World Journal of Biology Pharmacy and Health Sciences
eISSN: 2582-5542
Cross Ref DOI: 10.30574/wjbphs
Journal homepage: https://wjbphs.com/

(REVIEW ARTICLE)

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Diagnostic overshadowing: A cause of overlooked depression in prisoners

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World Journal of Biology Pharmacy and Health Sciences, 2025, 21(03), 392-396

Publication history: Received on 09 March 2025; revised on 11 March 2025 accepted on 13 March 2025

Article DOI: https://doi.org/10.30574/wjbphs.2025.21.3.0280

Abstract

Depression is a pervasive and prevalent mental health disorder among prisoners, yet it frequently remains undiagnosed due to the phenomenon of diagnostic overshadowing - a clinical bias where prominent conditions or contexts obscure less obvious mental health issues. This review explores diagnostic overshadowing as a key barrier to identifying depression in people in custody, focusing on diagnostic failures, their consequences, and solutions. We review global literature on depression prevalence, which affects prisoners at significantly higher rates than the general population, yet it is frequently misdiagnosed or goes unrecognized due to overshadowing by the more prominent features of substance use, challenging behaviours or the prison context itself. Failure to recognize readily treatable depressive disorders because of diagnostic overshadowing results in serious but avoidable consequences, including elevated suicide rates, increased recidivism, and other adverse outcomes such as substance abuse and institutional violence, which collectively and individually perpetuate the cycle of personal distress and dysfunction, as well as the human and associated costs to others in society. By describing and highlighting diagnostic overshadowing as a particular problem in correctional settings, and by exploring its mechanisms in correctional psychiatry settings, we advocate for solutions for more reliable recognition of depression in prisoners, which is an essential first step to effectively address this readily treatable but easily overlooked serious mental disorder.

Keywords: Diagnostic overshadowing; Depression; Prisoners; Suicide; Recidivism

1. Introduction

Mental illness is a pervasive and prevalent issue in correctional facilities, with depression affecting an estimated 35-38% of pooled samples of prisoners worldwide [1], at rates two to three times higher than in the general population. In Canada, the prevalence of depression among federal prisoners ranges from 20-30% [2]. Despite these figures, depression often goes undetected, overshadowed by more visible physical ailments, behavioral issues, or the prison context itself. This article explores diagnostic overshadowing as a primary cause of this oversight, focusing on its implications for suicide prevention, recidivism, and other significant consequences - critical outcomes with profound individual and societal impacts. Failure to recognize depressive disorders are of particular concern in this regard, because of the potentially serious consequences of lack of treatment in an already disadvantaged and often distressed prison population.

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1.1. Diagnostic Overshadowing

Diagnostic overshadowing occurs when a clinician's focus on a salient condition or characteristic - such as a prisoner's criminal history, substance abuse, or disruptive behavior -leads to the misattribution or dismissal of symptoms of a co-occurring disorder like depression. This cognitive bias, first noted in patients with intellectual disabilities [3], skews the diagnostic process by prioritizing more visible and apparent issues over less obvious ones. In prisons, where complex health and social factors converge, this phenomenon is particularly pronounced, resulting in systematic underdiagnosis of mental health conditions. For example, a prisoner reporting fatigue and hopelessness might have these symptoms attributed to the stress of confinement rather than being recognized as symptoms of a treatable depressive disorder. The overshadowing condition - in this case, incarceration - diverts diagnostic attention away from the underlying psychopathology, delaying or preventing treatment. Understanding this concept is crucial for recognizing why depression remains a hidden and often silent scourge in correctional settings.

2. Diagnostic Overshadowing in the Prison Context

The prison environment amplifies diagnostic overshadowing through several mechanisms, each rooted in the interplay of individual, clinical, and systemic factors.

2.1. Behavioral Misattribution

Depressive symptoms such as withdrawal or irritability are often misinterpreted as normal responses to incarceration or as disciplinary issues. A 2023 study found that 30% of U.S. prisoners reported jail-specific suicidal ideation, which was associated with the custodial environment [4]. However, such jail-specific suicidal ideation was three times higher in those with a prior history of mental illness, indicating that such suicidal ideation is significantly linked to pre-existing mental illness, and not just associated with a harsh custodial environment. Therefore, an exclusionary focus on the prison environment as the sole cause can lead to misattribution that obscures pre-existing and treatable depression, increasing vulnerability to adverse outcomes. Furthermore, some behavioural manifestations of an underlying mood disorder, which can lead to disciplinary actions, are all too frequently diagnosed as primary personality pathology, for example antisocial or borderline personality disorders, leading to overlooking an underlying or co-existing depressive disorder, which goes undiagnosed and untreated.

2.2. Prioritization of Physical Complaints

Physical health issues are over-represented in custody, with inmates in U.S. prisons having a higher burden of most chronic medical conditions compared to the general population [5]. Clinicians may focus on somatic complaints, overlooking their potential link to depression. For example, a prisoner with insomnia might receive sedatives without an assessment for mood disorders, perpetuating diagnostic overshadowing [6].

2.3. Stigma and Stereotyping

Stigma surrounding mental illness in prisons can lead to overshadowing because clinicians may view emotional distress as manipulative behavior. Such skepticism results in an exacerbation of stigma that may delay or hinder help-seeking efforts, leaving legitimate depressive symptoms unrecognized and unaddressed [7].

2.4. Systemic Barriers

Resource constraints in correctional healthcare – There is a chronic lack of qualified mental health staff in correctional facilities, due in large part to challenges in recruitment and retention. This results in a lack of timely access to an acceptable level of mental health care. In consequence there are few opportunities for thorough assessments as clinicians, under such circumstances, tend to prioritize acute conditions, sidelining depression despite its prevalence an import [8].

3. Consequences of Overlooked Depression: Suicide, Recidivism, and Beyond

The failure to diagnose depression due to diagnostic overshadowing can have devastating consequences, notably increased suicide risk, higher recidivism rates and additional adverse effects, within and beyond prison walls.

3.1. Suicide

Suicide is a leading cause of death in prisons, with rates ranging from 18 to 40 per 100,000 inmates in the U.S., far exceeding the general population's 2009 rate of 11 per 100,000 [9]. In a narrative review of Canadian studies, up to and

including 2014, the rates of federal prison suicides amounted to 70 per 100 000, compared to a community population rate of about 10 per 100 000 [10]. Multiple countries in northern and western Europe have been reported to have had even greater prison suicide rates of 100 or more per 100 000, between 2011 - 2014 [11]. Depression significantly elevates this risk; inmates with major depressive disorder face a relative risk of suicide 5.1 times higher than those without [9].

The consequences extend beyond the individual. Each suicide represents a preventable loss, straining prison resources and affecting staff morale. In 2019 alone, U.S. federal prisons reported a 61% increase in suicides since 2001, with 46% of federal prison suicides in the years 2015-19 occurring in the first year of imprisonment [12]. Undiagnosed depression, obscured by overshadowing, fuels this avoidable crisis, leaving prisoners without access to critical supports and easily prescribed interventions.

3.2. Recidivism

Untreated depression also contributes to repeat offending, undermining rehabilitation and community re-integration goals. A study of Texas prisoners found that those with diagnosed mental disorders, including depression, were significantly more likely to return to prison multiple times [13]. Furthermore, nationally in the U.S., offenders with serious mental illness are reported to be more likely to return to prison sooner than those without serious mental illness [14]. Depression exacerbates this cycle of recidivism by impairing coping skills, employment prospects, and social reintegration—factors critical to staying out of prison.

The economic cost of incarceration is also sobering. With each federal inmate in Canada, for example, costing an average of CAD 114,000 annually [15], recidivism driven by untreated depression contributes to the already strained public budgets. In Portugal, mental health expenses are reported to double daily incarceration costs, to about €98 per prisoner on average although the authors of the 2023 study [16] rightly argue that the costs of not treating mentally ill prisoners would be even greater, both to the individual and society.

3.3. Other consequences

Beyond suicide and recidivism, undiagnosed depression due to diagnostic overshadowing contributes to additional adverse outcomes, including increased substance use and institutional violence within prisons.

- **Substance use:** Depression often co-occurs with substance use disorders, with studies indicating that 74% of prisoners with mental disorders have a history of substance abuse [17]. Untreated depression can drive self-medication with illicit drugs, which are often readily accessible in prisons despite security measures [18]. This cycle not only worsens individual health but also fuels prison contraband markets, complicating facility management.

- **Institutional Violence:** Depression can manifest as irritability or aggression, contributing to violence among inmates. Research shows that prisoners with untreated mental disorders are involved in more disciplinary incidents, including assaults, than their peers [19]. This violence perpetuates a hostile environment, further entrenching psychological distress and obstructing rehabilitation efforts.

These additional consequences amplify the urgent need to effectively address diagnostic overshadowing, because they compound the human and institutional toll of inadvertently overlooked depression.

4. Mitigating Diagnostic Overshadowing

To combat diagnostic overshadowing and its consequences, effective strategies are needed to improve recognition of depressive disorders in custodial settings, for example:

- Educating clinicians about the phenomenon of diagnostic overshadowing and how it can obscure detection of less salient but potentially serious underlying mental health conditions.
- Training clinicians to be more self-reflective, to recognize their own clinical biases, and to have a high index of suspicions when it comes to differentiating depressive symptoms from prison-related behaviors.
- Implementing validated screening tools like the PHQ-9, to identify depression in prisons [20].
- Increasing mental health staffing – through pro-active recruitment and retention efforts [8] - would enable more time for comprehensive and more accurate evaluations.

5. Conclusion

Diagnostic overshadowing systematically obscures depression in prisoners, with potentially devastating outcomes, including suicide and serious harm to the public because of an increased risk of violent recidivism. Other harms such as substance abuse and institutional violence are additional concerns, because they disrupt the smooth functioning of correctional institutions, can result in longer incarceration times, and increase distress to the inmate and costs to society. By prioritizing more visible conditions over less obvious mental health issues, this bias can not only endanger lives but also perpetuates cycles of incarceration and institutional dysfunction. Education about clinical bias, enhanced training to have a high index of suspicion in correctional settings, structured screening, and more effective resource allocation are some foundational steps towards minimizing diagnostic overshadowing of depression in correctional settings.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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