

Mental Health Treatment in United States Prison Systems: The Influence of Varying Treatment Methods on Inmates with Schizophrenia

Research Proposal for UH 1604: Honors Research
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Abstract

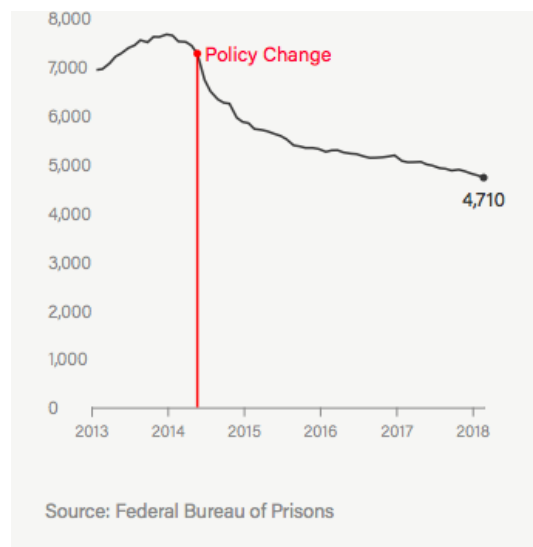
Schizophrenia is a psychological disorder that produces symptoms commonly of hallucinations, delusions, movement disorders, and confused thought or speech. Americans diagnosed with schizophrenia are three times more likely to be imprisoned than hospitalized for their symptom expression, thus necessitating prison reform to treat individuals and reduce repeat offenses. The influence of mental health treatments on inmates with schizophrenia (IWS) in the United States will be analyzed. In order to conduct the research, surveys will be distributed to IWS in 100 prisons across the United States. Five caregivers and 45 IWS within each prison will fill out six surveys over a six month period with questions that measure changes in levels of delusions, hallucinations, interpersonal distress, and disorganized thought that IWS express while incarcerated. Changes in symptoms will be analyzed over the six month period to observe how medications and other forms of treatment affect symptoms of IWS. Federal prisons fail to classify serious mental illnesses in prisoners and only require treatment in 3% of inmates. In comparison, California prisons classified over 30% of inmates in need of regular treatment for serious mental illness. Lack of treatment causes many IWS to experience heightened negative symptoms which, without treatment, drove some inmates to attempt suicide. Administering antipsychotic drugs, providing counseling, and offering emotional therapy to people with schizophrenia reduces their negative symptoms, which would help current inmates, and keep non-incarcerated people with schizophrenia out of prison.

Introduction

Mental health treatment in the United States prison system is lacking in its effectiveness to reduce negative symptoms of inmates with mental illnesses. Every county in the United States that has both a psychiatric facility and a county jail has a higher percentage of people who are seriously mentally ill that are incarcerated than hospitalized (Fuller n.p.). This is particularly a problem for those with severe mental illnesses, such as schizophrenia. Schizophrenia is a mental disorder which causes people to experience hallucinations, delusions, movement disorders, and confused thoughts or speech. Schizophrenia affects approximately 2.8 million Americans, or 1.1 percent of the U.S. population, and approximately 383,000 inmates in the United States have been diagnosed with schizophrenia (Fuller n.p.).

Only three percent of inmates in the United States were classified by the Bureau of Prisons as having a mental illness serious enough to require treatment (Thompson and Eldridge n.p.), but the reality is that approximately twenty percent of incarcerated Americans are seriously mentally ill (*Crime, Poverty Violence* n.p.). This percentage is far greater than the percentage of patients who are admitted to mental hospitals for mental health treatment. This shows that a large majority of those who need mental health treatment are not receiving it.

Figure 1: An illustration of how the number of federal prisoners receiving regular treatment for



mental illness has been declining (Thompson and Eldridge n.p.).

Possible treatments tailored towards inmates with schizophrenia include antipsychotic and anti-tremor medications, cognitive and behavioral therapy, rehabilitation, and psychoeducation (*Schizophrenia-Diagnosis* n.p.). People with schizophrenia often work closely with psychiatrists and clinical psychologists to develop strategies for reducing and managing their negative symptoms. However, people who are incarcerated are not always provided with these resources, thus, they often have a much more difficult time managing their disorder. When inmates with schizophrenia do not receive adequate treatment, their symptoms become heightened and can lead them to commit violence or self-harm, and cause increased rates of recidivism. This study analyzes how treatment, or lack thereof, affects the expression of negative

symptoms in prisoners with schizophrenia in the United States. It is expected that if inmates with schizophrenia receive adequate treatment, then their expression of negative symptoms and rates of recidivism will decrease. Conversely, it is expected that if inmates with schizophrenia do not receive adequate treatment, then their expression of negative symptoms and rates of recidivism will increase.

Methods

The first step in conducting this research is to receive Institutional Review Board (IRB) approval under 45 CFR 46.30. In order to collect data, IWS from 100 prisons across the United States, two from each U.S. state, will be studied on their treatment and negative symptom expression during their prison sentence, as well as their recidivism rates following their time in prison. The symptoms we analyze will be hallucinations, delusions, movement disorders, suicidal thoughts, and confused thought or speech. Out of all IWS in a given prison, a random sample of 45 IWS and five caregivers will be provided with six self-reporting written surveys on expressed negative schizophrenic symptoms over a six month period, filling one out every month. Each IWS studied will have at least six months remaining in their prison sentence. Each participant will sign a contract outlining the experimentation methods and risks, and will be informed that they will remain anonymous and may remove themselves from the study at any time. Each participant will sign the contract and gave their informed consent to participate in the study.

IWS will be asked to answer questions based on negative symptoms that they experience, and caregivers are asked to answer questions based on negative symptoms that they observe in IWS. Survey questions will include, but will not be limited to the following: “How often do you receive, or provide, treatment (i.e. once per day, twice per week, never, etc.),” “Which of these symptoms have you experienced, or observed, in the last seven (7) days; hallucinations, delusions, movement disorders, confused thoughts or speech (circle all that apply). For the symptoms circled, please provide a detailed description of what you experienced, or observed,” “Has your, or your patients’, treatment changed since you, or they, entered prison? If so, how?” Surveys will be gathered from each IWS and caregiver, and each individual’s six surveys will be compared to analyze any changes in negative symptom expression among IWS. Surveys will be analyzed for whether or not negative symptom expression increases or decreases for each symptom. They will be analyzed for correlations between changes in symptom expression and changes in treatment or treatment consistency.

To analyze rates of recidivism among IWS, the samples of 45 IWS will be studied for five years following their release from prison and data will be gathered on the number of IWS who commit crimes following their release from prison. IWS who feel that they had received appropriate treatment while in prison will be put into one category, while IWS who feel that they had not received appropriate treatment while in prison will be put into another category. The two categories’ rates of recidivism will be compared and analyzed for correlations between recidivism rates and receiving appropriate treatment while in prison.

Methods: Timeline

- Total time allotment for project completion: One year (June 2019-June 2020)
 - June 1-14 2019: Apply for IRB approval, develop hypothesis, draft IWS and caregiver symptom surveys
 - June 15-July 15 2019: Recruit interested IWS and caregivers from each prison to participate in study, select 45 IWS and five caregivers from those interested in each prison (IWS must have at least 6 months left in their prison sentence), provide consent forms for signature and collect for records
 - Jul 16-July 31 2019: Distribute surveys by mail to each of the 100 prisons being used in the study
 - September 1 2019: Collect first set of completed surveys from each prison by mail
 - October 1 2019: Collect second set of completed surveys from each prison by mail
 - November 1 2019: Collect third set of completed surveys from each prison by mail
 - December 1 2019: Collect fourth set of completed surveys from each prison by mail
 - January 1 2020: Collect fifth set of completed surveys from each prison by mail
 - February 1 2020: Collect sixth set of completed surveys from each prison by mail (six months of symptom and treatment data received)
 - February 2-March 1 2020: Review and compare all data recorded over the six month period
 - March 2-June 1 2020: Draw conclusions and develop a presentation of our research

Limitations

The research deals with human subjects, thus there are many ethical concerns. Primarily, it is important to obtain informed consent from the participating prisoners and prison clinicians. Inmates, especially those with schizophrenia, are a very vulnerable population. Therefore, they will be thoroughly informed of each step of the research and will be able to remove themselves from the study at any time. Additionally, due to their condition, the inmates' responses may have a lot of day to day variance as schizophrenic tendencies cause confused thoughts. Therefore, their responses may lack consistency between the months of research. For example, one month the responses may be very thoughtful, whereas another they could be very generic and inconclusive. However, the lack of consistency will be a factor we consider when evaluating how their negative symptoms have been affected, as they can give way to evidence of confused thought.

Since prisoners with schizophrenia are a very vulnerable population, personal interactions between the researchers and the inmates themselves is limited. For the safety of the researchers, caregivers, and IWS, face to face interactions will be prevented. The ethical concerns regarding who can interact with IWS necessitates surveys as the research method of choice. While face to face interactions and interviews give researchers a first person view into the negative symptoms of IWS, the written surveys may leave out some observations that could have otherwise been noted via interview. Therefore, observations may be limited. Additionally, since the surveys must be written and completed by the IWS and clinicians, the research involves a trust in the subjects that they will, in fact, complete their surveys on time. Guaranteeing that all subjects complete the studies within their given time frames may limit the results.

A final ethical concern is the privacy of the IWS and prison clinicians. Any response that may contain personally identifying information will need to be omitted from the published research to protect their identities. Thus, some key findings may need to be left out of the results. Ultimately, it is vital that anonymity is maintained throughout the entirety of the project, due to the vulnerability of the subjects.

Anticipated Outcomes

The expected outcomes of the methods conducted in the research are based off of a variety of scholarly articles and research done during this project. The first anticipated outcome involves prisoners experiencing an increase in their symptoms with schizophrenia due to long term exposure to a prison environment. This includes looking into the treatments performed globally and comparing it to the United States.

The next anticipated outcome includes looking into violent crimes versus nonviolent crimes. The reason this is a topic of interest is because, “a large number of papers indicate that schizophrenia is associated with aggressive behaviour as well as increased risk for violent and non-violent crimes” (Kristof et al. 198-205). The expectation is that the schizophrenia rates in a prison are much higher within prisoners convicted of violent crimes. “Patients with schizophrenia who commit violent acts have insight deficits, including lack of awareness of the legal implications of their behavior. Targeted interventions to improve insight and treatment compliance in this population are warranted” (Buckley et al. n.p.). IWS are known to be more violent in a prison environment because of their lack of awareness when it comes to daily activity.

Treatment Variable	% of state prison inmates with a mental illness	% of federal inmates with a mental illness
Lifetime use of medication for a mental condition	13.18%	23.93%
Received medication while	52.47%	42.22%

incarcerated		
Ever saw a counselor during lifetime	87.41%	78.45%
Saw a counselor in prison	46.33%	40.95%
Used self-help group or peer group in prison	21.45%	18.87%

Figure 2: A display of current statistics taken from a group of 18,185 inmates regarding the type of mental illness services state and federal prisoners provide in the United States (Reingle-Gonzalez and Connell n.p.).

Regarding rates of recidivism among IWS, it is anticipated that IWS who received appropriate treatment during their time in prison will have lower rates of recidivism, while IWS who did not receive appropriate treatment during their time in prison will have higher rates of recidivism. Rates of recidivism can be influenced by discontinuity in treatment patterns of IWS while they are serving their prison sentence (Reingle-Gonzalez and Connell n.p.). Figure 2 shows that 78.45% of federal inmates with a serious mental illness, including schizophrenia, had received counseling during their lifetime. However, only 40.95% of them received counseling while in prison. In addition, “among those who have been previously incarcerated, the rates of recidivism are between 50% and 230% higher for persons with mental health conditions than for those without any mental health conditions regardless of the diagnosis” (Reingle-Gonzalez and Connell n.p.). This trend shows that rates of recidivism are higher for those with mental illness, and rates of recidivism are likely to be even higher for people with mental illnesses who do not receive treatment for their illnesses. Such people often struggle to cope with or manage the symptoms of their mental illness and may display irregular or irrational behavior that results in them breaking the law.

Figure 2 supports the anticipated outcome from the study that IWS are receiving medication at higher rates than counseling or emotional therapy. From those receiving medications of the 18,185 inmates surveyed, 61% used no other mental health treatment. (Reingle-Gonzalez and Connell n.p.). As recidivism rates among inmates with mental illnesses are high, an expected conclusion to be drawn from the study is that there is a need for more emotional therapy and counseling for IWS.

The anticipated issues that could arise during this project include the lack of information and detail when it comes to schizophrenia and the treatments being given out in prison. The information may be difficult to validate because of the corrupt behavior that goes on in a prison; consequently, there is potential for unreliable information when it comes to the subject of mental health. Another issue with this is that many prisons do not actually record specific information regarding what goes on within the jail. Finally, there may be some variance among prisons and

their treatments globally, so the comparison between global and United States prison systems will make it difficult to find commonalities between countries.

Application of Outcomes/Solutions

The study to be conducted with IWS and their caregivers seeks to generate results to analyze the current psychological treatments of IWS and to generate solutions on how to reform it. The anticipated outcome is that IWS will experience an increase in symptom expression of hallucinations, delusions, movement disorders, and confused thoughts or speech over the course of the study, and that there will be a clear need for treatment reform within prisons. Additionally, the expected outcome that IWS will commit more violent than nonviolent crimes serves to necessitate reform to protect them and their fellow inmates. The research performed in this study is projected to provide evidence of inadequate treatment of IWS that will necessitate a call to action among prison authorities and legislators. The study holds much importance as it not only pertains to IWS, but also as it pertains to other inmates with mental illnesses since the research will shed light on the inadequacy of mental health facilities in United States prisons.

To generate ideas on how to develop reformatory plans and proposals for prisons to implement, various correctional systems around the world provide alternative examples of treatments that vary from the United States. For example, in Hungary, a study found that therapy and treatment centered around understanding and appeasing the various emotional and mental states the IWS experience while incarcerated will reduce their chances of committing violence (Kristoff et al. n.p.). Thus, plans to implement more emotion-based treatments in the United States prisons would develop from this study. Additionally, Chinese prison treatments have been evaluated to see how it could influence reform in the United States. The Chinese performed a study interpreting the effects of art therapy programs on IWS in China. They found that after IWS attended sixteen weeks of art therapy, their anxiety, depression, anger, and other negative psychiatric symptoms decreased (Qui and Hong-Zhong et al. n.p.). Thus, art therapy is a solution that could be implemented in United States prisons to help appease the negative symptoms of IWS.

The research conducted in this study and analyses of emotional and art therapy programs that have been implemented abroad both serve as suggestions for reform of current prison treatments of IWS in the United States. Thus, the economic values associated with different therapeutic methods and treatment reforms for IWS are important to note. The goal of implementing these programs are to reduce recidivism rates and violent outbursts of IWS, and there are many cost benefits to this. For example, it costs \$130 per day to house an inmate with mental illness, whereas it costs \$80 per day to house a mentally healthy inmate (Carroll n.p.). The art therapy and emotion-based treatments seek to reduce violent outbursts and schizophrenic symptoms that can lead to the commitment of crimes. Therefore, the implementation of these solutions could lead to reduced recidivism rates. Ultimately, reduced recidivism rates will keep

more people with schizophrenia out of prison and reduce the overall total costs of housing mentally ill inmates.

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