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# Medically Serious Suicide Attempts in a Jail with a Suicide-Prevention Program

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**ABSTRACT:** A suicide prevention program was implemented at the Galveston County Jail in 1986, reducing the number of suicides to only one from that time until the present. In the ten years prior to the implementation of the program, there had been seven suicides. Nevertheless, there have been a number of cases of medically serious suicide attempts that have occurred since implementation of the program. Thirteen cases of suicide attempts severe enough to warrant transfer to an emergency room for medical attention were identified through jail incident reports as occurring between 1989, when improvements were made in record-keeping at the jail, and July of 1994, when this study was initiated. Hospital records, jail medical records, jail administrative records and, in some cases, competency evaluations were obtained for each case. The cases were examined regarding demographic data, psychiatric history, circumstances surrounding the act, and results of psychiatric evaluation performed after the act. The findings were then compared to studies of suicides and near-suicides in the literature.

Examination of these cases has provided information that should render the suicide prevention program even more effective as well as provide useful information to other jails interested in implementing or improving a suicide-prevention program.

**KEYWORDS:** forensic science, forensic psychiatry, jail suicide prevention, Galveston County TX, suicide attempts

Nationally, jail suicide is a serious problem. The national suicide rate for the general population is 10–12 per 100,000. However, several studies have suggested jail suicide rates of 47 to 114 per 100,000 (1). This rate is high even when considering that jail populations tend to be younger and male. The national suicide rate for young males is approximately 15 per 100,000 (1).

Within the entire penal system, suicide rates appear to be higher in local and county jails. This may be attributed to several characteristics of jails, including:

1. the more transient nature of jail populations (which increases the number of different persons at risk at any one time)
2. the likelihood that jail will be the first experience with legal detention
3. the increased likelihood that the inmate will be intoxicated, and
4. the possibility that jail suicide prevention programs are less effective.

In August of 1986, a suicide prevention program was implemented at the Galveston County Jail, Galveston, Texas. The program was based on six principles.

1) Screening and identification of actively suicidal inmates, 2) Provision of psychological support to the suicidal inmate, 3) Close observation of the suicidal inmate, 4) Removal of dangerous instruments from the suicidal inmate, 5) Establishment of clear and consistent precautionary measures, and 6) Diagnosis, treatment and transfer of the inmate to a psychiatric hospital when appropriate. No suicides occurred during the period under study; that is, since the implementation of the program in 1986, until July 1994. In the ten years prior to implementation of the program, seven suicides occurred (2).

In spite of the apparently improved intervention, 58 cases of suicide attempts or gestures were documented in jail incident reports between 1989, when jail record-keeping was improved, and initiation of this study. Of these 58 cases, 13 were severe enough to warrant transfer to an emergency room for medical treatment. This study was undertaken to examine those 13 cases of medically serious suicide attempts with the hopes of further improving the suicide prevention program in place at the jail.

In addition, it was hoped that information might be obtained by comparing these cases to the typologies of suicidal inmates described in the literature. The most well known typology has resulted from the study conducted by the National Center on Institutions and Alternatives (NCIA), which examined 419 suicides that occurred in county and local jails in 1979 (3). A subsequent study of jail suicides occurring in 1985 and 1986 revealed few differences from the earlier study (4). From demographic data collected from 344 suicides in the original study, a profile of the "typical" jail suicide was constructed: that of a 22-year-old single white male with no significant prior arrest history, arrested for public intoxication, placed in isolation, and who died by hanging within three hours of booking. He would have had no previous psychiatric history or history of suicide attempts (3).

Other characteristics have been described in the literature as well. Marcus and Alcabes (1993) examined 48 suicides occurring in the New York Department of Corrections between 1980 and 1988. They found that 42% of suicides occurred within the first thirty days of incarceration, and that 50% occurred within three days of a court appearance. The vast majority occurred in isolation and by hanging. However, in contrast to the NCIA study, 52% had a major psychiatric diagnosis, and 46% had a history of inpatient or outpatient psychiatric care (5).

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## Methods

### *Design*

The present study is based on a retrospective review of all medically serious suicide attempts occurring between 1989 and July of 1994, when the author began a forensic psychiatry rotation at the Galveston County Jail. While it was predicted that the sample size would be small, it was felt that examination of these cases would nevertheless prove to be useful. Lester and associates (1979) have suggested that near-suicides and completed suicides do share common traits, and that it is possible to learn about completed suicides from studies of near-suicides (6). In addition, an advantage to studying "unsuccessful" suicide attempts is the opportunity to interview and evaluate the inmate after the attempt.

Cases were identified from the incident report file maintained by jail administration. Although an administrative record, this file is considered to be a fairly complete record for all cases meeting our inclusion criteria.

### *Inclusion Criteria*

From jail administration, 58 incident reports of suicide attempts or gestures were obtained with the following break-down by year: 1989—10, 1990—8, 1991—12, 1992—11, 1993—11, 1994—6 (as of July). Of the 58 cases, 13 were identified as severe enough to warrant transfer to an emergency room for medical attention, therefore meeting inclusion criteria for this study.

### *Sources of Data*

All potential sources of data were searched for information regarding the incidents. These included hospital records, jail medical records, jail administrative files, and, in a few cases, competency evaluations.

### *Data Extraction*

The author personally visited each of the possible locations to search for applicable records. Where present, records were reviewed and extracted to forms designed to record the desired information. Subjects were assigned code numbers to ensure confidentiality, as approved by the university Institutional Review Board.

### *Types of Data Obtained*

For each case the following information was obtained; I. demographic data, including age, gender, racial/ethnic grouping, marital status, employment, and current charge; II. prior psychiatric history including previous hospitalization and outpatient treatment, diagnos(es), treatment and dates, prior suicide attempts or self-destructive acts and history of drug or alcohol abuse; III. circumstances at the time of the act, including how long since booking, court dates and results, status in jail including jail section, suicide precautions, diagnosis and treatment before and/or after the act, recent stressors, method, responses to suicide screening questions at booking, and any threats, ideation, preparatory acts or attempts since being jailed; and IV. findings when evaluated after the act, including diagnosis, precautions, and judgement on suicidal intent. Finally, the case was assigned a Suicide Lethality Rating using the scale developed by Kim Smith and associates (7).

## Results

Table 1 presents demographic data of study cases and comparison data from the NCIA study.

### *Age*

Age in this study ranged from 18 to 40 with an average of 29, which is consistent with the average age of 28 found by the NCIA study. The Marcus and Alcabes study found an average age of 30. Three other studies of jail suicides found mean ages of 28.6, 33, and 29, respectively (8,9,10).

### *Gender*

Eleven of 13 or 84.6% of cases in this study were male compared to 96.5% in the NCIA study and 96% in the Marcus and Alcabes study. Other studies have demonstrated the vast majority of jail suicide victims to be male (10–13). However, the predictive value of gender is greatly diminished because females constitute only

TABLE 1—*Demographic data.*

| | Gal. County Jail | | NCIA Study | |
|---|---|---|---|---|
| | # | % | # | % |
| Age: | | | | |
| 17 and Below: | 0 | 0.0 | 15 | 4.5 |
| 18–22: | 4 | 30.7 | 96 | 28.7 |
| 23–27: | 2 | 15.4 | 85 | 25.4 |
| 28–32: | 2 | 15.4 | 55 | 16.4 |
| 33–37: | 3 | 23.1 | 35 | 10.4 |
| 38–42: | 2 | 15.4 | 23 | 6.9 |
| 43–47: | 0 | 0.0 | 9 | 2.7 |
| 48–53: | 0 | 0.0 | 9 | 2.7 |
| 54 and over: | 0 | 0.0 | 8 | 2.4 |
| Total: | 13 | | 335 | |
| Gender: | | | | |
| Male: | 11 | 84.6 | 332 | 96.5 |
| Female: | 2 | 15.4 | 12 | 3.5 |
| Total: | 13 | | 344 | |
| Race: | | | | |
| Caucasian: | 7 | 53.8 | 231 | 67.3 |
| African-American: | 4 | 30.7 | 74 | 21.6 |
| Other: | 2 | 15.4 | 38 | 11.1 |
| Total: | 13 | | 343 | |
| Marital Status: | | | | |
| Single: | 7 | 53.8 | 154 | 53.5 |
| Married: | 4 | 30.7 | 87 | 30.2 |
| Divorced: | 1 | 7.7 | 27 | 9.4 |
| Separated: | 1 | 7.7 | 17 | 5.9 |
| Widowed: | 0 | 0.0 | 3 | 1.0 |
| Total: | 13 | | 288 | |
| Employment: | | | | |
| Employed: | 4 | 30.7 | N/A | |
| Unemployed: | 7 | 53.8 | N/A | |
| Disabled: | 2 | 15.4 | N/A | |
| Total: | 13 | | | |
| Charge: | | | | |
| Felony: | 12 | 92.3 | N/A | |
| Drug: | 3 | 23.1 | 102 | 30.3 |
| Property: | 3 | 23.1 | 75 | 22.2 |
| Violent: | 7 | 53.8 | 89 | 26.4 |
| Total: | 13 | | 266 | |

N/A = data not available

about ten percent of jail populations. The average female population at the Galveston County Jail over the previous three years was 9.8%.

*Race*

Seven (53.8%) of the 13 cases in this study were Caucasian, 4 (30.7%) were African-American, and 2 (15.4%) were Hispanic, compared to the NCIA findings at 67.5% Caucasian, 21.6% African-American, and 11.1% Other. The Marcus and Alcabes study found that 16.6% were Caucasian, 41.6% were African-American, 37.5% were Hispanic, and the ethnic groups of two were unknown (5). Other studies have confirmed lower rates of Caucasians in large urban areas with higher African-American inmate populations (14). Although a majority of our inmates were African-American, a majority of the attempters in this study were Caucasian, confirming the greater proclivity toward self-harm among whites. On the other hand, some of the most serious attempts were made by non-whites, suggesting that overreliance on demographic factors in predicting attempts could be erroneous.

*Marital Status*

Findings regarding marital status were consistent with the NCIA study. Seven of the 13 cases in this study were single (53.8%), 4 (30.7%) were married, 1 was separated, and 1 was divorced. In the NCIA study, 53.5% were single, 30.2% were married, 5.9% were separated, 9.4% were divorced, and 1.0% were widowed. Other studies have demonstrated the majority of victims to be single (8,10,15).

*Employment*

Four out of 13 were employed, 2 were disabled, and the remaining 7 were unemployed at the time of their arrest. NCIA comparison data were not available.

*Charges*

Twelve out of 13 (92.3%) cases in our study involved felony charges. If "aggravated robbery" is counted as a violent offense, then 7 of 13 (53.8%) of cases in this study involved a violent offense. This is in contrast to the NCIA study, in which only 26.4% of the inmates' most serious or only offense at incarceration fell within the category of violent offense. Danto found that 60% of suicide victims had committed a violent felony (15), while Esparza, and Fawcett and Marrs found a history of violence in 84% and 61.5%, respectively (8,9). Marcus and Alcabes found 58.3% of inmates in their study to have committed a violent crime (5). Three (23%) of the cases in this study involved drug or alcohol-related charges, compared to 30.3% in the NCIA study. Three, or 23% of cases in this study involved property charges, compared to 22.2% in the NCIA study. Martin reported that 69.2% of cases involved property and drug offenses (14), while a study by Heilig reported that 65.4% of cases in his study were charged with drug or alcohol-related offenses (11). Seven cases in this study had no previous charges, while the remainder had multiple previous charges.

*Prior Psychiatric History*

*Previous Psychiatric Hospitalization*—Four cases in this study had no previous psychiatric hospitalizations, four had one, four had more than one, and for one past psychiatric history was unknown. While the NCIA study described its typical suicide victim as having no previous psychiatric history, others have found the typical victim to have had previous psychiatric contacts (8,13,16–19).

*Previous Inpatient Diagnosis and Treatment*—Diagnoses varied, and several cases carried several diagnoses. Two cases carried a diagnosis of depression, and five of the remaining six with psychiatric diagnoses included diagnoses of substance abuse. Treatment for most cases was unknown, and time since treatment varied greatly. Copeland (1984, 1989) described 23 jail suicides in Florida, concluding that the typical victim had a history of schizophrenia (19,20).

*Previous Outpatient Diagnosis and Treatment*—Four cases in this study appeared to have had no previous outpatient psychiatric treatment, three appeared to have had treatment at community mental health clinics, and the outpatient treatment history was unknown for the remainder. Diagnosis, treatment type and time since treatment were unknown for the majority.

*Self-Destructive Acts and Stressors Prior to Being Jailed*—Four cases had no history of previous self-destructive acts, and two were unknown. Three reported previous self-inflicted gunshot wounds, one of whom had made two attempts. One reported a previous attempt at hanging, and one had a previous attempt at cutting himself. One had made multiple attempts, with "47 scars" on his arms noted on one hospital physical examination.

Stressors for most cases were unknown, although one case had previously tried to "roll" his car and on another occasion cut his wrists and took an overdose when his wife left him. Reiger found that 6.7% of inmates at one federal institution had made previous suicide attempts (21), while Lester found that 20 percent in the Vermont prison system had made past suicide attempts (22).

*History of Drug and Alcohol Abuse*—Almost all cases in this study had a history of drug or alcohol abuse, and in most cases there was a history of polysubstance abuse. In two cases the drug histories were unknown, but in both cases the inmate was charged with delivery of cocaine. It is evident from the NCIA and other studies that acute intoxication is a significant risk factor for suicide occurring shortly after incarceration. While substance abuse appears common among those who attempt as well as those who commit suicide later in the course of their incarceration, it is unclear how the prevalence of substance abuse in these populations compares to the prevalence of substance abuse in the jail population as a whole.

*Circumstances at Time of Act*

*Time in Days Since Booking and Before/After Court Appearance*—(See Table 2) The time in days from booking to suicide attempt ranged from the same day to 480 days. The average number of days since booking was 137. Only one attempt in this study occurred within the first 24 hours, and only two within the first 48 hours. This is in contrast to a number of studies that have demonstrated a preponderance of suicides shortly after incarceration. It is speculated (and hoped) that the low number of attempts observed shortly after booking is due to efficacy of the screening program already in place at the jail. However, three of the four most serious attempts in this study occurred within the first week of incarceration.

TABLE 2—*Time from booking to suicide attempt.*

| | Gal. County Jail | | NCIA Study | |
|---|---|---|---|---|
| | # | % | # | % |
| Time: | | | | |
| 0–24 Hours | 1 | 7.7 | 165 | 51.1 |
| 25–48 Hours | 1 | 7.7 | 21 | 6.5 |
| 3–14 Days | 3 | 23.1 | 44 | 13.7 |
| 15–30 Days | 0 | 0.0 | 27 | 8.4 |
| 2–4 Months | 4 | 30.7 | 41 | 12.7 |
| 5–7 Months | 1 | 7.7 | 16 | 4.9 |
| 8–12 Months | 1 | 7.7 | 5 | 1.6 |
| > 1 Year | 2 | 15.4 | 3 | 0.9 |
| Total: | 13 | 100.0 | 322 | 100.0 |

While some studies have suggested that suicide attempts occur more frequently around court dates (5,23), unfortunately those data were not available for the majority of cases in this study.

*Status in Jail*—In most cases the attempters in this study were not in isolation, in contrast to the NCIA study, which found 67.7% of completed suicides to be in isolation. Possible explanations for this include differences in the selection process, differences in characteristics of the environment, and differences in the level of observation. Although placement in general population generally allows for increased observation, it also may provide for increased access to tools. Furthermore, while some inmates find isolation to be stressful, others prefer it to general population. It may be that factors are different for different cases.

Most cases in this study had not been referred to the psychiatric consultants prior to their suicide attempt. Diagnoses after the event were varied and included adjustment disorder, major depression, other mood disorders, psychotic disorders and personality disorders.

*Recent Stressors*—Recent stressors were quite varied, though several involved familial relationships. For example, one inmate reported that his wife was leaving him, one reported distress at being unable to contact his wife who had just had a baby, and one reported receiving news that his father was ill.

*Method*—Methods of attempting suicide included eight cases of cutting, two hanging, two overdoses, and one head-banging. This is in contrast to the majority of studies including the NCIA study, which found that 95.9% of jail suicides occurred by hanging (see Table 3). However, of the four most serious cases in this study, two were hangings.

TABLE 3—*Method.*

| | Gal. County Jail | | NCIA Study | |
|---|---|---|---|---|
| | # | % | # | % |
| Method: | | | | |
| Cutting | 8 | 61.5 | 1 | 0.3 |
| Hanging | 2 | 15.4 | 329 | 95.9 |
| Overdose | 2 | 15.4 | 5 | 1.5 |
| Shooting | 0 | 0.0 | 2 | 0.6 |
| Jumping | 0 | 0.0 | 4 | 1.2 |
| Ingestion | 0 | 0.0 | 1 | 0.3 |
| Other | 1 | 7.7 | 1 | 0.3 |
| Total: | 13 | 100.0 | 343 | 100.0 |

*Response to Suicide Screening Questions at Booking*—Suicide screening questions address previous suicidal ideation or attempts, past psychiatric treatment, current suicidal ideation, and recent stressors. In addition the interviewer assesses the inmate for signs and symptoms of depression. Our study revealed that five inmates answered "no" to all questions, four reported previous suicidal ideation or attempts, one reported suicidal ideation at booking, and the responses for three were unknown.

*Threats, Suicidal Ideation, Preparatory Acts or Attempts since Jailed*—Four attempters made no known indication of suicide prior to the attempt, three made threats or expressed suicidal ideation to other inmates prior to their attempt, for one case this information was unknown, and the remainder made multiple threats, preparatory acts and attempts prior to the attempt under study.

*Findings When Evaluated After the Act*

*Diagnosis*—Diagnoses varied widely and included a number of mood disorder diagnoses, the most frequent being adjustment disorder with mixed disturbance of emotions and conduct.

*Judgement on Suicidal Intent*—Suicidal intentions also appear to have varied widely. While a couple appear to have involved cell placement, others appear to have involved more severe stressors such as receiving bad news about family members. Two involved fears or memories of rape. Two appear to have resulted from psychosis.

*Suicide Precautions*—With the exception of four for whom the information could not be found in the records, and one who was left comatose, all were subsequently placed on suicide precautions lasting from the next day until three weeks later. Most had precautions discontinued after a few days, though several were kept on observation. Subsequent treatment for most was unknown, though some were placed on antidepressant or antipsychotic medication.

*Suicide Lethality Rating*—Each case was assigned a score based on the Suicide Lethality Rating Scale developed by Kim Smith and associates (7) (see Fig. 1). This scale ranges from 0.0 to 10.0 with 10.0 being the most lethal. The rating is a composite of two assessments: the actual lethality of the method and the circumstances surrounding the attempt, such as whether or not the subject was alone or made efforts to hide the act.

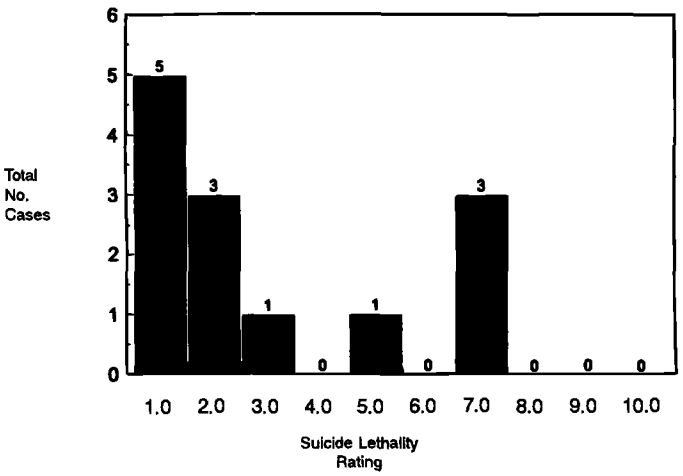


FIG. 1—*Suicide lethality rating.*

Scores were obtained by each examiner independently, and found to have an interrater reliability of 0.7 by Pearson correlation. A consensus score was then obtained through examiner agreement. As shown in Fig. 1, the scores ranged from 1.0 to 7.0 with three cases being rated 7.0, one case rated 5.0, one rated 3.0, three rated 2.0, and five rated 1.0. Of the three cases rated 7.0, two were attempts by hanging and one was an attempt by overdose.

## Case Presentations

Five cases are described. Four out of five of the cases (the exception being the case of head-banging) were the most serious attempts in this study as determined by the Suicide Lethality Rating Scale.

### *Case 1*

A 40-year-old male Hispanic construction worker was jailed on a charge of aggravated sexual assault, his second such charge. At booking he answered "no" to all screening questions regarding past or current suicidal ideation or attempts. He denied any past psychiatric history but reported a history of a severe head injury. He reported a history of cocaine and alcohol use, having consumed 4 to 12 beers per day for several years. He was not seen by the psychiatric consultants or placed on precautions prior to his attempt. Two days after incarceration, at approximately 10:09 a.m., the guard making rounds found the inmate lying on his bunk with a blanket covering his body. When the guard spoke to the inmate, the inmate reportedly removed the blanket, exposing a blood-soaked towel covering his forearm. Reports stated that the inmate was "semi-concious," with a large amount of blood clotted under his body. He was transported by ambulance to a local emergency room, where, according to reports, a 4 cm laceration to his forearm was sutured and he was returned to the jail.

When evaluated after the event, he reported that his wife had just had a baby, that they had no phone and he had no way to contact her. He expressed symptoms of depression including guilt, helplessness, and dysphoric mood, and continued to express suicidal ideation. He was placed on full suicide precautions and begun on antidepressant pharmacotherapy. He continued to express suicidal ideation off and on for the next two months, and was off and on suicide precautions. Several weeks after the first attempt, he made a superficial laceration to his wrist with a razor blade while not on suicide precautions. He continued to be followed by the psychiatric consultants, and appeared to improve after therapeutic levels of the antidepressant were attained.

Comment: It appears in this case that screening measures were properly taken and there were no apparent predictors of the inmate's future suicide attempt. He denied suicidal ideation at booking, as well as previous ideation or attempts or previous psychiatric treatment. He was not noted to be suffering from symptoms of depression at booking.

### *Case 2*

A 19-year-old unemployed, common-law married African-American male was incarcerated on a charge of aggravated robbery. He answered "no" to all suicide screening questions at booking. He had reportedly been in state schools since the age of six, and at the age of ten had been given the diagnoses of conduct disorder and attention-defecit disorder with hyperactivity. At age 16, in addition to the above diagnoses, he was given a diagnosis of schizoid personality disorder. He denied any drug or alcohol use. Approximately six months after he was incarcerated, he reportedly made a superficial laceration to his left forearm and wrist, later stating that he had hurt himself to get moved to another unit. He was seen by the psychiatric consultants and diagnosed (at various times) with antisocial personality disorder, intermittent explosive disorder and adjustment disorder with depressed mood. He expressed feelings of having been stressed by his cellmate's death and the subsequent questioning of him about it by legal authorities. He was begun on a liquid form of antidepressant medication.

Approximately 16 months after incarceration, he reportedly complained to a guard about shoulder pain, at which time the guard attempted to escort the inmate to the infirmary. However, the inmate reportedly collapsed and was found to be without a pulse. An emergency medical technician was summoned and began CPR. The inmate was transported by ambulance to a local hospital where he was treated as an inpatient for six weeks.

It was determined that the inmate had taken an overdose of his antidepressant, which he had been "cheeking" and then spitting into a bottle. A cellmate later reported that the inmate had been doing this for some time, at times using the medication for barter. The inmate was subsequently given a diagnosis of organic mental disorder due to anoxic brain injury.

Comment: This unfortunate outcome resulted from what appears not to have been an actual suicide attempt. The inmate had recently denied suicidal ideation to the psychiatrist. Historically, he had overdosed on a psychotropic medication during a previous incarceration, at which time he stated that he had done it with the hopes of being transferred. This case resulted in a change in policy regarding orders to elicit a verbal response after each dose of medications and to check cells for medications at least once a week; while this had been a standing order for all suicidal inmates, it was decided to apply these orders to all inmates on tricyclic antidepressant medication.

### *Case 3*

A 27-year-old common-law married white male who worked for a lawn care company was jailed on a charge of possession of cocaine. He reported several previous suicide attempts while both in and out of jail. He stated that nine years before, he had tried to kill himself by "rolling" his car. He reported that seven years before, he had tried to kill himself by overdosing on pills and slashing his wrists after his wife left him. He reported that one year before, while in jail, he tried to overdose and hang himself. He reported a previous psychiatric hospitalization at age 16 for paint sniffing and suicidal ideation. A psychiatric evaluation done three years prior to the attempt resulted in a diagnosis of adjustment disorder with depressed mood and mixed substance abuse. An evaluation one year later resulted in a diagnosis of anxiety disorder and dysthymia.

The inmate denied suicidal ideation at booking but demonstrated signs of depression, so he was placed on the schedule to see the psychiatrist. However, later that day the deputy making rounds found him lying face down on the floor of his cell with a cloth tied around his neck. The incident report stated that the inmate had stopped breathing for approximately 45 seconds. He was transported by ambulance to a local hospital where he was evaluated and cleared. While in the emergency room he was evaluated by the psychiatrist on call, to whom he disclosed that this incarceration had brought back memories of a previous incarceration, when he had been raped. He stated that prior to being jailed his mood was good, though he reported some middle insomnia and decreased

appetite. He reported alcohol use of one six-pack approximately every other day. He denied other substance use, though other records indicated use of cocaine, marijuana, LSD, and inhalants. He reported having been treated by a psychiatrist who prescribed a "nerve pill" two years before because of an emotional reaction to having been raped. He reported having had auditory hallucinations approximately two weeks before this attempt but he would not elaborate. He was diagnosed with adjustment disorder with mixed disturbance of emotions and conduct, with recommendations to rule out alcohol abuse, rule out polysubstance dependence, and rule out post-traumatic stress disorder. Recommendations were made that he be returned to the jail on full suicide precautions with monitoring for alcohol withdrawal. He was followed by the psychiatry consultants and restarted on an antidepressant that was prescribed during a previous incarceration. He was charged with Assault and Driving While Intoxicated in separate incidents two years later.

Comment: Symptoms of depression were accurately detected at booking, and the inmate was placed on the list to see the psychiatrist. However, the inmate denied suicidal ideation, and therefore was not placed on precautions. This cases emphasizes the difficulty in weighing the actual risk of suicide versus the discomfort and humiliation of being placed on suicide precautions. It is possible that placement of this inmate on an intermediate level of observation, such as 15-minute checks, might have prevented his attempt. Furthermore, this case suggests the need to decide if the suicide screening questions at booking should include questions regarding previous rapes or other traumatic events during previous incarcerations.

*Case 4*

A 33-year-old single male Hispanic construction worker was charged with aggravated sexual assault. Upon booking he denied previous psychiatric treatment or symptoms, past suicide attempts or ideation and current suicidal ideation. He reported a history of alcohol use.

One week after incarceration, he told an officer that he wanted to hang himself, and he was moved to the medical unit and placed on full suicide precautions. At approximately 10:00 a.m., the inmate reportedly asked the deputy making rounds why he could not have his clothes. The deputy reportedly told him that it was so that he would not hurt himself. He stated that the inmate told him that he did not want to hurt himself, but that "they" were the ones that wanted to kill him. The deputy reported that he told the inmate that they did not want to hurt him, at which time the inmate started to bang his head. When asked why he was banging his head, the inmate reportedly stated because he was a man and he wanted the police, not the deputy or the sheriff because they would kill him like they killed his friend. He then reportedly stated that he would bang his head as long as he wanted, and the deputy left to continue his rounds.

At approximately 10:30 another inmate notified a second deputy that the inmate was "beating his head against the toilet" and had "split his head open." The inmate was observed by the deputy to be banging his head against the steel toilet, and that his face and hair, as well as the steel bunk and floor were covered with blood. The inmate was examined in the infirmary and then transported by a deputy to the emergency room where a CAT scan demonstrated a small hematoma but no intracranial abnormalities. He was seen by a psychiatrist who concluded that the inmate was delerious and referred him back to Medicine. He was then seen by Neurology who noted mild paranoia and a strange affect, but stated that his exam was otherwise within normal limits. He was again referred back to Psychiatry. He was noted not to be tremulous and his vital signs were stable, but his liver enzymes were elevated. He reported having last drunk alcohol three days before (although records indicate he was jailed 7 days before).

He was returned to the jail and placed on full suicide precautions. He subsequently told the psychiatrist that his cellmates had tried to rape him and that his friend (other reports said brother) was raped and killed in jail. He was given a diagnosis of brief reactive psychosis and symptoms resolved shortly thereafter without treatment.

Comment: It has been suggested that patients who are suicidal are more likely to bang their heads when placed on precautions and other methods of harming themselves are taken away. Though the first deputy in this case did not appear to take the inmate's head banging seriously, clearly significant injury can occur from this behavior. However, there were other features of this case that the typical deputy would not likely be trained to find, such as the degree of paranoia suggested in the inmate's comments to him. Furthermore, there was some suggestion that this inmate may have been delerious, possibly suffering from effects of heavy alcohol use.

*Case 5*

A 25-year-old single African-American female was charged with assault and felony escape. She denied past psychiatric history or psychiatric symptoms and answered "no" to all suicide screening questions at booking. She reported a history of crack cocaine and marijuana use.

Four days after booking she told a cellmate that she wanted to electrocute herself using water and a television cord and stated that she had drunk cleanser in a suicide attempt. She was taken to the infirmary and placed on full suicide precautions. Three days later, while still on precautions, she called out to a guard, who then went to check on her. When the guard arrived, the inmate was hanging from the cell bars by a noose made from two socks tied together. The guard reportedly called for help, then held the patient up until help arrived. A second guard arrived but was unable to untie the knot. A third guard gave him a knife and he was able to cut the noose from the inmate's neck. The inmate was transported to the emergency room where she was medically cleared and returned to the jail. She told the psychiatrist in a subsequent interview that she was "distressed about [her] situation." She reportedly appeared grandiose and complained of auditory and visual hallucinations. She was diagnosed with cyclothymic disorder vs. borderline personality disorder and placed on antipsychotic medication.

Comment: This case demonstrates that even standard care can have weaknesses. For example, blankets that cannot be torn to be used as a suicide tool can hide other tools that can be used in an attempt, as in this case, the inmate's socks. This emphasizes the importance of either constant observation or strict adherence to restriction of materials that may be used as ligatures or for concealment.

**Discussion**

Lester has suggested that almost 15% of those who make suicide attempts ultimately die from suicide (24). Therefore, attempting suicide is a risk factor for completed suicide. A number of studies

have examined characteristics of those who have completed suicides with suicide attempters. Haycock, compared inmates who had made nonlethal suicide attempts with those who had made lethal attempts. While he found no differences in marital status, employment/status, charge, psychiatric history, psychiatric diagnosis or alcohol abuse, he found that those who used the more lethal methods were more often older, had a history of heroin use, were intoxicated at the time of the act, and had made more suicide attempts (25).

Fawcett and Marrs compared a number of inmates who had made suicide attempts with completed suicides at the Cook County Jail. They found few differences in race, charge, time since booking, psychiatric background or method. However, they found that those who attempted suicide were younger than those who completed suicide (9).

It is possible that some of the cases in this study should be considered acts of self-injury without true suicide intent. Lester and Danto in *Suicide Behind Bars* suggest that prisoners often injure themselves without any real suicide intent (1). They cite a study by Martinez (1980) that states that the most common forms of self-injury in correctional settings are laceration with razor blades or other sharp objects and swallowing of metal utensils or razor blades (26). They cite Wicks who suggested other reasons for self-mutilation including a desire for reclassification, a cry for help, escape from intolerable situations, and a desire for clemency (27). In addition, Cookson has suggested that female inmates self-mutilated to relieve tension, depression, anxiety and depersonalization and to gain some control over their environment (28).

In summary, it is difficult to generalize from such a small sample size and with such varied results. Moreover, efforts at data collection were compromised by incomplete records. Most remarkably, this sample deviates in several characteristics from the NCIA typology of successful suicides. In contrast to that typology, these subjects generally committed serious self injury much later after booking, the act occurred in the general jail population more often than in isolation, the inmates were charged with felony offenses, not simply public intoxication, and prior history of self-destructive behaviors and psychiatric hospitalizations was usual. This deviation may be the result, at least in part, of preventing those successful suicides that would have occurred soon after booking, leaving some self-destructive or suicidal inmates who do not conform to the former typology. In predicting who will be at risk over time, factors such as mental disorders, prior psychiatric hospitalizations, prior suicidal and self-destructive acts, substance abuse, and ongoing stressors may eventually prove to be more useful danger signals than demographic variables such as age, race, and gender.

It is hoped that the small sample size is testimony to the effectiveness of the screening program already in place at the jail, and that the results of this study elucidate areas for further inquiry in efforts to improve safety in our program and others.

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