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MENTAL ILLNESS AND VIOLENCE: IS THERE A LINK?

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Abstract: Many believe mental illness and violence are associated. Despite research showing the vast majority of individuals with mental illness are not violent, the dangerousness of mental illness is frequently exaggerated in the news and entertainment industries. Resultant stigma toward those with mental illness can greatly impact public policy and opinion. This literature review examines the links between mental illness and violence and the variables that mediate that relationship. Overall, research suggests focusing not on whether mental illness causes violence, but how to best identify risk factors and reduce stigmatizing beliefs.

Introduction

Most people understand the experience of feeling anxious, sad, or unmotivated. For some, these feelings are temporary and fade with time; for others, they persist and cause significant distress, leading to changes in behavior, thinking, and emotion. When these changes begin to interfere with daily life, a mental illness[1] may be diagnosed.

Mental illness is common—the National Institute of Mental Health estimates that one in five people in the United States live with a mental illness, or approximately 46.6 million people.[2] As with physical illnesses, mental illnesses vary in severity, symptoms, and age of onset.[3] Approximately one-fifth of those who have a mental illness have a serious mental illness (SMI), defined as any behavioral disorder that causes substantial impairment in one or more life activities, such as work or school.[4]

Diagnoses can change over time and with treatment and, for many, symptoms can be reduced or managed.[5] Many individuals with mental illness live healthy, productive lives.[6] Despite this, mental illness is often associated with unpredictable, scary, and violent behavior, a perception driven by the news and entertainment industries.[7] However, research indicates that in most cases, violent behavior is not solely due to mental illness, but the culmination of multiple biological, social, and contextual factors.[8] Overestimating the role of mental illness in violence can have a strong impact on stigmatizing beliefs and attitudes, as well as affect public policy.

This literature review provides a summary of research analyzing the link—or lack thereof—between violence and mental illness, examines some of the variables found throughout the literature that may affect that link, and discusses the effects of stigma resulting from associating the two phenomena. Recommendations for policy and practice also are provided.

Mental Health-Related Definitions

Mental health is defined by the World Health Organization as "a state of well-being in which an individual realizes their own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to their community." Mental health encompasses emotional, psychological, and social well-being.

Mental health problem is a term often used to describe a set of symptoms that may not meet the diagnostic criteria for a mental disorder but can still create changes in mood or behavior.

Mental illness refers collectively to all diagnosable mental disorders, although the term is often used interchangeably with mental disorder.

Mental disorders are diagnosable conditions based on these factors in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5):

- A behavioral or psychological syndrome or pattern that occurs in an individual
- Reflects an underlying psychobiological dysfunction
- Results in clinically significant distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning)
- Is not merely an expected response to common stressors and losses (e.g., the loss of a loved one) or a culturally sanctioned response to a particular event (e.g., trance states in religious rituals)
- Primarily a result of social deviance or conflicts with society

Severe or serious mental illness is defined by the National Institute of Mental Health as "a mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities."

Substance use disorders are a type of mental disorder diagnosed through a cluster of cognitive, behavioral, and physiological symptoms indicating that an individual continues using a substance despite significant substance-related problems. Substance use disorders may create changes in brain circuits that last beyond detoxification (DSM-5).

Sources: American Psychiatric Association
National Institute of Mental Health
World Health Organization

An Overview of Research on Mental Illness and Violence

A large body of research exists on the relationship between mental illness and violence.[9] Studies have repeatedly shown that the majority of individuals with mental illness are not violent and that the majority of violent acts are not committed by those with mental illness.[10] Further, research indicates only 3% to 5% of violent acts can be attributed to persons with SMI.[11] Though some believe only a person with mental illness could commit an act of mass violence, researchers estimate that persons with mental illness are responsible for fewer than 1% of all gun-related homicides.[12]

However, researchers have noted difficulty in measuring the rate of violence among persons with mental illness.[13] For example, the rate of violence for those living in their community may be different than those in psychiatric settings or those who are justice-involved.[14] Mental health disorders carry different risks. Risk also may be influenced by personality traits, such as narcissism.[15] Some studies measuring violence in persons with mental illness rely on self-report, whereas others use criminal records.[16] Further, researchers do not use a universal definition of violence; threatening behavior, self-harm, and damage to property are not measured consistently across studies.[17]

Some studies revealed a relationship between violence and mental illness when the focus was narrowed to SMI.[18] However, scholars have emphasized that it is unlikely SMI is the causal factor.[19] Some have suggested that environmental factors (e.g., childhood trauma, abuse) may manifest as both mental illness and violent tendencies in the future, as opposed to mental illness causing the violent behavior.[20] Others have noted that the relationship between SMI and violence diminishes when individuals receive effective treatment.[21]

When a person with mental illness does commit violence, immediate family members and mental health practitioners are at the highest risk of victimization.[22] Strangers rarely experience random violence from people with mental illness.[23]

Incarcerated Population

Incarcerated persons with mental illness are at increased risk of violent behavior. In 2017, the U.S. Bureau of Justice Statistics reported that incarcerated persons with a mental health problem were significantly more likely to verbally or physically assault correctional staff and peers than those incarcerated without a mental health problem.[24] One study found incarcerated persons with SMI also are more likely to engage in violent behavior while in prison.[25] Researchers suggested these findings were not because violence is inherent to mental illness, but the result of a lack of adequate treatment both before and during incarceration coupled with the stressors of a prison or jail environment.[26]

Mental Illness and Victimization

Studies on the relationship between violence and mental illness have mostly focused on violent offending. However, researchers have noted that examining violent victimization is just as important, as research has found that persons with mental illness are much more likely to become victims of violent acts, rather than perpetrators.[27] One study found that adults with SMI were over 10 times more likely to become victims of a violent crime than the general population.[28]

Although limited, other research supports the theory that individuals with SMI are more likely to be victimized. Desmarais and colleagues combined data from multiple studies on community violence and mental illness and found that 23.9% of persons with mental illness had perpetrated violence in the last 6 months, whereas 30.9% had been victims of violence.[29] In another study, 2.3% of persons diagnosed with schizophrenia had been formally charged for committing violent behavior toward another person, whereas 34% reported that they had been the victims of a violent crime during the same examined time period.[30] Blitz, Wolff, & Shi (2008) found that once incarcerated, men with a mental illness were 1.6 times more likely to be physically victimized by other incarcerated persons, and women with a mental illness were 1.7 times more likely to experience this victimization.[31]

Harm to Self

In addition to being harmed, persons with mental illness also are more likely to hurt themselves.[32] Mental illnesses increase the risk of non-suicidal self-injury, which is defined as behaviors intended to harm one's own body, typically without the intent to die.[33] In one study, those with depression engaged in self-injury at 14.1 times the rate of a comparison group of persons with other medical conditions.[34] One study showed approximately 11.3% of those with psychotic disorders (e.g., schizophrenia, schizoaffective disorder) have engaged in self-harm[35] compared to 6.4% of the general population.[36] Another examination found that most incarcerated persons who self-injure have one or more mental health disorders.[37]

Suicide. While approximately 3% of adults aged 18 and older have attempted suicide,[38] studies have estimated that 18% to 55% of those with SMI have attempted suicide.[39] Studies using psychological autopsy—a technique of using multiple methods to gain information about a suicide victim after their death, including interviews with loved ones, hospital case-notes, and criminal records—have indicated that the prevalence may be higher.[40] In one study, researchers estimated that 50% to 90% of suicide victims may have met the criteria for a mental disorder, with some never receiving an official diagnosis.[41] Mental health problems also have been associated with increased risk for suicide attempts in incarcerated persons.[42]

Risk and Protective Factors in Persons with Mental Illness

Many behavioral health experts agree that a complex combination of factors influence any person's risk for violent behavior, not just risk among those with mental illness.[43] Because studies have concluded the majority of persons with mental illness are not violent,[44] researchers have shifted focus to identifying factors that may increase or decrease risk of violence for the smaller minority.

The following risk factors should be considered within the context of the minimal amount of violence committed by this population (<5%).[45]

> "Mental illness is one factor in a person's life that is sometimes relevant to involvement in violence, but it is very rarely the only factor, or even a causal factor."
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> Source: Rozel, J. S., & Mulvey, E. P. (2017). The link between mental illness and firearm violence: Implications for social policy and clinical practice. *Annual Review of Clinical Psychology*, *13*, 445-469.

Static Risk Factors

Static risk factors are those that remain relatively stable over time (e.g., personality characteristics) or cannot be changed (e.g., family background). Two of the most frequently identified static risk factors for violence in persons with mental illness are a history of previous violence and a co-occurring personality disorder.[46]

Previous violence. Research indicates previous violence is a strong predictor of future violence.[47] In particular, a diagnosis of conduct disorder in childhood, which includes symptoms such as physical cruelty and aggression, has frequently been linked with future violent behavior.[48] Persons with SMI who presented with conduct disorder during adolescence are at increased risk of nonviolent and violent criminal offending.[49] One study found that persons with SMI and a history of violence exhibited more frequent and more severe aggressive behavior than persons with mental illness and no history of violence.[50] Since previous violence has a strong

empirical association with future violence, it is often a weighted factor in violence risk assessments for psychiatric populations.[51]

Personality disorders. A personality disorder is a type of mental disorder defined as "an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible, is stable over time, and leads to impairment."[52] Antisocial personality disorder, which has dimensions of impulsivity, irresponsibility, and lack of remorse, has been associated with increased risk for violence.[53] Research indicates that having both antisocial personality disorder and another SMI increases risk for violence in persons with mental illness.[54] Antisocial personality disorder also frequently co-occurs with a substance use disorder (SUD), which can further increase risk of violence.[55]

Dynamic Risk Factors

Dynamic risk factors are malleable and may be more responsive to treatment. In one comprehensive review, SUDs and untreated psychosis were among the two most studied dynamic risk factors for violence in persons with mental illness.[56]

Substance use disorders. Researchers estimate one-third to one-half of persons with SMI also have a diagnosable SUD.[57] Previous studies have found strong associations between SUDs and violent behavior, particularly when the SUD co-occurs with another mental disorder.[58] An examination of multiple studies on substance use, mental illness, and violence concluded that "substance abuse appears to be a major determinant of violence and this is true whether it occurs in the context of a concurrent mental illness or not."[59] The MacArthur Violence Risk Assessment Study, one of the most robust and detailed studies examining the link between mental illness and risk for violence, found similar results.[60] After controlling for a co-occurring SUD, those with mental illness had no greater risk of violence than those without mental illness.[61]

Psychosis. One aspect of SMI that can increase risk for violent behavior is the presence of untreated psychosis.[62] Psychosis, which can be a symptom in multiple mental health disorders, is defined as "disruptions to a person's thoughts and perceptions that make it difficult for them to recognize what is real and what isn't."[63] Psychosis includes both hallucinations and/or delusions. Hallucinations are things heard or seen that do not exist (e.g., hearing voices), whereas delusions are false beliefs not based in reality (e.g., believing oneself to be a god).[64] Researchers have asserted that certain combinations of psychotic symptoms may be more likely to affect violence risk than other symptoms. Specifically, threat/control-override symptoms have been linked with violence.[65] Symptoms of threat/control override involve a deep fear of personal harm that is strong enough to override an individual's self-control of violent behavior. In threat/control override, the fear of harm is the result of a delusional belief, not actual harm. Findings on the effect of threat/control override symptoms on violence perpetration are mixed.[66] Gender may moderate this risk factor. In one study, men were more likely than women to respond to threatening delusions with violent behavior.[67]

Protective Factors

In contrast with risk factors that increase the likelihood of violent behavior, protective factors work to prevent or deter violent behavior among those with mental illness. The American Psychological Association notes that factors such as a person's family, career, and home environment can reduce risk of violence.[68] Other protective factors may include religious beliefs,

positive peer relationships, and involvement in prosocial activities.[69] For those with mental illness, the strongest protective factor may be effective behavioral health treatment.[70] What is considered effective may vary person to person, but effective treatment plans often include psychotherapy, medication, lifestyle changes (e.g., exercising, eating healthy), illness self-management (e.g., developing coping skills, setting goals for recovery), and joining support groups.[71]

Fazel and colleagues (2010) noted that for those with SUDs, SUD treatment may be the most protective against violent behavior due to the strong relationship between the disorders and violence.[72] Receiving integrated treatment for co-occurring disorders can reduce substance use and increase motivation for treatment in persons with mental illness.[73]

> "*Risk factors tend to be positively correlated with one another and negatively correlated to protective factors. In other words, people with some risk factors have a greater chance of experiencing even more risk factors, and they are less likely to have protective factors.*
>
> *These correlations underscore the importance of:* ***early intervention*** *and* ***interventions that target multiple, not single, factors***."
>
> Source: Substance Abuse and Mental Health Services Administration. (2019). *Risk and protective factors*. https://www.samhsa.gov/sites/default/files/20190718-samhsa-risk-protective-factors.pdf

Mental Illness, Violence, and Stigma

While multiple risk factors exist for violence among persons with mental illness, only a small percent actually commit violent acts. A report from the National Academies of Sciences, Engineering, and Medicine concluded that "less than 2% of the population meets the diagnostic criteria for severe and persistent mental illness, and it is a subgroup of those—adults with conduct disorders in childhood—that has the strongest association with violence. But even among that subgroup, the majority is not violent but instead is more likely to be victims of violence."[74] However, despite the mostly weak relationship between violent behavior and mental illness, studies continue to find evidence of public stigma, fueled by the belief that mental illness is unpredictable and violent.[75] Although perceptions of mental illness have improved over time,[76] persons with mental illness still experience negative remarks, stereotypes, and discrimination from others.[77]

A person with mental illness may encounter multiple types of stigma outlined in Corrigan, Druss, and Perlick (2014):[78]

- **Public stigma** can be summarized as the general belief that persons with mental illness are dangerous, violent, and unpredictable. When this belief is prevalent, persons with mental illness may struggle to find a job or a place to live or receive a lower quality of treatment.

- **Self-stigma** causes a person with mental illness to believe that they are dangerous or unworthy of care. They may believe it is impossible for them to live a good life or

feel as if they are to blame for their illness. Self-stigma can reduce self-esteem and lower interest in treatment.

- **Label avoidance** occurs when a person does not seek treatment in an effort to avoid being labeled as "mentally ill." They may resist taking medication and may not use services when categorized as "mental health care."[79] Some may instead self-medicate with substances to reduce mental health symptoms, which can lead to a SUD.[80]

- **Structural stigma** can make it challenging for persons with mental illness to receive needed care due to cultural barriers and institutional policies. Further, persons with mental illness may be barred from holding certain jobs, gaining custody rights, voting, and may be forced to disclose mental health status in certain contexts.[81]

As scholarly research does not signify a clear relationship between violence and mental illness, researchers have inquired into the origins of stigmatizing beliefs and attitudes. Some have suggested that media portrayals, through either news sources, television, or movies, strongly impact these perceptions. In television programs, approximately one in four characters with mental illness kill someone and over half are shown hurting others.[82] Depictions in the news show similar results. In a randomly selected sample of 400 U.S. news stories about mental illness from 1995-2014, over half discussed mental illness and violence together and were more likely to focus on interpersonal violence, not suicide or self-harm.[83] There is a vast discrepancy between these representations and the actual rate of violence amongst this population.

These portrayals have entwined the concepts of mental illness and violence in the minds of the public, and research indicates public perceptions of dangerousness far exceed actual risk.[84] Some believe that mass shootings are primarily caused by failures in the mental health system,[85] indicating a perception that mental illness and violence are once again directly correlated. Experts in the field have emphasized that blaming the mental health system for mass shootings and other acts of violence only adds to stigma, and that improving access to treatment is only one part of the equation to prevent widescale acts of violence.[86] In addition, multiple concurrent forms of stigma may create major barriers to interest in and access to treatment among persons with mental illness.

Recommendations for Policy and Practice

Repeatedly associating mental illness and violence in the media has contributed to the belief that persons with mental illness are dangerous. The resulting negative stigma can affect the self-efficacy and self-esteem of persons with mental illness,[87] as well as their access to opportunities, such as employment or housing.[88] Persons with mental illness also may experience social isolation and be discouraged from seeking treatment.[89] Therefore, it is important to reduce the misconception that persons with mental illness are dangerous.[90] However, some researchers have argued that violent behavior from persons with untreated SMI, no matter how rarely it occurs, will continue to fuel public stigma.[91] As such, treatment must still be prioritized for those most at-risk. The following recommendations should be considered as part of any public health approach to reducing violence and stigma.

Address Stigma of Individuals with Mental Illness

Media and public figures should not continue to associate all mental illness with violence, especially in the wake of mass shootings and other violent incidents. The entertainment industries also must be cognizant of the way that they portray mental illness and violence together and move away from sensationalized depictions.[92] Persons with mental illness should be given a voice to influence polices and further reduce the fear and stigma surrounding mental diagnoses.[93] Accurate information and portrayals of those with mental illness can reduce discrimination, encourage help seeking and improve quality-of-life,[94] and increase support for mental health funding.[95]

Address Treatment Barriers

Behavioral health treatment can target risk factors to reduce the likelihood of violent behavior for those most at-risk.[96] However, persons with mental illness often report that treatment is unavailable, too costly, or that they do not know where to go for services.[97] Patients need expanded treatment availability, more information on where to go for treatment, and transportation to and from services.[98]

Treatment barriers also may lead those with mental illness into involvement with the criminal justice system, which may not be equipped to address their needs.[99] Incarceration can rapidly worsen both physical and mental health,[100] particularly among those who were not receiving adequate treatment prior to incarceration.[101] Researchers have suggested that, when possible, diverting persons with mental illness away from the justice system and into behavioral health treatment may be beneficial.[102] Several evidence-informed practices exist for diverting and treating individuals with mental health disorders at various points in the criminal justice system.

Conclusion

The relationship between violence and mental illness is complex and cannot be examined as a single causal relationship. Research indicates persons with mental illness do not pose any significant risk of violence. While certain risk factors have been found to increase the likelihood of the perpetration of violence, particularly when accumulated, the majority of persons with mental illness do not behave violently. However, more consistent research with standardized definitions of violence, similar population samples, and rigorous study design is needed. Enhancing protective factors, such as treatment and social support, may have a profound effect on those who are most at-risk,[103] but negative stigma can reduce access to needed care. Mental health advocates and researchers must employ strategies to reduce stigma and increase access to treatment to lessen the likelihood of violent perpetration and victimization.[104]

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[1] The terms *mental disorder*, *mental health disorder*, and *mental illness* are all used to refer to diagnoses in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).
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