td>10.0%</td>
<td>(not asked)</td>
</tr>
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</table>

**Monroe County sample is weighted to adjust for possible biases introduced by telephone survey methodology.**
Research Strategies & Methodology

Community-Engaged Research Approach

- Local & national advisory boards
- Research project specific boards
- Town hall meetings
- Translation teams
  - Include d/D/HH community members
- Cognitive interviews
  - *Vital step in developing a culturally & linguistically appropriate research methodologies with D/HH populations*
  - *Participant’s thought processes, reactions, & comments about survey or other methodology is interview focus - not actual answers*
  - *Illuminates cognitive processes that respondents use to answer survey questions*
    - Use to evaluate & minimize sources of response error in the survey questionnaire [23]
    - *Conceptually strengthens validity & reliability*
Surveys in ASL & Signed English

**Complex & intricate process**
- Team translation & back translation
- Cognitive interviews
- Script development
- Filming
- Computer software survey building
- Software testing

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Research Challenges

- Few **qualified researchers** fluent in ASL & Deaf culture
- Different **definitions & ways of asking/capturing** ‘deaf’ ‘hard-of-hearing’ & other terms to **identify population** in data
- Identifying & engaging & **d/D/HH sub-groups** (e.g. minimal language skill d/D/HH people, Deaf with Disabilities (DWD))
- Variability in **modes of communication & ASL skills** of d/D/HH people
- Linguistic & cultural **accessibility of existing measures**
- Few **data collection measures in ASL**
- **Complex logistics & process** in survey adaptation
- Deaf & hard-of-hearing ASL users **small population**
- No **single sign** for ‘suicide’ – not a limitation of ASL
- Understanding **how Deaf people conceptualize** ideations & attempts
  - Misunderstandings in media regarding “accidents”
How Deaf Residential Schools Approach Suicide

Dudzinski (1998) surveyed d/D/HH residential schools

- Most participating schools considered suicidal behavior a problem
- 31% had no established guidelines for responding to such behavior
- Five most common elements of procedures for dealing with suicidal ideation listed were generic:
  1. call parents
  2. keep student under observation
  3. complete written documentation
  4. call counselor/psychologist
  5. follow-up
- In schools with policies for dealing with suicidal ideation, the most common response type was administrative
- In some schools the policies were exclusively administrative in nature
- The least common intervention was psychosocial
Sources of Strength

- Upstream suicide prevention program with adolescent Peer Leaders & Adult Mentors
- 2005: National Field Project Award – American Public Health Assoc. (APHA)

Key Concepts
- Social Connectedness Model
- Change-Agents: Key Opinion Leaders
- Active Training and Diffusion

Objectives
- Spread Healthy Coping to Reduce Vulnerability to Suicide
- Strengthen Youth-Adult Connections
- Increase Help-Seeking & Receiving

Testing/program refinement - 2006
- NIMH & SAMSHA funded RCT w/ 18 schools; 465 Peer Leaders; 2,700 students [1 Semester] (Wyman et al 2010, AJPH)
- First Peer Leader program to change school-wide risk & protective factors associated with reduced suicide
Rationale for Sources of Strength

Need

- d/D/HH experience isolation -> mental health impact -> suicide risk
- College - impressionable time for d/D/HH student identity development & community affiliation
- d/D/HH student readiness for college stressors
- Lack of prevention education in middle & high school years

Sources of Strength

- **Program Philosophy**
  - Developed through working with underserved populations
  - Strengths based – not pathological
  - Adaptable to meet communities where they are
  - Community owned not imposed

- **Style**
  - Hands-on interactive learning & application
  - Circle seating
  - Personal narratives are valued

- Need for Adaptation of Evidenced Based Practices with d/D/HH
Network Health Diffusion Model
Research Areas to Inform Adaptation of Sources of Strength

Peer Leader Selection
- Makeup of d/D/HH peer groups
- Identification of peer leaders
- Relationships with peers
- Identification of mentors
- Relationships with mentors

Peer Leader Training & Development
- Deaf perspective – wheel
- Adaption for activities
- d/D/HH peer group social norms
- Natural coping strategies

Diffusion to Population
- Social networking in d/D/HH communities
- Impact of stigma on networking
- How messages are shared among networks
Research Project

Aims

- Identify d/D/HH college students’ social network characteristics related to influential peer leaders, ties to mentors & affiliations
- Identify d/D/HH college students’ perspectives on natural coping resources

Methodology

- Qualitative Study using 25 semi-structured video recorded interviews with d/D/HH RIT & NTID students in their preferred mode of communication
- Questions exploring:
  - On & off campus social networks
  - Trusted groups/clubs/offices on campus
  - How learned about these groups/clubs/offices on campus
  - How they access these people & groups
  - Stressors
  - What gives them strength

Analysis Plans

- Sign language translated into English then code English
- Conduct thematic analysis using and frequency statistics of demographic information
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