County jails-----Is it prison inmates or individuals in a correctional facility?

50 more inmates showed psychiatric symptoms.----What percentage was this?

#### 1.Introduction

The 2011-2012 U.S. National Inmate Survey surveyed a total of 106,532 adult inmates in 233 state and federal prisons, 358 jails, and 15 special facilities. Approximately, 24% of prisoners reported that they were told they had a major depressive disorder compared to 31% of jail inmates. A major depressive disorder was the most prevalent diagnosis being reported among both prisoner and jail inmates [1]. Compared to the prevalence of serious psychological distress (SPD)among the general U.S. population, respectively, it was three times higher among prisoners and five times higheramong jail inmates. More jail inmates reported SPD than prisoners; more female prisoners and jail inmates reported SPD in the past 30 days; and more white prisoners and jail inmates reported SPD in the past 30 days than black and Hispanic prisoners and jail inmates [1]. The 2016 U.S. Survey of Prison Inmates collected data from 24,848 adult prisoners in 364 state and federal prisons. About 43% of state and 23% of federal prisoners reported that they had a history of mental illness; about 14% of state prisoners and 8% of federal prisoners had SPD; repeatedly, more female prisoners and white prisoners indicated SPD in the past 30 days [2]. Consistently, a thorough review of articles published between 1989 and 2013 focusing on the prevalence of mental distress in prisons in 16 states suggested that regardless of the discrepancies indefinitions of mental disorder, sampling strategies, etc., both current and lifetime prevalencerates of mental disorders among incarcerated populations were higher than in non-incarcerated populations [3]. Later studies further confirmed these previous findings, as well asstressed the age, sex, and racial disparities and delays in mental health diagnosis and treatment [4, 5]. In 2020, the National Alliance on Mental Illness continued to report that in the U.S., about 37% of state and federal prisoners and 44% of jail inmates suffered from mental illness; about 66% of female prisoners had a history of mental illness, which was twice higher than the percentage of male prisoners; the number of times among people with serious mental illness being booked into jails was about 2 million each year [6].-----The introduction would have been balanced, if references from other regions/countries were included. Update with data from other regions/or countries.

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Current literature suggested that the rapid and continued growth of mentally ill inmates in the U.S. prisons and jails was a result of the "failure to treat addiction and mental illness as medical conditions" [7], deinstitutionalization, and transinstitutionalization [7-9]. Addiction often anticipates later or co-occurring behavioral and mental health problems [7]. Rich et al. argued that jails had become the largest facilities to house psychiatric patients in the U.S. instead of hospitals. The burden of care for drug or alcohol addiction, and mental illness had been shifted to jails and prisons due to transinstitutionalization [7]. Raphael and Stoll's 2013 study estimated that between 1980-2000, there were significant transinstitutionalization rates for all men and women with a relatively larger transinstitutionalization rate for men compared to women and with the largest rate for white men compared to other ethnicities [8]. Similarly, a study conducted among 79,211 inmates who began serving sentences between 2006 and 2007 indicated that inmates with major psychiatric disorders had a substantially increased risk of multiple incarcerations; inmates with bipolar disorder were about three times more likely to have multiple incarcerations compared to inmates had no major psychiatric disorders [10]. Moreover, during fiscal year 2005 and 2006, a total of 4,544 incarceration records from a county jail system were obtained and reviewed. Records showed that substance-related diagnoses, and schizophrenia, bipolar, or other psychotic disorder diagnoses were among some of the major risk factors for being incarcerated or re-incarcerated [11]. The 2006 special report of Bureau of Justice Statistics also revealed that among the incarcerated with mental illness, being female, white, or young inmates, homeless and foster care experiences, low rates of employment and high rates of illegal income, past physical or sexual abuse, substance dependence or abuse were much more common [12]. Green et al. and Wolff et al. further illustrated the relationship between high prevalence of traumatic life events and an increased risk of mental illness among inmates [13, 14]. In addition, incarceration was specifically related to subsequent long-lasting mood disorders and aggravated mental distress due to social and physical isolation, loss of autonomy, lack of purpose, witnessing violence, family disconnection, overcrowding, etc. [7, 15, 16, 17].

# Materials and Methods

#### Subjects

The study used a mixed method approach with a quantitative descriptive study design and a qualitative case study design. Non-probability sampling strategies, including convenience sampling, criterion sampling, and snowball sampling, were applied to recruit participants. Anonymous quantitative mental health screening records completed in 2021 with 222 adult inmates at a local county jail in Madison County, Illinois, were obtained, reviewed, and included. Through personal connections and snowball sampling, a total of 29 Individuals working with Madison County's criminal justice system (e.g., mental health counselors, nurses, law enforcement officers) were contacted and invited to participate in the qualitative case study for further information.

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- **5.** The quantitate data were analyzed using IBM SPSS and descriptive statistics (e.g., frequencies, percentages, **crosstabs**) on variables------Crosstabs for?
- 7. "The only way an inmate gets screened is if either if a note is made in the police report, -----Not clear. Edit

Similarly, in Mulvey and Schubert's study, they discussed five aspects for improvement (1) "expand the reach of standard and innovative mental health services in jails and prisons to avert crises related to psychiatric deterioration"; (2) "divert mentally illindividuals charged with less serious crimes out of the criminal justice process at the earliest stages of official processing"; (3) "enrich training of criminal justice personnel" so they have the knowledge and skills to react to individuals who are mentally ill; (4)use

individuals' mental health data more effectivelyand collect consistent and actionable data that can aid decision-making; (5) "promote interdisciplinaryaftercare programs for people with mental illness when they are released from jails and prisons, and return to the community" [20]. In Kennedy-Hendricks et al.'s review, within the Sequential Intercept Framework used for mental and substance use disorders, existing interventions were identified, which can effectively reduce mentally ill inmates' criminal justice involvement, such as inclusion of trained law enforcement on a crisis response team, collaboration between law enforcement and behavioral health agencies, pre-trial diversion, linkage established between discharged inmates, and health and social services, supported housing and employment after discharge [21]. -------Literature review?

Results are consistent with the current literature [1-6]. Mental illness was prevalent among inmates in Madison County jails. Female inmates, inmates younger than 48 years old, or Hispanics in this study appeared to be more susceptible to mental illness. Significant mental healthcare needs among inmates but limited mental healthcare services provided in diagnosis, treatment, and referral; a prolonged period of time to wait for mental healthcare services; lack of proper and consistent medication for mentally ill inmates; and lack of separate facilities/housing/jail cells for mentally ill inmates were among the major concerns expressed by the survey participants working in the county criminal justice system. The survey participants further demonstrated the needs of strengthening partnerships with mental health professionals and agencies to ensure the adequate and prompt mental health services in jails; increasing facilities to host mentally ill inmates; improving the comprehensiveness and accuracy of mental health screening/assessment tools; changing/establishing policies and procedures to expand inmates' mental healthcare access; and continuing to seek opportunities for funding, advocacy, and training to improve inmates' mental healthcare access, including "an agency which could start looking at services for the inmate before he/she gets out of jail and once the inmate is released, a mental health advocate assigned to an inmate if it is deemed he/she might have mental health issues". Similarly, in Mulvey and Schubert's study, they discussed five aspects for improvement (1) "expand the reach of standard and innovative mental health services in jails and prisons to avert crises related to psychiatric deterioration"; (2) "divert mentally ill individuals charged with less serious crimes out of the criminal justice process at the earliest stages of official processing"; (3) "enrich training of criminal justice personnel" so they have the knowledge and skills to react to individuals who are mentally ill; (4) use individuals' mental health data more effectively and collect consistent and actionable data that can aid decision-making; (5) "promote interdisciplinary aftercare programs for people with mental illness when they are released from jails and prisons, and return to the community" [21]. In Kennedy-Hendricks et al.'s review, within the Sequential Intercept Framework used for mental and substance use disorders, existing interventions were identified, which can effectively reduce mentally ill inmates' criminal justice involvement, such as inclusion of trained law enforcement on a crisis response team, collaboration between law enforcement and behavioral health agencies, pre-trial diversion, linkage established between discharged inmates, and health and social services, supported housing and employment after discharge [22].

Specifically, Testa summarized diversion into pre-booking diversion and post-booking diversion. Pre-booking diversion aimed to prevent mentally ill individuals from being arrested and diverts them to proper care through using strategies like having specialized law enforcement officers

who experienced crisis intervention training, can recognize signs and symptoms of mental illness, and have communication and de-escalation skills; or having law enforcement officers partnering with mental health professionals on a crisis response team [23]. Post-booking diversion aimed to divert individuals who had been arrested or charged to mental healthcare system through jail-based and court-based diversion programs before being sentenced and incarcerated [23]. The Eleventh Judicial Circuit Criminal Mental Health Project (CMHP) in Miami-Dade County, FL is a successful application of pre-booking and post-booking diversions. This ongoing program was established in 2000 to "divert individuals with serious mental illnesses away from the criminal justice system and into comprehensive community-based treatment and support services" [24]. The CMHP pre-booking diversion also involves trained law enforcement officers on a crisis response team [24]. The Stepping Up initiative established in 2015 is another example "building community-based services and supports incarceration/reincarceration" through interdisciplinary collaborations [25]. These early intervention strategies have been proven to be effective to intercept jail entries/re-entries and alleviate overcrowding in jails and prisons [20, 23-27].

Significantly strengthening mental health services in jail/prison is also crucial and urgent [28]. As one of the survey participants in the current study stated that "there is not enough. This is not a "knock" on the Madison County Jail. Mental Health services and interventions, on a national level, have been lacking throughout the criminal justice/corrections profession for years." Forrester et al. described the essential mental health service needs in jail/prison settings as "Screening, Triage, Assessment, Intervention and Reintegration (STAIR)" [29]. More effective and innovative psychological/psychiatric assessment tools and treatment approaches are needed. Samele et al.'s study found that establishing an open referral system to receive referrals from inmates, families, and others, having a health nurse to screen all new inmates at the entry, and triaging emergency and non-emergency cases were deemed to be successful [30]. Other scholars also believed that training correctional officers about mental health crisis response and management, such as brain's response to trauma and trauma-informed care, would hugely and positively impact inmates' mental well-being [27]. A comprehensive curriculum was recently developed to train correctional officers about mental health issues in the criminal justice system, signs and symptoms of mental illness, screening and response to mental illness, and self-care for correctional offices. Training outcomes were favorable [31]. Simpson and colleagues recently conducted a systematic review of correctional mental health services using STAIR as a framework. Their findings suggested that the greatest knowledge gained through research studies was in the areas of screening, triage, psychological therapies such as cognitive behavioral therapy (CBT), and reintegration in certain jurisdictions. However, even with independently validated screening tools, false positive rates could be high; there was a lack of evidence or high-quality evidence of efficacy and effectiveness of many other psychological therapies and treatment modalities other than CBT; evidence from reintegration studies was often not generalizable due to jurisdictional specifics [32].

### 9. Conclusion

Mental illness among inmates remains alarming, and their needs of mental healthcare remain significant. There has been an "increased risk of suicide, self-harm, violence, and victimization"

Mental illness among inmates remains alarming, and their needs of mental healthcare remain significant. There has been an "increased risk of suicide, self-harm, violence, and victimization" among inmates with mental illness [33]. Policies/procedures need to be established/changed to ensure the availability and accessibility of mental healthcare for mentally ill inmates through strategies like diversion, expansion of in-jail/prison services, cross-system collaborations, community-based programs, housing and employment, and social and medical benefits [20, 21-27, 34]. More research/evaluations should be done to support innovations in mental healthcare and evidence-based practice in jail/prison settings, and inform a structural/systemic change [32, 34].

- **10.** Maruschak, L. M., Bronson, J., Alper, M. Indicators of mental health problems reported by prisoners: Survey of prison inmates, 2016. https://bjs.ojp.gov/library/publications/indicators-mental-health-problems-reported-prisoners-survey-prison-inmates -------Improper referencing
- **11.** National Alliance on Mental Illness. Mental Health by the numbers, https://nami.org/mhstats ----Year?