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Keywords
self-injurious behavior, incarcerated people, mental health, correctional mental health

Comments
Conference: American Academy of Psychiatry and the Law 42nd Annual Meeting, Boston, MA

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Self-injurious Behaviors in Prisons: A Nationwide Survey of Correctional Mental Health Directors

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Judith Savageau, MPH (Univ of Massachusetts)
Robert Trestman, PhD, MD (Univ of Connecticut)
Jeffrey Metzner, MD (Univ of Colorado)

42nd Annual Meeting: American Academy of Psychiatry and the Law
Boston, MA; October 27, 2011
Background

• 3/29/07 UMCH convened mental health workgroup (at Academic & Health Policy Conf on Correctional Health; next in Atlanta 3-22-23-2012)

• Over twenty participants
  • Local and national
  • 6 medical schools and several private and public agencies
  • All with experience or interest in correctional mental health research
Objective

• Review state of mental health research in correctional settings
• Two main areas:
  • Opportunities
  • Barriers
General Perceptions

- Significant limitations in the current knowledge-base
- Several hot topics need attention
- Multiple barriers: match projects to stakeholder agendas and concerns (e.g., safety)
  - SIB at top of list
Background and Significance of SIB

• Distinct in concept from suicidal behavior
  • Usually lacks lethal intent
  • But can still → death

• SIB in correctional settings may differ in situational context, incidence, intent, and environmental impact

• Management consumes significant clinical and custodial resources
Background and Significance

• Serious consequences: health, safety, operational, security & fiscal:
  • Injury to inmate, other inmates, & staff
  • Freeze in facility operations
  • Need for outside medical attention
    • Staff diversion, costs, additional security risks
• Limited data: prevalence; characteristics
Background and Significance

One of first 2 surveys of the U.S. prison system:


Study Objectives

• Our study sought information about the prevalence and nature of SIB in the nation’s prison systems, and interventions used to manage it, which could benefit efforts by clinicians and administrators to diminish SIB and improve the functional status of inmates with this behavior.
Methods

• Identified state and federal directors of correctional mental health services (N=51)
• Used paper-based, email and on-line data collection techniques with 3 reminders
• Sent a 30-item survey eliciting information:
  • Definition, frequency, tracked data, impact on operations & resources, diagnoses, management strategies, and roles of mental health & custody staff
• Collected data between November, 2009 and March, 2010
Methods

• Supplemented primary data collection with 2 secondary sources:
  • U.S. Department of Justice’s Bureau of Justice Statistics
  • National Association of State Budget Officers 2008 State Expenditure Report
• Analyzed data using SPSS V17.0
  • Univariate statistics used to describe significant aspects of the national experience with SIB
  • Bivariate statistics used to examine relationships between variables
Results

• Of the 51 MH directors surveyed, 39 (76.5%) responded; 6 refusals; 6 non-responders

• Non-response was not related to:
  • system size
  • geographic location
  • operational or design capacity
  • total annual expenditures
  • annual non-capital expenditures

• Results were evenly distributed by population size and geographic location
<table>
<thead>
<tr>
<th>Geography*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>8 (21.1%)</td>
</tr>
<tr>
<td>Midwest</td>
<td>8 (21.1%)</td>
</tr>
<tr>
<td>South</td>
<td>10 (26.3%)</td>
</tr>
<tr>
<td>West</td>
<td>12 (31.5%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size of prison system**</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Range (# of inmates)</td>
<td>2,064 – 201,280</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>31,421 (46,824)</td>
</tr>
<tr>
<td>Median</td>
<td>20,661</td>
</tr>
</tbody>
</table>

* This does not include the one site representing the federal prison system.
* The Bureau of Justice Statistics (2008) was used to confirm size of prison systems and/or to supplement missing data from the few systems who did not provide this information.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>17 (43.6%)</td>
</tr>
<tr>
<td>Yes</td>
<td>22 (56.4%)</td>
</tr>
<tr>
<td>Housing unit</td>
<td>17 (43.6%)</td>
</tr>
<tr>
<td>Behavior</td>
<td>17 (43.6%)</td>
</tr>
<tr>
<td>Gender</td>
<td>15 (38.5%)</td>
</tr>
<tr>
<td>Shift or time of day</td>
<td>14 (35.9%)</td>
</tr>
<tr>
<td>Age</td>
<td>13 (33.3%)</td>
</tr>
<tr>
<td>Security level</td>
<td>11 (28.2%)</td>
</tr>
<tr>
<td>Race</td>
<td>10 (25.6%)</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>10 (25.6%)</td>
</tr>
<tr>
<td>Precipitants for behavior</td>
<td>7 (17.9%)</td>
</tr>
<tr>
<td>Crime</td>
<td>6 (15.4%)</td>
</tr>
<tr>
<td>Sentence</td>
<td>6 (15.4%)</td>
</tr>
<tr>
<td>Sanctions for behavior</td>
<td>5 (12.8%)</td>
</tr>
<tr>
<td>Other</td>
<td>4 (10.3%)</td>
</tr>
</tbody>
</table>
### Definitions of SIB and Determination of SIB Incidents

<table>
<thead>
<tr>
<th></th>
<th>Yes (32.4%)</th>
<th>No (67.6%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Is SIB defined by policy?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>25 (67.6%)</td>
</tr>
<tr>
<td>Yes</td>
<td>12 (32.4%)</td>
<td></td>
</tr>
</tbody>
</table>

**SIB definitions include:**

- Requires an act of self-injurying behavior: 29
- Behavior was intentional or deliberate: 14
- Explicit inclusion of suicidal intent: 4
- Explicit exclusion of suicidal intent: 12
- Injury severe enough to receive medical intervention: 4

<table>
<thead>
<tr>
<th></th>
<th>Yes (73.7%)</th>
<th>No (26.3%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Does system distinguish between SIB incidents and suicide attempts?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>10 (26.3%)</td>
</tr>
<tr>
<td>Yes</td>
<td>28 (73.7%)</td>
<td></td>
</tr>
</tbody>
</table>
### Determination of SIB Incidents and Their Responsibility

<table>
<thead>
<tr>
<th>Who makes the determination that the incident was SIB?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical clinician</td>
<td>21</td>
</tr>
<tr>
<td>Mental health clinician</td>
<td>37</td>
</tr>
<tr>
<td>Custody staff</td>
<td>9</td>
</tr>
<tr>
<td>Did not answer question</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>53.8%</td>
</tr>
<tr>
<td></td>
<td>94.9%</td>
</tr>
<tr>
<td></td>
<td>23.1%</td>
</tr>
<tr>
<td></td>
<td>5.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Who has primary responsibility for dealing with SIB?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health staff</td>
<td>16</td>
</tr>
<tr>
<td>Custody staff</td>
<td>0</td>
</tr>
<tr>
<td>Both</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>41.0%</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>59.0%</td>
</tr>
</tbody>
</table>

- For nearly all systems, a mental health clinician makes the determination that an event was self-injurious but more often shares the responsibility of dealing with the incident.
### Prevalence of SIB Events: Calendar Year 2008

<table>
<thead>
<tr>
<th>Inmates engaging in SIB</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>2 – 5000</td>
<td>0.03 – 8.93</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>321.5 (948.1)</td>
<td>1.30 (1.89)</td>
</tr>
<tr>
<td>Median</td>
<td>92</td>
<td>0.44</td>
</tr>
</tbody>
</table>

- For all 39 systems collectively, 0.71% of inmates engaged in SIB.
## Frequency of SIB Incidents

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than once a day</td>
<td>5</td>
<td>14.7%</td>
</tr>
<tr>
<td>Once a day</td>
<td>2</td>
<td>5.9%</td>
</tr>
<tr>
<td>Several times per week</td>
<td>17</td>
<td>50.0%</td>
</tr>
<tr>
<td>Once a week</td>
<td>5</td>
<td>14.7%</td>
</tr>
<tr>
<td>Once a month</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Less than once a month</td>
<td>5</td>
<td>14.7%</td>
</tr>
</tbody>
</table>

- In 85.3% of systems, SIB events occur at least weekly.
- In 20.6% of systems, these events occur at least daily.
Results: Where Do SIBs Occur?

• Segregation and other lockdown units had the highest rate of occurrence in most systems (75.9%)
• Among general population units, higher rates occurred in maximum than in non-maximum security units (40.2% vs 21.7%, respectively)
### Effects of SIB Incidents on Operations and Resources

<table>
<thead>
<tr>
<th></th>
<th>Disruptions to facility operations</th>
<th>Drain on mental health resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal</td>
<td>7 (18.4%)</td>
<td>3 (8.1%)</td>
</tr>
<tr>
<td>Somewhat</td>
<td>13 (34.2%)</td>
<td>8 (21.6%)</td>
</tr>
<tr>
<td>Moderate</td>
<td>11 (28.9%)</td>
<td>16 (43.2%)</td>
</tr>
<tr>
<td>Extreme</td>
<td>7 (18.4%)</td>
<td>10 (27.0%)</td>
</tr>
</tbody>
</table>

- In 47.3% of systems, SIB events at least moderately disrupt facility operations.
- In 70.2% of systems, these events put at least a moderate drain on mental health resources.
Effect of SIB Incidents on Need for Outside Medical Services

<table>
<thead>
<tr>
<th>Required medical treatment outside of the prison facility</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 %</td>
<td>12 (38.7%)</td>
</tr>
<tr>
<td>5 – 10%</td>
<td>7 (22.6%)</td>
</tr>
<tr>
<td>11 – 25%</td>
<td>7 (22.6%)</td>
</tr>
<tr>
<td>26 – 50%</td>
<td>4 (12.9%)</td>
</tr>
<tr>
<td>&gt; 50%</td>
<td>1 (3.2%)</td>
</tr>
</tbody>
</table>

- In 61.3% of systems, SIB events resulted in need for outside medical treatment 10% of the time or less.
<table>
<thead>
<tr>
<th>Disorder</th>
<th>Range</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychotic</td>
<td>0 – 20%</td>
<td>7.6% (5.3)</td>
</tr>
<tr>
<td>Mood</td>
<td>0 – 35%</td>
<td>15.5% (9.7)</td>
</tr>
<tr>
<td>MR / PDD / Autism</td>
<td>0 – 10%</td>
<td>3.2% (3.1)</td>
</tr>
<tr>
<td>Cluster B Personality</td>
<td>4 – 95%</td>
<td>52.2% (25.7)</td>
</tr>
<tr>
<td>Mixed Personality</td>
<td>0 – 35%</td>
<td>12.2% (10.7)</td>
</tr>
</tbody>
</table>

- Cluster B Personality disorders, followed by Mood and Mixed Personality disorders were the most prevalent mental health disorders among inmates engaging in SIB events.
Results: Management Techniques and Interventions

- Most systems used SSRI’s (86.4%)
  - Followed by antipsychotics and anticonvulsants
  - Least frequent use: Naltrexone, anxiolytics, and beta blockers
- Involuntary medications used by 33 (84.6%) of systems
  - Most systems use these < 5% of the time (69.0%)
  - 94.3% of systems have policies and procedures
- 100% of systems have policies and procedures for security- and/or mental health-ordered restraints
  - Most systems use these < 5% of the time (security: 45.2%; mental health: 46.7%)
- 48.6% of systems have a behavioral management program or unit
  - Bed sizes ranged from 15-620 beds (Mean: 136 beds; SD 182)
A special note of thanks to the artist Todd (Hyung-Rae) Tarselli whose art work graphically displays the devastating effects of prison on the mental health of its inmates. LA Rhoades, AJPH, October 2005;95(10):1692-1695.
Discussion

• High response rate attests to perceived importance
  • Most systems interested in research
• Lack of a widely & consistently used definition complicates research
• Prison systems keep limited, if any, data about SIB events
• Few inmates; frequent episodes
• Serious consequences:
  • Health, safety, operational, security & fiscal
• Management approaches lack widespread consistency
• Infrequent use of:
  • Restraints
  • Involuntary meds
  • Behavior management plans/programs
Limitations

- Absence of tracked data
  - Impressionistic responses?
- Lack of a consistent definition
  - Measuring different phenomena?
- Self-reported data
  - Biased by social desirability?
- Small sample
  - Under-powered to find correlations & differences?
Next Steps

1. Identify distinguishing characteristics of SIB inmates, including those most associated with increased frequency and severity of harm
   - Demographics;
   - Criminal, medical and psychiatric history
   - Past self-injurious behaviors
   - Current functioning

Identify subgroups
2. Identify circumstances and settings of significant SIB events

• Timing and location

• Precipitants
  • interpersonal conflicts, changes in legal status, disciplinary actions, victimization, etc.

Relationship of these factors to:

• inmate-specific characteristics

• type and severity of injury
3. Examine relationship between apparent intent (self-report and staff perceptions) to type of behaviors and outcome

- Concordance between staff and inmate
- Is presumed intent predictive of severity, outcome or recidivism
Select Recent References

Implications of this study from a mental health systems perspective

- Staff resources
- Working relationships between custody and mental health staff
- Needed programs
Staffing resources

- Disproportionate amount of mental health and custody staff’s time
- Impacts utilization of crisis beds and medical emergency facilities
- Potential for havoc in the segregation units
Impact on working relationship between mental health, medical and custody staffs.

- Facility disruption

- View as an opportunity to “show your stuff”

- Avoid the “mad versus bad” conceptual model
Issues related to handling SIB as a rules infraction

- Expense
- Lack of effectiveness
What does not seem to work…

- “Cutters’ units”

- Punitive settings — healthcare or segregation units

- Not addressing the “secondary gain, manipulation and/or underlying dynamics” related to the SIB
What seems to help...

- Recognizing that inmates with SIB are not all the same, although there are similar useful interventions to implement

- Define achievable goals/outcomes of treatment (e.g., decreasing the frequency and severity of SIB over time)
What seems to help…

- A behavioral management plan developed and implemented by a multidisciplinary team that includes custody staff

- Individual therapy provided on a regular basis by the same clinician

- Consider placement in a residential mental health treatment level of care (i.e., a special needs unit)
What seems to help...

- Psychotropic medications if affective instability or impulse control problems are present

- Address both transference and countertransference issues (see NEJM: The Management of the Hateful Patient)
Managing Extreme Behaviors

The Connecticut Behavioral Engagement Unit

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Executive Director, Correctional Managed Health Care
University of Connecticut Health Center

Trestman@uchc.edu
DISCLOSURE

I have no actual or potential conflicts of interest in relation to this program/presentation.
ACKNOWLEDGEMENTS

CURRENT TEAM MEMBERS:

- **Thomas Kocienda PsyD** Team Leader
- Robert Melms, Capt. Unit Manager
- Nancy Bertulis CSWA Mary Bento CSW
- Jeffrey Brockett RT
- Oleh Kusen CN Nancy Niemeth CN
- Tom Criscitiello CC Gary Hancock CO

BEU Review Committee:

- Dr. Thomas Kocienda Capt. Robert Memls HSA Rick Bush
- DW Amonda Hannah CHNS Pat Morris

- **Alexis Gendell PhD** Developer/ Prior Consultant
- Robert Berger MD, Director of Mental Health and Psychiatry, CMHC
- Suzanne Ducate MD, Director of Psychiatry, CT DOC
- Scott Semple, Warden GCI
- James Dzurenda, Deputy Commissioner
- Leo Arnone, Commissioner DOC
Case Vignette

- 27 yo male, crime: murder, long sentence
- Repeated cutting, hanging attempts, flooding cell, destruction of property, disobeying orders
- Failed several BMPs
Axis I: Mood Disorder NOS, PSA

Axis II: PDNOS (Borderline and Antisocial Traits)

Meds: antidepressant, anxiolytic

Prior Meds: most everything

Hx: fire setting, fighting, threatening family with knives
The Behavioral Engagement Unit at Garner Correctional Institution
FORMULATION

- Adult men
- Eight bed unit
- Significant disorders:
  - self-injurious acts
  - threats of self-harm
  - maladaptive behaviors, repeated facility disruption
- Help the inmate reduce or eliminate these behaviors
  - structured environment
  - behavioral modification techniques
  - treatment team approach.
- Not designed to replace RHU or as an alternative to IPM.
STAFFING

- Psychologist (part-time)
- Psychiatrist (part-time)
- First Shift Social Worker (Dedicated)
- First Shift Nurse Clinician (Dedicated)
- Second Shift Social Worker (Dedicated)
- RN First Shift – (part-time)
- RN Second Shift – (part-time)
ADMISSION CRITERIA

- Impulsive/dangerous to self or others
- Persistent disturbances in the facility
- Result in multiple Disciplinary Reports
- Resistant to Behavior Management Plan(s) that attempt to extinguish ongoing maladaptive behaviors
TEAM APPROACH

Collaboration between mental health, medical, and custody staff
COMPONENTS

- Voluntary program
- Three phases, each requiring 30 days.
- As part of the incentive, pending or current sanctions are reduced or eliminated.
- “Non-ticket block”, requires a Disciplinary Report to be written and maintained for reference. Exceptions are considered.
REFERRALS

- Generated state wide
- Coordinated by the BEU team leader
- DOC’s Director of Psychiatric Services for initial review.
- If appropriate, forwarded to the BEU team
- If approved, the BEU team leader and referral source coordinate admission
BEU TREATMENT

- Initially admitted in safety attire.
- Team Leader & Unit Manager orient
- Initial **Probationary Period** (14 days)
- Assigned to one social worker
- A psychiatric evaluation, treatment planning, Computerized Measures and other evaluative data
Once 14 days of appropriate behavior has been attained, the inmate will progress into **Phase 1**.

Each phase is composed of 30 “good days”.

Medications as clinically indicated

**Target behaviors:**
- impulse control
- frustration tolerance
- stress management
MONTHLY REVIEW

- Inmate meets with review committee
- Progress reviewed
- Recommend next phase privileges
- Inmates air concerns, ask questions and comment on their program and progress
SEQUENTIAL PHASES

As the inmates progress through the 3 phases:
- greater potential for privileges
- expected to participate in increased level of clinical programming
- anticipated increase in prosocial behavior.
RESULTS:
GENERAL IMPRESSION

- Great benefit to the system
- Respite
- Decompress power struggles
- Very hard to maintain program fidelity
TOTAL OF 18 INMATES ADMITTED TO THE PROGRAM.
- 12 COMPLETIONS (2 INMATES REPEATED)
- 4 REMOVED
- 2 IN PROGRAM
INITIAL OUTCOMES

- 4 removed inmates
  - One transferred out of state (unrelated to program)
  - One reassessed and transferred to GP in another facility (power struggle resolved)
  - One reassessed and transferred to a low functioning MH-4 unit at GCI
  - One repeatedly aggressive and returned to NCI
INITIAL OUTCOMES

- 14 Completers (12 unique people)
  - 11 improved to varying degrees
  - Two repeated the program
  - One Discharged to WFI at End of Sentence
CHALLENGES: Axis II

- Difficult time adjusting to the unit
- Individualized interventions a challenge
- Test limits
- Once tested, rapidly progress through the program, sanctions “wiped clean”
- Short term decrease in maladaptive behavior
- Ongoing need for new coping skills
CHALLENGES: COGNITIVE IMPAIRMENT

- Not Successful: Mental retardation, acquired brain injury or other neuropsychological deficits
- Require sustained structure
- unable to adapt to the behavioral concepts of the BEU
CONCLUSION

- Ongoing support from DOC and CMHC
- Need to refine admission criteria
- Aftercare and skills training continuity
- Continue gathering data of extended outcomes