Understanding Mental Illness

George W. Woods and David Freedman[1]

Introduction to Mental Illness

Mental illnesses critically shape the way in which people experience the world, how people perceive and respond to circumstances around them, interact and engage with people, experience joy or sadness or excitement or possibility or disappointment. As a result of shaping every aspect of life, mental illnesses are relevant to moral culpability. Living with a mental illness often means having impaired capacity to engage in decision making; impaired thinking and feeling and expressing thoughts; it alters the ways in which a person behaves, and makes sense of themselves and others; as compared to those without mental illness.

It is for this reason, that the American Psychiatric Association, the American Psychological Association, the American Association on Intellectual and Developmental Disabilities, the American Bar Association and other medical and scientific organizations urge against the imposition of the death penalty upon those suffering from such illnesses. However, the symptoms of mental illness often invoke fear and distancing from other people, with the resulting stigma and discrimination creating barriers to effective recognition and treatment of patients. Stigma often leads people with mental illness to avoid seeking treatment and care, and along with myriad other social, racial, economic and cultural factors, contribute to the significant number of people who are undiagnosed or misdiagnosed. The symptoms of mental illness are commonly misattributed to personality flaws and character defects, or alternatively are normalized, both of which can further obscure their significance to moral culpability.

Definitions and Symptoms

Mental illness is defined by The American Psychiatric Association (APA) as: "a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. An expectable or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a mental disorder." (DSM-5-TR at 104).[2]

A few notable issues are acknowledged by this definition. First, a mental illness is diagnosed based on a combination of symptom presentation and functional impairment. Second, the symptoms are determined to be clinically significant, meaning that they have an identifiable impact on behavior and functioning. And third, mental disorders must be assessed within the

[1] George W. Woods, M.D., is a clinical and forensic neuropsychiatrist and is the current President of the International Academy of Law and Mental Health. David Freedman, Ph.D., is a psychiatric epidemiologist and Senior Research Consultant for the International Academy of Law and Mental Health.

[2] APA. (2022). *Diagnostic and statistical manual of mental disorders: DSM-5-TR* (5th ed. Text Revised ed.). Arlington, VA: American Psychiatric Association.

appropriate environmental, social and cultural context, with a disorder found when a person's response is outside the typical or expected response.

DSM-5-TR goes on to say that clinical assessment is necessary since "psychiatric pathologies are not reliably discrete with sharp boundaries from one another, with atypical presentation, comorbidity, subsyndromal conditions, and variable functional severity observed in most people with mental illness." (at 106). This acknowledges the reality that mental illnesses are often complex and comorbid, with some symptoms more prominent for some people than for others even when they have the same condition. Social and cultural context shapes the expression and manifestation of symptoms and behaviors that constitute mental illness. (at 107).

DSM-5-TR also recognizes that social and cultural environmental influences are most important in increasing the risk of developing a mental illness: "Racism is an important social determinant of health that contributes to a wide variety of adverse health outcomes, including hypertension, suicidal behavior, and posttraumatic stress disorder and can predispose individuals to substance use, mood disorders, and psychosis." (at 109). This is equally true of poverty, exposure to environmental neurotoxins (especially during the developmental period), exposure to violence in the community or within the family, social stigma or discrimination based on identity or social standing, and social inclusion or exclusions based on perceived status or sense of belonging.

Symptoms, rather than specific diagnostic categories, are often more reliable and useful in understanding how mental diseases connect to a specific behaviors (Woods, Freedman, & Greenspan, 2012). A wealth of evidence demonstrates that many psychiatric disorders previously viewed primarily as character flaws or poor choices actually reflect atypical brain development or disease (Bozikas, Kosmidis, Kiosseoglou, & Karavatos, 2006; Danielyan & Nasrallah, 2009). Psychiatric diagnoses are most often, comorbid, enhanced or diminished by symptoms of other disorders, or new, novel, or stressful circumstances which may alter the emotional or cognitive trajectory of the disease.

Origins of Mental Illness

Mental illness is a complex concept that encompasses: neurodevelopmental course (meaning that exposures or events during the perinatal period affect the symptoms and functioning of a person across life course into old age), acquired injuries (such as traumatic head injuries or exposure to violence), genetic predisposition (whereby multigenerational risks for mental illness accumulate through genes), and social-cultural context (meaning that the context in which a person lives and grows can exacerbate or ameliorate the severity of the symptoms).

In general, three types of mental conditions are relevant:

(1) neurodevelopmental disorders (including psychotic disorders, mood disorders, early life trauma, and early exposure to toxins such as alcohol);
(2) acquired disorders (including traumatic brain injury, later life trauma, and conditions secondary to medical illnesses such as Type II diabetes); and

(3) degenerative disorders (including dementia, conditions secondary to medical illnesses, and aging related conditions).

Importantly, these three types of mental illness overlap and co-occur. Co-occurrence is when disorders occur at the same time. Comorbidity reflects an interaction with the various disorders and symptom constellations so that the symptoms are impacted by each other, creating atypical symptom presentations.

Often, the complexity of comorbid and co-occurring mental illness and the atypical symptoms presentation that manifest, are misdiagnosed as personality disorders. Personality disorders are also misdiagnosed because they require less work and are often assumed to be present by evaluators who have too little bio-psychosocial history and spend too little time with a person to accurately diagnose them. Many of the symptoms of mental illnesses, for instance Post Traumatic Stress Disorder, anxiety or depression, are the cause of the behaviors which result in misdiagnosed personality disorders.

(1) Neurodevelopmental disorders and the impact of trauma and adverse childhood experiences

Regarding neurodevelopmental disorders, early life exposure to trauma (physical or sexual abuse, neglect, witnessing domestic violence, and witnessing neighborhood violence) during the developmental period is different from the trauma which adults may experience. Trauma that occurs during neurodevelopment (i.e., prior to complete brain maturation which continues into a person's mid-twenties), especially when the trauma is chronic (repeated), can have a profound impact upon the person's cognitive and functional trajectory. Those subjected to chronic trauma are more likely to have slowed and aberrant neurodevelopment, difficulty mastering every day living tasks, and also acquire adaptive behaviors more slowly, if at all. They are more likely to be distrustful of those in authority (particularly when the abuse is perpetrated by care-givers or those with institutional authority) and struggle to assess social interactions, perceiving threats and anger where others would not. They are more likely to be hyper-vigilant but also misperceive social cues. It is important to note that these consequences are observed over the life course regardless of whether a person meets criteria for a current diagnosis of post-traumatic stress disorder. Significantly, they are also at far greater risk for developing other psychiatric disorders.[3]

Because severe childhood adversity *alters* brain development in children which then *leads to* multiple poor health, employment, family, and behavioral outcomes, chronic exposure to violence increasingly pulls development further from typical. Overreliance on the brain's fear circuitry creates underutilization of other brain structures and functions, at great cost to the developing brain. This is because healthy brain development is defined by increasing connections first, then pruning away of those connections which are not needed or are underutilized. Since the fear circuitry is significantly developed in very early childhood, a child exposed to trauma overdevelops fear circuitry in order to maintain survival, and other neural connections are lost or

[3] In a study of 1,735 juveniles detained in Cook County (Chicago) Jail, researchers found an overwhelming percentage of detained youth had been subjected to moderate or severe physical or sexual abuse. Seventy-one percent of males and eighty-two percent of female juvenile detainees had been maltreated (King et al., 2011). That study went on to find that nearly every type of maltreatment was associated with an increased rate of co-morbid psychiatric disorders.

not developed. Thus, the higher the "dose" of adversity and the longer it persists, the more likely that these brain alterations will become "hard-wired." and may have longstanding impacts across the lifespan.

Healthy cognitive development allows a child to form working models of what relationships can and should be, what is needed and given in social interactions in different settings, and allows for the on-going updating of these working models (Ayoub, Fischer, & O'Connor, 2003). As the child ages, exploring the world around them and interacting with new people, these working models become more complex, building on past experience, fitting new information into the model, and adapting the models. Childhood trauma trauma) disrupts this developmental trajectory and alters the trajectory (Ayoub et al., 2003). Childhood trauma can include a myriad of events and conditions, including physical, mental, and sexual abuse, physical and emotional neglect, witnessing of the abuse of others, lack of personal safety, substance abuse, and family instability. When the trauma is caused by the care-giver or adult responsible for the child's safety, the effects on the child's emotional and cognitive development are direct and most severe.

These cognitive, emotional, and impulse deficits are not always obvious, particularly in the everyday, redundant, regulated, encapsulated world of prison. The structure of prison, which reduces the need for complex decision-making or reduces the chance of unexpected situations, provides a cognitive scaffold for people with cognitive deficits, thereby reducing the chance of behavioral problems. However, in the outside world, when exposed to stressful circumstances or unexpected changes in routine, a person with impaired cognitive functioning is more likely to manifest behavioral and coping problems, exposing the depth and severity of the mental disease.

A recent, community study which included nearly 10,000 youth between ages 8 and 21, found trauma exposure associated with both higher psychiatric symptoms and cognitive impairment (Barzilay et al., 2019). The study found a high exposure to traumatic events, with 43% of participants endorsing at least one event and almost 9% endorsing three or more exposures. Compared to those without traumatic exposures, each additional trauma increased mood disorders, fear, psychotic symptoms and behavioral problems. The areas of cognitive deficit associated with more traumatic exposure were primarily executive and complex reasoning abilities, social cognition, as well as overall efficiency of cognition.[4]

(2) Acquired Disorders

In contrast, acquired disorders are those that happen external to a person's biological or neurological life course, but which still alter the life trajectory. Acquired impairments are typically

[4] In another prospectively followed cohort study, children who were maltreated by a caregiver or bullied by peers, were 3 times as likely to report psychotic symptoms at age 12 compared to those who were not maltreated (Arseneault et al., 2011). The Cook County (Chicago) Juvenile Jail study mentioned above provides evidence of just how strongly associated moderate and severe trauma are with psychiatric disorders in youth. Compared to those male detainees who reported no abuse, those who were moderately or severely physically abused had 4 times the increased risk of any psychiatric disorder (which included: anxiety disorder, any affective disorder, attention-deficit hyperactivity disorder, any substance use disorder, and psychosis); and nearly 6 times increased for those who were both physically and sexually abused. For female detainees, moderately or severely physically abused had 3 times the increased risk of any psychiatric disorder; and a nearly 11 times increased risk when both physically and sexually abused (King et al., 2011).

defined as what they are not: an injury to the brain which is not hereditary, congenital, degenerative, or induced by trauma during the developmental period. They are acquired in the sense of being added. For instance, a person who has had a typical life course may, at the age of 50, have a stroke which suddenly changes his/her cognitive functioning. The common types of acquired impairments seen in criminal cases are traumatic brain injury (e.g. car accident, fall, gunshot, beating), adult trauma exposure, or brain injury resulting from a medical condition (including alcohol and substance abuse). Onset and course of acquired impairment is usually described as sudden, linked to a specific event, although the consequences may be long-term, and the effects may be cumulative in the event of multiple acquired injuries. In understanding the impact of these types of injury, the critical assessment question relates to change from prior to the injury. Yet, physical or medical childhood trauma may occur so early as to have always appear to have been present. Another type of acquired disorder is the illness, like repeated ear infections in childhood which can manifest with significant cognitive an psychiatric deficits.

(3) Degenerative Disorders

The third type of relevant mental conditions are those which occur secondary to medical illnesses. Many medical conditions are co-occurring or comorbid with cognitive impairments. At a minimum, cardiovascular diseases, hypertension, high blood pressure, endocrine disorders, thyroid disorders, hepatitis, and diabetes should be considered risks for impaired cognitive functioning and decline without medical intervention. Laboratory examination (from blood and urine samples) allow consideration of possible immunological, genetic, hematological and metabolic conditions. Comprehensive laboratory testing is also useful for clients for whom the bio-psychosocial history has documented a neurobehavioral disorder, as such disorders may point to other abnormalities (Monteleone, Martiadis, & Maj, 2009). Those subjected to the social determinants of health are more inclined to acquire these disorders earlier in life, what is termed "accelerated aging." However, long term medical problems like Diabetes, Lupus, and Thyroid Disease may have a more insidious progression and presentation.

Relationship Between Mental Illness, Maladaptive Behaviors, and Culpability

Again, drawing on the research, it is clear that the accumulation of risk factors, including exposure to trauma, results in a host of bad outcomes: worse employment and earnings, fewer years of school, more difficulty in social settings and relationships, and impaired cognition. For instance, the combination of genetic risks and early life complications (defined as intra-uterine, pregnancy and birth complications which increased maternal and fetal stress) was found to significantly increase the risk of later life schizophrenia for off-spring. The interaction of genetic and environmental risk factors (known as epigenetics) increased the risk of schizophrenia by more than 8 times the risk of those with low polygenic risk scores and no early life complications (Ursini et al., 2018).

Cognitively, chronic childhood trauma is associated with dysfunctional working memory, verbal fluency, inhibition, cognitive flexibility, verbal comprehension, perceptual reasoning and

impaired self-regulation, attention, affect, memory, mood and worse school performance.[5] Impaired cognitive functioning in people who experienced trauma during the developmental period skews the presentation of chronic trauma, making assessment more difficult when the trauma is not known and taken into account. The long term impairments affect symptom presentation and functioning in concrete and often severe ways, and are associated with many maladaptive behaviors and increased likelihood of arrest.[6]

In 2020, the American Psychiatric Association announced its position that people with a "mental disorder or disability that significantly impaired their capacity (a) to appreciate the nature, consequences or wrongfulness of their conduct, (b) to exercise rational judgment in relation to their conduct, or (c) to conform their conduct to the requirements of the law" or those with "significant limitations in both their intellectual functioning and adaptive behavior, as expressed in conceptual, social, and practical adaptive skills, resulting from intellectual disability (intellectual developmental disorder) or neurocognitive disorder" should not be sentenced to death or executed.

The APA's position is consistent with its position on persons with intellectual disability and youthful offenders.[7] Mental illness, like Intellectual Disability (ID) and youth, impairs a person's cognitive processes, decision making, perceptions, functioning and behavior. In determining culpability, mental illness may equally reduce the moral culpability similar to how the courts have determined that people with ID and those in their developmental period have a diminished culpability. Also similar is that people with mental illness may demonstrate alterations in the brain regions responsible for these real life capacities and functions.

The symptoms of mental illnesses which interfere with functioning and behavior include *negative* symptoms, *positive* symptoms and *cognitive* symptoms. For instance, psychotic disorders (a term which generally refers to the conditions Schizophrenia, Schizoaffective, Bipolar, and Major Depression with Psychotic features, as well as a number of associated conditions) are typically diagnosed based on these three types of symptoms. Positive symptoms can be thought of as symptoms outside of typical life experiences: hallucinations (sensory breaks from reality, meaning you hear, smell, taste, see, or feel something not there), and delusions which can be somatic (body sensations), bizarre or simpler fixed false beliefs. Negative symptoms can be thought of as an absence of something that is typically experienced: the inability to experience happiness or joy, depression, sadness, lack of initiative. Oddities of language can also reflect negative symptoms. The cognitive symptoms of psychosis are most typically observed as thought disorder or disorganization of thinking, but they also include many types of thought, learning, perceptual, and thinking impairments.

Mental Illness in Prison

[5] (Anda et al., 2006; De Bellis & Zisk, 2014; Kira, Lewandowski, Somers, Yoon, & Chiodo, 2012; Kirke-Smith, Henry, & Messer, 2014; Mills et al., 2011; Nikulina & Widom, 2013; Spann et al., 2012; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005; J.J. Vasterling & Brewin, 2005; J. J. Vasterling et al., 2002)
[6] (Allwood & Widom, 2013; King et al., 2011; Perry & Pollard, 1998; Sourander et al., 2007)
[7] Position Statement of the American Psychiatric Association Pertaining to Capital Sentencing and the Death Penalty, 2020.

In the context of incarceration, the positive, negative and cognitive symptoms of mental illnesses can be effectively managed, especially the positive symptoms which are responsive to medications. Negative and cognitive symptoms are amenable to the structure of incarceration and the decrease in adaptive functioning requirement found in highly structured settings. These symptoms affect behavior when a person is without environmental, institutional, or family supports. Without supports, people with mental illnesses are more likely to misperceive events and people, respond inappropriately and often excessively to interactions, fail to be able to regulate or inhibit behaviors, struggle to consider consequences or alternative courses of behavior, or to exercise judgment.

In contrast, when properly identified, mental illnesses may be successfully managed with supports, which typically means structure and routine. These are precisely the environmental conditions that prisons offer. Combined with treatment and these supports, people with mental illness can manage and regulate their behavior, leading restricted but meaningful lives in custody.

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