Suicide by Inpatients

Professor Len Bowers
Karen James, Duncan Stewart, Ben Thomas, Noreen Gul
Overview

• Literature review on inpatient suicide
  – Selected findings
• Prevented inpatient suicide
Systematic review of the literature

• Method: electronic searches, post 1960, 3 languages
• 98 papers reporting empirical studies
• Inpatient suicide rate by:
  – Admissions
  – Population
  – All suicides
• Change over time:
  – 1950-90 increases
  – 1998-now (UK) decreases
• Extrapolation: an average acute ward will encounter a suicide once every 3 - 4 years
Patient features and prediction

- Age, gender, marital status, employment and educational qualifications are not predictive for inpatients.
- Patients with schizophrenia are at equal risk as patients with affective disorder, but risk declines differently.
- Depressive symptoms a significant predictor.
- Past history of self-harm or suicide attempts a significant predictor.
Suicide clusters (epidemics)

- Community studies do find a clustering/contagion effect
- Of nine inpatient studies, only one finds the cluster significant (one other does not, and the rest apply no test)
- Only one study has examined a large dataset for clusters, finding no significant result
- Two main mechanisms are suggested:
  - patients copy each other (good evidence provided)
  - decreases in staff competence/confidence secondary to organisational change (but why aren’t there clusters whenever these occur?)
Timing and location

• Methods reflect availability
• 40% of suicides take place during agreed leave, 27% following absconding, and 33% within the hospital
• Leave suicides associated with:
  – Living alone
  – Family conflict
• Abscond suicides:
  – Schizophrenia
  – Noncompliance with treatment
  – 25% not immediately
• Inpatient suicides:
  – Nil effect of locked doors
Recommendations for clinical practice

• There is no need to lock the ward doors, unless there are exceptional circumstances (political feasibility, ‘open futures’)
• An anti-absconding intervention may reduce the risk of some impulsive suicides (www.kcl.ac.uk/mentalhealthnursing)
• Agreed leave should be given cautiously when the patient lives alone or has family conflicts
• Inpatient treatment should include work with families
• Support should be provided for patients on leave
• As much attention should be given to suicide risk in patients with schizophrenia as those with affective disorder
• Access to the means is important: remove ligature points, search patients’ property, banning items such as sharp instruments, observing patients for hoarding of tablets, etc. This should be undertaken with due attention to local traditions and recently successfully used suicide methods, to prevent copycat events.
Learning from prevented inpatient suicide

To discover the interventions which prevent completion of attempted suicide in psychiatric inpatient care.
The data

• 602 reports of attempted suicide from the NPSA (contrast c15k self-harm)
• Between 01\(^{st}\) January 2009 and 31\(^{st}\) December 2009
• In mental health inpatient units
• Included only attempts made on the ward, and attempts made off the ward where the actions of ward staff prevented the suicide.
• **Main interest:** How the suicide was prevented
Coding lethality

The Lethality of Suicide Attempt Rating Scale (Smith, Conroy and Ehler, 1984)

- 11 point scale of severity (0-10)
- Scores the potential lethality of the act
- The National Confidential Inquiry was consulted about the potential lethality of specific acts. [www.medicine.manchester.ac.uk/psychiatry/](http://www.medicine.manchester.ac.uk/psychiatry/)
- TOXBASE was used to determine the lethal doses of medications and poisons used. [www.toxbase.org/](http://www.toxbase.org/)
Severity scores

High severity = score of 5 or above (n=244)
An acute ward is 7 times more likely to report an attempted suicide.
Method of strangulation

<table>
<thead>
<tr>
<th>Method</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tied around neck</td>
<td>113</td>
<td>56</td>
</tr>
<tr>
<td>Attached to window</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Secured over door</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Attached to bed</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Attached to bathroom rails</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Attached to door handle</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Attached to door hinge</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Attached to ceiling</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
Object used

![Bar chart showing the percentage of attempts using different objects.

- Medication: 40% of attempts
- Other ligature: 8% of attempts
- Other object: 5% of attempts
- Plastic bag: 4% of attempts
- Unspecified ligature: 18% of attempts
- Object not specified in report: 1% of attempts

The chart also includes categories for 'Clothing/underwear', 'Cables', and 'Bedding and equipment', with lower percentages (2%, 4%, and 6%, respectively).]
# Objects used most frequently

<table>
<thead>
<tr>
<th>Object</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belt</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Shoe lace</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>Plastic bag</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Dressing gown cord</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Bed sheet</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Lace/cord</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Towel</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>
Time of day

Chi squared p = < 0.001
Preventative actions

- Domestic/security find
- Fellow patient find
- Police find
- Staff find
- Environmental management
- Jumping prevention
- Other third party report
- Patient exposure
- Poor design of method
- Suicidal patient raised alarm
- Unknown
How patients were found by staff

- Intermittent obs
- Meal/drink checks
- Meds round
- Normal daily activity (not coded)
- Other checks
- Staff caringly vigilant and inquisitive
Constant observation failures

- Ran into her bedroom, locking the door behind her, tying a ligature before access could be gained.
- Tying ligature underneath the bedclothes while in bed (n = 2)
- Allowed to go to the toilet unobserved while nurse waited outside the door, attempted suicide by suffocation while out of sight (n = 1), or by tying ligature (n = 2).
- Allowed to go to the toilet with door left open, but nurse stood to one side to give privacy. Ligature tied whilst out of sight.
- In two cases there was no explanation as to how the suicide attempt was made in the presence of an observing staff member, suggesting that observation had been incorrectly interrupted or terminated.
Caringly vigilant and inquisitive??

1. **Noticing a patient’s absence**
   “Staff became concerned when the patient was not in communal areas of ward. She was located in a toilet with a ligature tied tightly around her neck. She appeared to have lost consciousness, and was not breathing.”

2. **Noticing that a patient appears physically ill**
   “A female patient came to the office and was observed to be dazed and pale in colour. The patient’s bag was searched, there were empty packets of 32 tablets. She had taken the tablets as an overdose.”

3. **Following a patient in distress**
   “The patient was in the garden and came up crying and ran into her bedroom. Staff were close behind and followed her in.”

4. **Noticing that a patient is taking a long time in the toilet**
   “The patient went to the toilet and appeared to be taking a long time. Staff investigated & found she had formed a ligature from her bra.”
5. **Noticing suspicious actions**

“The patient was lying on her bed, she turned on her front and staff saw her elbow moving slightly. Staff stood over the patient to see what she was doing and saw a strap wrapped around her neck.”

6. **Listening carefully to safety calls**

“The client was in the toilets. Staff called out to client but did not feel happy with the response. On opening the toilet door, client was found with a pyjama top wrapped around her head.”

7. **Responding to an unusual noise**

“I heard rustling from patient’s bedspace, when I entered patient was lying on her bed with a plastic carrier bag over her head and attempting to tie it.”
Implications for practice

1. Increase checks:
   - Don’t stop using intermittent observations
   - Increased checks in the evening/night and during handover
   - Target bedrooms, bathrooms and toilets
   - Develop/support night staff

2. Be awake, be aware, trust your instincts:
   - Attend to obvious and subtle cues
   - Check without hesitation

3. Constant observation
   - Rigorous conduct
   - Enriched content
Resources


• [www.kcl.ac.uk/mentalhealthnursing](http://www.kcl.ac.uk/mentalhealthnursing)
  - Literature reviews on self-harm, suicide, absconding, special observation, etc.
  - Research reports on locked doors, absconding, etc.
  - Anti-absconding package, guides, workbooks for staff
Online course in inpatient suicide prevention @ Institute of Psychiatry

- One study day spread over a month
- Wards as cohorts
- Directed to nurses but useful for medical staff, OTs and psychologists
- Completed at home for ‘time off in lieu’
- Covers generic and specific inpatient risk assessment, prevention methods, therapeutic observation, the suicidal mind, latest observation method developments, talking with suicidal people
- Includes lectures, quiz, outcome scaling, activities, online interaction & ideas swap, risk assessment practice, video interviews of patients and experts
• len.bowers@kcl.ac.uk

• www.kcl.ac.uk/mentalhealthnursing