

Risk of trauma exposure among persons with mental illness in jails and prisons: what do we really know?

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Purpose of review

Traumatic victimization, particularly sexual abuse, is a serious problem in correctional facilities and those suffering from mental illnesses are especially vulnerable. This review examines our current knowledge regarding trauma victimization among persons with mental illness serving time in jails/prisons, considers methodological challenges, and provides recommendations for future research.

Recent findings

Traumatic victimization, particularly sexual abuse, has consistently been identified as a high-frequency problem within jails and prisons. Lifetime, 6-month, and 12-month prevalence rates of physical and sexual violence among incarcerated people are quite high relative to nonincarcerated populations, and women report much higher rates of most traumatic events than men. Moreover, data show that inmates with mental illnesses are up to eight times more likely to be victims of sexual abuse than nonmentally ill inmates.

Summary

Additional research is needed to improve our understanding of this issue and inform change efforts. Future research should include: epidemiological studies to improve our knowledge of risk factors and correlates of victimization; prospective studies to determine causality between trauma victimization and mental illness or other adverse outcome; and intervention studies to examine strategies for reducing violence and traumatic victimization inside correctional facilities, effective treatments for posttraumatic psychopathology, and improved re-entry outcomes.

Keywords

criminal justice, incarcerated populations, jails and prisons, mental illness, posttraumatic stress disorder, severe mental illness, trauma, victimization

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Introduction

Persons with mental illness continue to be over-represented in jails and prisons despite the increase in the number of programs, such as specialized law-enforcement-based responses, jail diversion programs, mental health and veteran courts, and re-entry services, aimed at reducing their involvement in the correctional system. The most recent report on the prevalence of current serious mental illness in jails showed rates of 14.5% and 31% of male and female inmates, respectively [1]. These rates increase to 17.1% (men) and 34.3% (women) when post-traumatic stress disorder (PTSD) is included. Although there are several clinical and legal reasons to reduce the prevalence of persons with serious mental illness (SMI) in jails and prisons, the risk of trauma exposure (e.g., sexual or physical assault) among this cohort and its sequelae is one of great significance [2]. Traumatic victimization, particularly sexual abuse, has consistently been identified as a problem within jails and

prisons [3–21] and, although the data are not abundant, those suffering from mental illnesses have been identified as especially vulnerable [22–25].

If trauma victimization is an inherent, frequent, ongoing, and long-standing problem within jails and prisons, why would inmates with schizophrenia, bipolar depression or major depression, for example, be more susceptible than their incarcerated counterparts without mental illness? According to Silver *et al.* [26], there are two possible reasons for the increased risk. The first hypothesis, ‘Enhanced Vulnerability to Attack,’ explains that people with mental disorders are more vulnerable to victimization because they may be confused as a result of medications, with dulled responses, and therefore often unable to engage in self protection and self defense [27,28].

The second hypothesis, ‘Victimization as an Informal Social Control,’ attributes the increased risk to behaviors such as illogical thinking, delusions, auditory

hallucinations, and severe mood swings among people with SMI that may be disquieting in other nonill inmates or correctional staff and result in violent attempts to control or reduce such behaviors [29]. This theory also explains situations in which correctional officers react with violence to inmates, possibly with delusions, who lash out physically. There are numerous reasons why an inmate with SMI may respond in this way. One possible reason is that a past history of trauma may lead to reactions of fear and anxiety as a result of retraumatizing circumstances associated with incarceration (e.g., handcuffed restraints, body cavity or strip search), as has been found in adult patients with SMI during involuntary psychiatric hospitalizations [30].

Both of these theories suggest that a symptomatic inmate may be susceptible to further abuse [31]. A significant correlation between severity of symptoms and subsequent physical and sexual abuse has in fact been observed [32].

The purpose of this paper is to provide a review of recent research to examine our current level of knowledge about the likelihood of trauma victimization among persons with mental illness serving time in jails or prisons. This review will also highlight the importance of victimization research and related methodological challenges, particularly among incarcerated populations with mental illness, and provide recommendations for future research.

Methods

The literature review was restricted to studies conducted in the United States that directly or indirectly explored the relationship between mental illness and trauma victimization in the criminal justice system. We searched PubMed (citations and abstracts from Medline and other life sciences journals), PsycInfo (the most comprehensive database of psychology and psychological disciplines), and Google Scholar (a web search engine that indexes the full text of scholarly literature across an array of publishing formats and disciplines). The search was then expanded to reference lists from published key articles. The search was limited to articles published between 2005 and 2011. The search was conducted using the following medical subject headings terms, keywords, and phrases: victimization, physical abuse/assault, sexual abuse/assault, rape, violence, mental disorder, mental illness, severe mental illness, psychiatric disorder. Searches were also conducted on names of individuals with expertise and a history of publishing in the field.

The importance of trauma victimization research

The psychological consequences of trauma victimization are potentially severe and include fear, anxiety, depres-

Key points

- Traumatic victimization, particularly sexual abuse, has consistently been identified as a high-frequency problem within jails and prisons.
- Prison is a particularly violent place for persons with mental disorders, with inmates with mental illnesses being up to eight times more likely to be victims of sexual abuse than nonmentally ill inmates.
- The lack of literature on the relationship between mental illness and victimization among populations in the correctional system calls for additional research to improve our understanding of this issue and inform change efforts.

sion, substance abuse, suicidal ideation, and PTSD [33]. Moreover, there are also potential physical and medical consequences to trauma exposure [34–36]. Having a history of unwanted sexual experience is significantly related to cigarette smoking, disability, poor general health, poor mental health, poor physical health, and less satisfaction with life [37]. Sexual trauma also increases risk of sexually transmitted diseases and HIV, and unwanted pregnancies for women [38–41]. Compounding the problem, data indicate that victims of violence are also more likely to be perpetrators of violence toward others [27]. Thus, there are demonstrable physical, emotional, and behavioral implications to trauma exposure inside and outside jails/prisons. We need empirical data on the extent of the problem and the correlates that increase or decrease risk of abuse among persons with psychiatric illnesses in the criminal justice system because the negative consequences are numerous and far-reaching.

Epidemiology of trauma exposure among persons with mental illness and criminal justice involvement

Data on trauma exposure among inmates in jail and prison and victimization among persons with serious mental illness in the community are consistent and abundant with both life-time and current physical and sexual abuse being highly prevalent among both populations. Although the victimization literature on these two groups is vast, only a few seminal studies will be highlighted here to provide a context to better understand the magnitude of the problem of victimization among persons with mental illness in the criminal justice system. A discussion of the correlates of victimization, including, for example, ethnicity, age, sex, and sexual orientation, is beyond the scope of this article but excellent reviews exist [42,43].

Data regarding prevalence of victimization among incarcerated populations, especially sexual abuse, date back to

1968. Up until 2007, studies have been small and at the state level. Two national studies on the incidence of sexual abuse have been conducted (one in 2007 and one in 2008) by the Bureau of Justice in response to an explicit mandate from Congress under the Prison Elimination Act, which was enacted in 2003 [3,4].

The most recent study surveyed 81 566 inmates aged 18 or older within 167 state and federal prisons, 286 jails and 10 special confinement facilities [4]. Self-reported incidents of sexual victimization in the past 12 months were frequent, with slightly higher rates among prison inmates (4.4%) compared with jail inmates (3.1%). Wolff *et al.* [20,21] furthered our understanding of this problem by asking inmates not only about sexual abuse but also about physical victimization. Self-report data were collected from a large probability sample of 7221 men and 564 women aged 18 or older, inmates from 13 adult male prisons and one female prison. Among the facilities, 6-month prevalence rates of physical violence among men ranged (depending on the question) from 75 to 205 per 1000 (inmate-on-inmate) and 139 to 246 per 1000 (staff-on-inmate). Six-month prevalence rates of physical violence among women ranged (depending on the question) from 92 to 206 per 1000 (inmate-on-inmate) and 23 to 83 per 1000 (staff-on-inmate). The authors reported that, compared with the general population, the rate of physical assault is over 18 times higher for male inmates and 27 times higher for female inmates, compared with assault victimization rates for nonincarcerated men and women, respectively [20]. With respect to sexual victimization (any incident), 6-month prevalence among men was 43 per 1000 (inmate-on-inmate) and 76 per 1000 (staff-on-inmate). For female inmates, the prevalence rates were 212 per 1000 (inmate-on-inmate) and 76 per 1000 (staff-on-inmate) [21].

Research has shown that there is an elevated risk of trauma exposure for individuals with SMI in the community [44–52]. Teplin *et al.* [44] examined the incidence of violent victimization in a randomly selected sample ($N=936$) of people with SMI using the same instruments as the National Crime Victimization Survey and found the incidence of violent victimization among people with SMI to be more than four times higher than in the general population, after controlling for demographic differences between samples.

Although the research on the prevalence of victimization among persons with mental illness in the community is extensive and shows extremely high rates of trauma (91%) and PTSD (19%) [46,53], there is relatively little empirical data on the prevalence of victimization among inmates with mental illness. In fact, the epidemiology of victimization among persons with SMI in prison has remained largely speculative until recently with the research conducted by Wolff *et al.* described above.

Wolff *et al.* [24] found that prison is a particularly violent place for people with mental disorders [23]. Approximately one in 12 male inmates with a mental disorder reported at least one incident of sexual victimization by another inmate compared with one in 32 inmates with no mental disorder [24]. There was less of a difference between female inmates with (four per 1000) and without a mental disorder (five per 1000) but sexual victimization was three times as high among female inmates (23.4%) as among male inmates (8.3%). Blitz *et al.* [23] also found higher rates of inmate on inmate physical violence among both male and female inmates with serious mental illness compared with nonill inmates. Male inmates with a mental disorder were 1.6 times more likely than their counterparts to be physically assaulted by another inmate. Victimization for females with a mental disorder was 1.7 times higher than that of females with no mental disorder. Among men with mental illness, individuals with schizophrenia or bipolar disorder were at highest risk (310 per 1000 inmates).

Additional support for the increased risk of victimization among persons with mental illness in the criminal justice system comes from a review of nearly 2000 officially reported sexual assaults that occurred in the Texas Prison systems between 2002 and 2005 [25]. The Texas Department of Criminal Justice found that inmates classified as mentally ill were eight times more likely to be a victim of sexual abuse compared with inmates not classified as mentally ill.

Methodological challenges with epidemiological research on victimization

In addition to all of the usual challenges of conducting research on vulnerable populations, there are various methodological challenges associated with conducting epidemiological research on victimization. Given the likelihood of underreporting, the magnitude of the problem among persons with SMI in jails and prisons may be far greater than what the few studies have revealed thus far. Potential underreporting is a major source of measurement bias in victimization research. As defined by Last *et al.* [54], bias from measurement results from ‘systematic error arising from inaccurate measurement or classification of subjects on the study variables.’ Several reasons have been cited for underreporting, including feelings of shame, guilt, embarrassment, and fear of not being believed and retaliation [5,55]. The likelihood of underreporting may be even higher among inmates with SMI compared with nonill inmates because, in addition to the reasons cited above, the former group may be more likely to distrust officials and less likely to know how to report such violations.

Misclassification bias may also come from the method in which data are collected. Estimates of victimization are

traditionally lower if based on information provided from administrative records/official reports compared with self reports [56]. Most studies using self-report data report levels of victimization at least 10 times greater than the official estimates provided by the Bureau of Justice Statistics [57]. In a study of 382 male and 51 female inmates, Struckman-Johnson and Struckman-Johnson [5] found that only 22% of the men and 34% of the women reported their assaults to prison staff. Another limitation of official reports is that they do not capture information on physical violence against inmates by staff [56].

The accuracy of self report has also been questioned [28]. There is still a misconception that people with mental illness are unreliable informants about their life experiences. Studies on the validity of self reports among persons with mental illness have provided evidence refuting this misconception [58–60]. There is also a potential for misclassification bias due to over-reporting. Inmates may be likely to fabricate, misinterpret, or over-inflate the severity of situations in an attempt to make the facility and its staff look bad [23]. Another source of misclassification bias comes from the way in which questions are worded. Wolff *et al.* [61] reported that 'rates of victimization were found to vary significantly by specificity of the question, definition of the perpetrator, and clustering of behaviors'.

Conclusion

Our review of recent research found very few studies on the relationship between mental illness and victimization among populations in the correctional system. The scant research shows that persons with SMI have an increased vulnerability to being abused compared with nonill inmates. The data are consistent with the elevated risk noted among community-based samples of persons with SMI. Additional research in this area is needed not only to confirm the increased risk, but also to address the methodological shortcomings of the few studies conducted thus far.

Although we have a good understanding of victim characteristics (e.g., race, physical size, age, sexual orientation) among general inmate populations [4,43,62], we know virtually nothing about the correlates of victimization among inmates with SMI. The only data on correlates come from the studies by Wolff and coworkers [23,24], who explored differences in the rates of sexual and physical victimization by sex and race/ethnicity among inmates with mental illness. Further research on correlates is needed. According to Wolff *et al.* [21], it is good to know the characteristics of the individual that 'elevate or lower risk levels in order to better classify inmates for placement and to alter environments inside prison to promote safe and humane prisons.' Another major gap

in the literature is the absence of studies of inmates with SMI in jail. Compared with prisons, jails have a greater number and rapid turnover of inmates and these conditions may result in more or fewer episodes of violence.

Future studies should include prospective methodologies that would permit the determination of causality between trauma victimization and mental illness or other adverse outcomes. Although Wolff and coworkers [23,24] attempted to control this by dividing a sample into diagnostic groups with prior treatment for any mental disorder and those with prior treatment for a serious mental illness (i.e., schizophrenia or bipolar disorder, that is, disorders not caused by physical victimization), they also called for research to explore the causality issue in more robust ways. Future studies should use clinical interviews and chart reviews.

Finally, intervention studies should be carried out to examine strategies for reducing violence and traumatic victimization inside correctional facilities, effective treatments for posttraumatic psychopathology (e.g., PTSD, substance abuse, depression), and improved re-entry outcomes. Important outcomes to examine include clinical symptoms, process and quality of life, costs, and a range of re-entry outcomes. Some of this latter research is in early stages of implementation [2].

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Conflicts of interest

None declared.

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