Suicide in Jail: A Ten-Year Retrospective Study

Matthew J. Kucmanic, Thomas P. Gilson

ABSTRACT

Suicide in jails, like all death in custody, may involve complicated investigation. Allegations of mistreatment and/or abuse may be raised and these possibilities need to be addressed. Apart from these investigative concerns, the occurrence of suicides in such a controlled environment raises additional questions about potential preventative measures.

Between 2004 and 2014, there were ten deaths of incarcerated individuals in Cuyahoga County (metropolitan Cleveland) Ohio. Most (80%) were white and all were male. Similar to previous reviews, the majority of decedents hanged themselves (90%), with one case of asphyxiation by airway obstruction with a foreign body. Psychiatric disorders were noted in six of ten decedents while seven of ten had a history of substance abuse including alcoholism. Overall, nine of ten had at least one of these disorders.

All suicide deaths occurred within one year of incarceration, which may reflect the absence of a long-term prison fatality in our county. It is noteworthy that 70% of deaths occurred within the first month of incarceration with four of ten events occurring in less than a day including two deaths in less than 30 minutes. Positive toxicology for abused substances was noted in 75% (three) of the four individuals who died in less than a day and only in one other suicide, which occurred on the second day of incarceration.

Our data suggest that suicide in jail is predominantly a male phenomenon, with early incarceration being a particularly vulnerable period. The presence of another inmate in the same cell as the decedent was not seen to have an independent deterrent effect. Intoxication, particularly in individuals with a history of substance abuse and/or alcoholism, should raise concern for potential self-harm in recently jailed individuals. Possible interventions suggested by this study might include closer direct surveillance in the early incarceration period, earlier access to mental health services as well as design modifications in holding cells with possible dedicated short-term holding areas where self-harm risks are minimized and surveillance can be optimized. *Acad Forensic Pathol. 2016 6(1): 109-113*

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INTRODUCTION

Suicide is the leading manner of traumatic death in jails (short-term correctional facilities), the fourth leading cause of death in prisons (long-term correctional facilities) (1), and the tenth leading cause of death in the United States as a whole (2). Like all death in custody, a complicated investigation may be required to address potential allegations of misconduct and/or abuse. These concerns were highlighted in a recent case involving the death of a woman in Texas jail, which received national media attention surrounding her manner of death, time incarcerated, race, and gender (3). The occurrence of suicide in a controlled environment, such as a jail or prison, raises several community and public health questions with the most pressing surrounding prevention strategies, interventions, and policy development to reduce jail suicide.

In 2014, we observed two jail suicides in Cuyahoga County (metropolitan Cleveland) that occurred in a relatively short time frame (two months). This prompted a retrospective investigation of jail suicides that occurred in Cuyahoga County. This paper presents data from Cuyahoga County from 2004 through 2014 in regard to suicide that occurred in jail. An analysis of these deaths is presented and prevention/intervention strategies are proposed.

METHODS

The Cuyahoga County Medical Examiner/Coroner Office has the statutory responsibility to investigate all deaths occurring as result of injury as well as deaths of individuals in legal custody at the time of their death. Death investigations from 2004-2014 were retrospectively reviewed to identify suicide deaths occurring in jail. Full review of medical history and circumstances, including jail records, are standard for this type of death investigation. Medical examiner policy in the investigation of such deaths routinely involves scene visit (regardless of decedent transport from scene) by a board-certified death investigator, as well as the Chief Medical Examiner. Full autopsy, including posterior neck and subcutaneous wrist and ankle dissections at a minimum, is performed in all cases. Full toxicology is performed in all cases. All ligatures in hanging deaths are transported to the medical examiner office for evaluation.

Case files were analyzed for demographic data, causes of death, mental health history (including substance abuse), length of detention, and toxicology findings. Data were then compared to national jail suicide data, Cuyahoga County general population suicide data, and national population suicide data. Within Cuyahoga County, there was an average of 154 suicides per year between 2004 and 2014. In the United States, there has been a general increase in the rate of suicide over the past ten years, with a rate of 11.1 (per 100 000 residents) in 2004 and a rate of 13 in 2014 (4). In the United States, the rate of suicide in jail is approximately four times higher than the rate of suicide in the nation; in 2013, the jail suicide rate was 43 and the national suicide rate was 13 (1, 4).

RESULTS

Between 2004 and 2014, there were ten suicide deaths in Cuyahoga County (metropolitan Cleveland) jails. Eight individuals were white and the remaining two were black. All of the decedents were male. Ages ranged from 24 to 60, with an average age of 43. The majority of the cases were death due to hanging (nine of ten), with one case being death due to asphyxiation by airway obstruction with a foreign body. Ligatures used in hanging deaths included decedent clothing or bedding materials. Two of the individuals were single, four were married, and four were divorced.

A history of mental illness was present in seven of the ten decedents (depression, five; bipolar disorder, two; anxiety disorder, two; schizophrenia/schizoaffective disorder, one; nonspecific psychiatric illness, two) with some individuals carrying multiple diagnoses. Substance abuse history was noted in seven of the decedents. There was a significant overlap between mental illness and substance abuse disorders, with nine of the ten individuals having one or both conditions.

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All of the individuals died within the span of one year of incarceration. Four died in under a day, two died in under a week, one died in under a month, and three died in under a year. Of the four individuals who died in under a day, three had positive toxicology (including ethanol, cocaine, opiates, and cannabis). An individual who died on his second day of incarceration tested positive for methamphetamine. No other decedents tested positive for illicit drugs or ethanol.

At the time of their deaths, six suicide victims were arrested but not yet charged, three had been charged but not adjudicated and one had recently been convicted. The absence of long-term convicted individuals reflects the nature of correctional facilities within Cuyahoga County, where there are no extended term prisons.

DISCUSSION

As the leading cause of death in jail facilities, understanding and preventing jail suicide is important for all public correctional facilities. Despite our sample size of ten, we were able to identify several factors that were shared among the decedents and that are consistent with the current literature on this phenomenon. Our research of the literature reinforces our data and findings, and will hopefully be used by our county to develop policies and prevention strategies to reduce jail suicides in the future.

In our study, we found that all of our decedents were male, and the majority (80%) were white. This is disproportionately higher than the county general population (65% white) and the county jail population (<40% white) (5). Mumola showed that jail suicide is most common in the United States among white males (6) and Hayes, in a 20 year review of a 1985 study, showed that 93% of jail suicides were male and 67% were white (7).

One factor from our study that was most striking was the number of individuals that died under a day and under a month. In total, seven of the ten decedents that we studied died in under a month, and four died in less than a day. These findings correlate with Harrison and Rogers, who found that jail suicide occurs most frequently within 60 days (8). In addition, Mumola found that 48% of deaths occur in the first two weeks of incarceration (6) and Hayes predicted that inmates are at greatest risk 24-48 hours after incarceration (7).

Of the four decedents who died in the first day of incarceration, three of the four were found to have positive toxicology for abused substances. Studies have shown that both drug and alcohol intoxication are correlated with suicide, and are linked with impulsive suicides (9). This may suggest that the altered state, caused by intoxication, may lead to a heightened perception of crisis. Jail environment and a crisis state are thought to be the primary causes of jail suicide with factors such as feelings of fear, isolation, and shame, which can be caused by the environment, may lead to crisis, and which in turn may influence the inmate towards suicide (7, 10). Distinguishing the causative environmental factors in suicide is difficult and beyond the scope of this study, but suggests that the risk of taking one's life may lie more so in the perception of the jail environment and not necessarily the physical jail itself. The charge status of the decedents (with only one having actually been adjudicated) is also likely a reflection of the acute nature of the incarceration with uncertainty and fear of possible outcomes. This may be especially relevant in the setting of mental illness, which occurs with greater frequency among the incarcerated when compared to the general public.

It is known that correctional facilities have high rates of mental illness (11), with some concluding that jails and prisons have replaced hospitals in the provision of mental health services for this segment of the population (8). Our results show that seven of ten individuals suffered from mental illness ranging from depression/bipolar disease to schizophrenia, which have been associated with suicide in general (12, 13). There was also significant overlap between mental illness and substance abuse disorders, with nine of ten individuals having at least one of these conditions. This has been previously described in a review of jail and prison suicides, where it was found that history of psychiatric care, along with age, offence, homelessness, prior incarceration, and history of drug abuse were

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correlated with jail and prison suicide (14). As mentioned above, acute crisis, coupled with this chronic history may serve as a foundation for self harm.

From 2004 to 2014, there were a total of ten jail suicides in the county with two occurring from 2004 to 2008 and eight occurring from 2009 to 2014—an overall increase in the last five years. This mirrors the rising rate of suicides nationally, but shows a more dramatic rise (1). Given the small sample size, caution must be employed in trend analysis. Although there has been a general decrease in the number of national jail suicides since the mid 1980's (6), the rate of jail suicides has remained consistent, reflecting a general decline in jail population over this time (1). Within Cuyahoga County, the jail population fluctuated over our study period, but averaged approximately 2000 inmates on any given day. This estimates a suicide rate of 50 per 100 000 individuals, which roughly corresponds to the national rate of 43. Given the small sample size, similar caution in trend analysis here is also advisable. Despite this, our rate confirms an overall greater rate of suicides in the jail population, compared to the rate of suicides in the general population.

Difficulties arise in developing prevention strategies for jail suicide. Primary prevention methods relying on demographics or mental illness history may be inadequate screening tools (10, 15) while current public health tools to assess behaviors and social environments may be ineffective in addressing one-time behaviors like suicide (16). One study suggests that the main reasons for suicide in jails are that inmates are not observed in an appropriate time frame (appropriateness determined by their status or national standards), closed circuit television monitoring is unreliable, and cells contain anchor points, which can be used for hanging (7). These standards provide information for generating primary and secondary strategies that are more effective than removing cloth or potentially harmful objects from the room itself. Pompili and colleagues, who did a review of jail suicide prevention strategies, developed a suicide prevention plan that ended with the use of a postvention. Their six-step plan is as follows: 1) train jail personnel about the indicators of suicidality, 2) develop procedures to screen inmates, 3) communication between staff about high risk individuals, 4) develop written procedures, 5) ensure access to mental health services, and 6) develop a debriefing strategy for when a suicide occurs (17). These general methods provide a basic framework for the development of policies geared towards suicide prevention.

A main key to these strategies is education about suicidal tendencies and behaviors. Suicide prevention can start at the arrest site and not at the jail, with police officers trained to recognize suicidal cues and tendencies. In addition, providing greater access to mental health counseling is crucial not only to prevent jail suicide, but also to serve the growing population of correctional facility inmates who have mental illness. Their last step—a "postvention"—is a morbidity and mortality review to optimize learning from these relatively infrequent occurrences.

Another prevention option is to create a temporary initial holding area lacking bars or other anchor points. This recognizes the frequency of hanging in these deaths and also the relatively short interval of detention in the majority of our suicide deaths. In addition, this holding area should include a form of direct surveillance, such as a two-way mirror, which allows jail personnel to directly view physical and emotional cues that may not be visible on closed circuit television. In addition, surveillance should be maintained as continuous as possible, with routines shortened from the 15 minute standard.

This paper is limited by the relatively small sample size. Since suicide in jail is a relatively rare occurrence in most individual jurisdictions, caution is advised in the application of these results to trend analysis, public health planning and intervention strategy development. As a retrospective review confined to completed suicides, our smaller population may miss risk factors which might have been uncovered with a systematic review of all acts of self-harm. We also could not address some risk factors (e.g., concomitant life crises independent of incarceration, sexual orientation among younger inmates) in a retrospective study but these variables merit further consideration.

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The development of a collaborative reporting system of jail suicides for medical examiners/coroners may provide future researchers with the statistical power to create interventions and policies that are supported by a robust evidence base.

CONCLUSION

Our study showed that there is an overall increase in the number of jail suicides within Cuyahoga County and the United States. Although we found that hanging is a common method for suicide, factors such as mental illness and substance abuse may prove to be better areas of focus for prevention strategies. Strategies that have been developed focus on suicidal behaviors and crisis-like cognitions. The individual variables that were shared among individuals point to the fact that inmates, especially newly incarcerated inmates, are a vulnerable population that have a greater propensity towards suicide. This suggests that further investigations into the cause of jail suicide are needed not only in Cuyahoga County, but also in other counties within the United States.

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