An analysis of child deaths by suicide in Queensland Australia, 2004-2012: What are we missing from a preventative health services perspective?

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Dr Florin Oprescu, Ms Jeanne Dayton

Youth and child suicide

• Youth and child suicide prevention is a national priority
  – 15-19 year olds:
    • 35% of all male deaths and 26% of all female deaths in Australia, 2014
    • Males 14.3/100,000; females 5.6/100,000 in 2013

Youth and child suicide

• Suicide risk factors?
  – Environmental risk and protective elements
    • Social, economic and cultural stressors
    • Individual, family and community factors
    • Male, indigenous, rural, refugee/immigrant, same-sex attracted, transgender, lower socioeconomic status, welfare/residential care, mental health issues
  – Do children understand death is irreversible?
  – ~74% of major mental illness begin before age 18 years

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- Qualitative research can inform policy and practice

Method

- De-identified data child suicide fatalities (<18 years)
  - 1 July 2004-30 June 2014, Queensland
  - Commission for Children and Young People and the Child Guardian
  - Intent clear or established intent-to-die as probable

- Narrative summaries of circumstances surrounding death
  - 159 cases
  - Leximancer version 4
  - Initial coding, coding for categories, coding for themes
  - Concept clarification
  - Removed redundancies [eg, approximately],
    - Combined similar concepts [eg, deceased, deceased’s]
  - SPSS Version 22

Results: Demographics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Proportion</th>
<th>Demographics</th>
<th>Proportion</th>
<th>Demographics</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>63.5%</td>
<td>9-14 years</td>
<td>23.9%</td>
<td>Known to child safety system</td>
<td>63.5%</td>
</tr>
<tr>
<td>Female</td>
<td>36.5%</td>
<td>15-17 years</td>
<td>15.1%</td>
<td>Aboriginal</td>
<td>10.7%</td>
</tr>
<tr>
<td>Major city</td>
<td></td>
<td></td>
<td></td>
<td>Torres Strait Islander</td>
<td>1.3%</td>
</tr>
<tr>
<td>Inner regional</td>
<td></td>
<td></td>
<td></td>
<td>Neither</td>
<td>73.5%</td>
</tr>
<tr>
<td>Outer regional</td>
<td></td>
<td></td>
<td></td>
<td>Unknown</td>
<td>0.6%</td>
</tr>
<tr>
<td>Remote</td>
<td>1.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very remote</td>
<td>2.5%</td>
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<td></td>
</tr>
<tr>
<td>Outside of QLD</td>
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<td></td>
</tr>
<tr>
<td>SEIFA residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very high</td>
<td>7.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>15.7%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>29.6%</td>
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<td></td>
</tr>
<tr>
<td>Low</td>
<td>23.2%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Very low</td>
<td>20.1%</td>
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<td></td>
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<tr>
<td>Outside of QLD</td>
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</tr>
</tbody>
</table>

Results: Mental health issues

<table>
<thead>
<tr>
<th>Mental health issues</th>
<th>Proportion</th>
<th>Mental health issues</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown suicidal ideation</td>
<td>40.4%</td>
<td>Unknown suicidal ideation</td>
<td>40.4%</td>
</tr>
<tr>
<td>Suicidal ideation</td>
<td>9.7%</td>
<td>Suicidal ideation</td>
<td>9.7%</td>
</tr>
<tr>
<td>Self harm</td>
<td>17.7%</td>
<td>Self harm</td>
<td>17.7%</td>
</tr>
<tr>
<td>Unknown attempt at suicide</td>
<td>8.4%</td>
<td>Unknown attempt at suicide</td>
<td>8.4%</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td>10.5%</td>
<td>Attempted suicide</td>
<td>10.5%</td>
</tr>
<tr>
<td>Unknown social media or social isolation</td>
<td>10.5%</td>
<td>Unknown social media or social isolation</td>
<td>10.5%</td>
</tr>
<tr>
<td>Family history of mental illness</td>
<td>16.4%</td>
<td>Family history of mental illness</td>
<td>16.4%</td>
</tr>
<tr>
<td>Uknown mental illness family history</td>
<td>25.2%</td>
<td>Uknown mental illness family history</td>
<td>25.2%</td>
</tr>
<tr>
<td>Previous suicidal thoughts/behaviour</td>
<td>16.4%</td>
<td>Previous suicidal thoughts/behaviour</td>
<td>16.4%</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td>10.5%</td>
<td>Attempted suicide</td>
<td>10.5%</td>
</tr>
<tr>
<td>Self-harm</td>
<td>10.5%</td>
<td>Self-harm</td>
<td>10.5%</td>
</tr>
<tr>
<td>Suicidal ideation</td>
<td>10.5%</td>
<td>Suicidal ideation</td>
<td>10.5%</td>
</tr>
<tr>
<td>Unknown mental illness</td>
<td>25.2%</td>
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</tr>
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Results: Child abuse

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sibling abuse</td>
<td>19.9</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>15.6</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>13.5</td>
</tr>
<tr>
<td>Emotional harm/neglect</td>
<td>11.7</td>
</tr>
<tr>
<td>Substantiated abuse</td>
<td>9.4</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>7.9</td>
</tr>
<tr>
<td>History of childhood abuse</td>
<td>5.6</td>
</tr>
<tr>
<td>Unknown abuse</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Results: Precipitator/contagion

<table>
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<tbody>
<tr>
<td>Sibling abuse</td>
<td>18.9</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>13.2</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>10.7</td>
</tr>
<tr>
<td>Emotional harm/neglect</td>
<td>7.4</td>
</tr>
<tr>
<td>Substantiated abuse</td>
<td>7.1</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>6.6</td>
</tr>
<tr>
<td>History of childhood abuse</td>
<td>5.6</td>
</tr>
<tr>
<td>Unknown abuse</td>
<td>5.1</td>
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</tbody>
</table>

Themes

- Centrality of **family**
  - Mother (n = 82 cases): Typically broader role in interactions with child
  - Father (n = 42 cases): Typically involved in checking on, finding the child, responding to the suicide
  - Brother (n = 31 cases)

- Centrality of **home**
  - Majority of suicides located in the house, most commonly
    - Bedroom, bathroom, garage, shed
    - Trees near family residence
    - Family usually locked out of location
  - Location of interpersonal conflict with **family**
Themes

• Centrality of prior
  – Related to home and family themes
    • Eg, Interpersonal conflict with family member in family home, previous day
  – Related to other risk factors
    • Eg, Relationship breakdown, mental health symptoms, death of pet
  – Events often occurred the night before the suicide
  – Often wrote about intent to suicide the next day
  – Often in better mood on day of suicide (previous unusual mood/behaviour)

• Centrality of neck and head
  – Methods of suicide
  – Hanging common, but materials varied widely
    • Ropes, belts, dog chains, electrical chords
  – Availability and versatility of suicide tools

• Centrality of ambulance and hospital
  – Post-suicide sequelae of events
    • Emergency services called, signs of life sought
    • Some deaths announced in hospital, others had history of hospital treatment/admission

Hanging vs Non-hanging deaths

• Non-hanging deaths more likely
  – In metropolitan and outer regional areas
  – In families with a history of mental illness
  – A history of child abuse (not emotional harm or neglect)
• Hanging deaths more likely
  – Precipitating argument with a significant other

Injury prevention implications

• We know some key themes
  – Better understand youth suicide
  – Better prevent youth suicide
Injury prevention implications

- We know some key themes
  - Better understand youth suicide
  - Better prevent youth suicide
- Some gender differences in mechanism
  - Only males by collision with moving object/carbon monoxide (CO) poisoning, more likely by gunshot
  - Only females by overdose/asphyxiation by gas other than CO

Injury prevention implications continued

- Increased suicide risk with mental health difficulties
  - Health services/health system failure?
  - Better connection to health services?
  - Extra support for families and children?

Injury prevention implications

- Need rapid intervention in suicide
  - Increased survivability for some methods
    - E.g., hanging time <5 minutes
  - Aggressive resuscitation efforts increase survival rates

Injury prevention implications continued

- Need rapid intervention in suicide
  - Increased survivability for some methods
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  - Aggressive resuscitation efforts increase survival rates
- Manage mechanisms of death
  - Guns
  - Hanging?
Injury prevention implications continued

• Need rapid intervention in suicide
  – Increased survivability for some methods
    – Eg. hanging time <5 minutes
  – Aggressive resuscitation efforts increase survival rates

• Manage mechanisms of death
  – Guns
  – Hanging?

• Targeting the child
  – Intervene in ‘close relationships’ (source of conflict, source of advice)
  – Resilience and self-efficacy
  – Engagement in development of interventions
  – Societal intervention (SEIFA, ARIA)

• ‘Postvention’?

Questions?

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