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Diagnosis as it Pertains to Medicaid and Treatment with MAT
Services**

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**IMPACT IN HOSPITALIZATION OF MENTAL HEALTH PATIENTS WITH DUAL
DIAGNOSIS AS IT PERTAINS TO MEDICAID AND TREATMENT WITH MAT
SERVICES**

ABSTRACT

Introduction

About 17.5 million Americans over the age of 18 have been diagnosed with a mental illness, and about 4 million of those individuals have also been diagnosed with a substance use disorder. Medicaid requirements made to those receiving Medication Assisted Treatment (MAT) services provide access to quality care to reduce re-hospitalization by focusing on behavioral changes and accountability. The purpose of this research was to analyze the impact of hospitalization rates to determine unmet needs and barriers to receiving treatment for those that have a dual diagnosis.

Methodology

The methodology was a literature review. Thirty-two sources were referenced for this literature in the English language from 2010-2020.

Results

This review examined sources that have impacted the hospitalization of those with dual diagnosis pertaining to Medicaid by treatment with Medication Assisted Treatment (MAT). This review focused on how treatment with MAT services to those with dual diagnosis can impact hospitalization rates by decreasing re-admission. Medicaid requirements to MAT services can decrease the cost to taxpayers.

Discussion/Conclusion

The purpose of this research was to analyze the impact of hospitalization rates to determine unmet needs and barriers to receiving treatment for those that have a dual diagnosis. The review examined research by focusing on scholarly, relevant articles related to healthcare. The results were able to show how unmet needs and barriers to treatment based on the mental illness and substance use disorder could decrease the number of re-hospitalizations in order to lower costs to taxpayers.

Keywords: Mental Illness, Dual Diagnosis, Hospitalization, Hospital Re-Admission Rates, Medicated Assistant Treatment, and Medicaid

INTRODUCTION

Mental illness and substance abuse disorders have been co-occurring across the nation as patients with dual diagnosis do not take medications as prescribed, self-medicate, and lived in an environment not well suited to fit their lifestyle (Buckley, 2007). About 17.5 million Americans over the age of 18 have been diagnosed with a mental illness, and about 4 million of those individuals have also been diagnosed with a substance use disorder (Network, 2020). Those that have been diagnosed with a psychotic and substance abuse disorder have a higher risk of hospitalization 31.3% in 2004 to 57.6% in 2009 (Vincenti, 2010) as relapses have been known to occur due to lack of social support and environmental resources, legal dilemmas, and instability of housing (Mueser and Gingerich, 2013). It has been practical to treat dual diagnosis by using cognitive behavioral therapy, providing Medication Assisted Treatments services like Vivitrol, motivational interviews, providing access to a community engagement coordinator to help with

community resources, and peer recovery services. Most mental health facilities have been able to provide this treatment to clients with the help of Medicaid (Crane, et al, 2019).

To help lower the risk of relapse and/or hospitalization rates and costs, Medicaid has been requiring that program participants must comply with treatment plan (Bryant & Gerald, 2020). Clients must have completed four hours of cognitive behavioral therapy four hours a month that can be individual or group as long as one hour is individual, complete and pass at least two urine drug screens a month at the request of medical staff and have a Substance Use Disorder diagnosis (American Society of Addiction Medicine, 2014). Those with a dual diagnosis were 2 or 3 times more likely to have been hospitalized than with mental health alone (Schmidt, et al. 2011).

There has been a stigma attached to those with dual diagnosis as people have provided negative feedback about those receiving treatment for their substance abuse as people have felt that addiction was a choice rather than a mental illness (Connery, et al, 2020). There has been a limited understanding provided to the public as they have painted those with addiction as a public nuisance as chemical substances have been known to increase and worsen the effects of the mental illness diagnosis, for instance Schizophrenia (Costache and Cioara, 2016). Residents surrounding those with such diagnoses have been less than understanding as people have been more willing to incarcerate this population as they have been known to be impulsive and compulsive in nature (Costache and Cioara, 2016). For those that have had to go to jail were given records, which has made it harder for them to get into the workforce and become productive members in the community. Those that sell their prescribed medications of Suboxone and Subutex have not only used themselves, but they have made a lot of money on the street

selling it, which creates turmoil. The clients whom have sold their prescriptions have not only contributed to others unhealthy habits, but it has made it harder for those to want to find just only offering minimum wage. It has been known to be a continuous issue in the substance use community as it has continued to be a barrier to those seeking treatment.

A case study has shown that out of 6,048 hospitalization admissions; 1,841 were involuntary and 4,207 were voluntary as those patients who due to their mental illness were unwilling to seek treatment (Enberg, M., et al, 2007). The state has provided court proceedings to this population of patients (West Virginia State Legislature, 2020). By providing this option to family/friends, healthcare workers, and police they have been able to provide reasons as to why the person is a danger to themselves or others based on their mental illness and/or addiction (Legal Aid, 2015). The idea of the mental hygiene is to reduce the risk of rehospitalization as clients have come out of involuntary commitment to the hospital and are at a baseline to start receiving outpatient services as they get scheduled with a hospital discharge at an outpatient behavioral health facility (Grafft, et al, 2010).

Medicaid has been the largest single payer for those with mental illness disorders and in 2010, 33% of those people were receiving services while 11% had a severe mental health diagnosis (Rowan, 2014). With the expansion of the Affordable Care Act in 2008, 32.1 million people in states where the poverty level was highest at 138% have been able to seek mental health and substance abuse treatment services (Rowan, 2014). In 2013, Medicaid in 17 states did not cover MAT (Jones, Honermann, Sharp & Millett, 2018). Medicaid Program have been encouraging behavioral health facilities to provide MAT services (Reif, Acevedo, Garnick, & Fullerton, 2017). In 2016, 12,029 facilities reported that they were providing substance abuse treatment;

7,466 (62.1%) reported accepting Medicaid and 4,950 (41.2%) offered MAT services; 3,346 (67.6%) accepted Medicaid (Jones, Honermann, Sharp & Millett, 2018).

The purpose of this research was to analyze the impact of hospitalization rates to determine unmet needs and barriers to receiving treatment for those that have a dual diagnosis.

METHODOLOGY

The intended methodology for this qualitative study was a literature review with a semi structured interview with an expert in mental health for dual diagnosis. The working hypothesis was that mental health participants with dual diagnosis of Substance Abuse Disorder and Mental Illness whom continue to follow through with treatment had a better quality of life, sustain community resources, and smaller risk of re-hospitalization.

The literature was conducted in three strategies: 1. Literature Identification and Collection; 2. Determining and analyzing inclusion criteria with literature analysis; 3. Categorizing Literature

Step 1: Literature Identification and Collection

A literature review was used to investigate the interaction and outcomes of hospitalization rates as it pertains to Medicaid as the payee to those with dual diagnosis. The electronic databases of PubMed, Medline, ScienceDirect, Google Scholar, and Google were used. The search of material was limited to articles written in the English language and published from 2010 to 2020.

Different keywords were used to narrow the scope of exploration, including, but not restricted to, words such as: “dual diagnosis” or “substance use disorder” or “mental illness” AND “medicated

assisted treatment” AND “Medicaid” AND “hospitalization” OR “hospital re-admission rates”. Reputable websites of the Psychiatry Services, Journal of Dual Diagnosis, American Society of Addiction Medicine, West Virginia State Legislature were also referenced for relevant information.

The search identified 428 relevant citations, and articles were excluded (N=410) if they did not meet inclusion principles. Articles were included (N=143) if they described hospitalization and dual diagnosis: articles from other sources (N=50) were also included in this search. These 32 references were subject to full-text review, and these 32 citations were included in the data abstraction and analysis. Only 11 references were used in the results section (see PRISMA flow chart Figure 1), (Moher, Altman, Liberati and Tetzlaff, 2011).

Step 2: Establishment of Inclusion Criteria and Literature Analysis

Original articles, reviews, and research studies including primary and secondary data were included. Relevant articles were selected after a review of the abstracts was performed. resources were selected for this research. The analysis of literature and information was informative. The studies researched produced results that were relatable to the topic and their dates were current enough to be relevant. The case studies provided material that has correlated how initial hospitalization upon dual diagnosis has been able to reduce re-admissions by utilizing Medicaid in medication assisted treatment. An interview was completed by a licensed social worker in a behavioral health care facility who specializes in working with clients who have a dual diagnosis. The interview was IRB approved, then written down verbatim face to face underneath the questions that were being asked and then discarded in a paper bin that was not accessible to

consumers or colleagues as the bin will be only picked up by a third-party company then shredded so as to keep confidentiality and anonymity. The literature search was conducted by A.A. and was validated by A.C., who acted as a second reader and confirmed that the references met the research study inclusion criteria.

Step 3: Literature Categorization

The following subheadings were included in the research: *Dual Diagnosis Hospitalization Rates, Barriers and Unmet Needs to Treatment, and Medication Assisted Treatment.*

RESULTS

Dual Diagnosis Hospitalization Rates

Hospitalization rates have been known to occur at a high rate when it pertains to those who have a co-occurring mental health disorder with substance abuse (Loch, 2012). In 2016, more than 55 million people in the United States over the age of 18 were diagnosed with either a mental illness and/or substance abuse disorder; 45 million (1 in 5 adults) had a mental illness, 11 million had a substance use disorder, and 8 million had a dual diagnosis (Owens, et al, 2019). Inpatient stays have cost \$15.3 billion, an average of \$7,100 with a stay of 6.4 days where 60% of those hospitalizations were billed to the public (Owens, et al, 2019). With hospitalization trends seemingly growing at an alarming rate, a study had been conducted that has shown an increase of 1.28% from 1979 to 2.96% in 2008 for those with co-occurring disorder (Bennett, 2019).

Emergency room visits have shown that 1 out of 8 visits (12 million visits) have been those who suffered from their mental health disorder with substance use (NAMI, 2019). When

inpatient and/or detox was being sought out, the patient has to go to the emergency room for medical clearance before staying at a facility for 3-5, 5-7 up to 10 days or more if needed to get them mentally stable. Hospital re-admission generally had occurred when the patient discharged to when they have another episode. Re-admission was more likely following the first months of discharge; In 2009 from August-December, 361 mental health patients were observed after hospital discharge and of those patients 60% or 217 patients had sought re-hospitalization following the short inpatient stay (Jaramillo-Gonzalez, Sanchez-Pedraza, & Herazo, 2014).

Barriers and Unmet Needs to Treatment

Those with mental illness and substance use disorders have had barriers and unmet needs when it pertains to treatment. There have been issues that have stemmed from financial barriers, homelessness, lack of social support, personal vulnerabilities, gender-specific roles, and lack of access/transportation to treatment facility (Centers, 2020). Personal vulnerabilities have been an issue in those with severe mental illness such as schizophrenia where substance use has been shown to worsen symptoms like psychosis, lowers motivation, and decreases the likelihood of seeking or accessing treatment where level of functioning decreases (Priester, 2015).

Financial barriers to treatment have been at the forefront of the opioid epidemic. The Mental Health Parity and Addiction Equity Act of 2008 had been implemented to help reduce high deductibles, increase uncovered services, and lower the costs of prescription medications that would reduce access to behavioral health services where insurances would be reimbursed on par, yet it has not been enforced (Connolly, 2017). Inpatient treatment out-of-pocket costs have been known to cost on average 5,000 to 20,000 for a 30-day period (SAMHSA, 2016). The

increasing costs have been detrimental to those facing homelessness. In 2004, more than 175,300 inpatient admissions to substance abuse treatment 13% of those were known to have been homeless (Homeless, 2020). Homelessness has faced other factors such as lack of documentation and lack of social support as they had no family and/or friends to support them in their recovery.

For those living in the United States they have delayed medical treatment due to lack of transportation (Wolfe, 2020). Over a 12-month period, 21.6 million Americans aged 12 and older needed treatment for substance use disorder, only about 2.3 million received help as a lack of being able to get a ride just to the doctor's office had been a hassle (Jankowski, 2019). LogistiCare has been implemented to assist in providing non-emergency transportation to those seeking substance abuse treatment to and from their medical appointments. This program has been shown to save taxpayers \$40,000 million for every 30,000 people with Medicaid when they have utilized this service (LogistiCare, 2018).

Mental illness has been more prevalent in women about 21.2% as opposed to 14.3% for men in adults between the ages 18 to 25 (Kamal, 2017). For women, there have been gender-specific factors that have kept them from accessing treatment. About 7.5% of single mothers were unable to obtain childcare while they sought treatment (Priester, 2015). Women's concerns when they had sought treatment had focused on how they would be treated, they had expressed wanting to be nurtured by empathetic staff and women only therapy groups (Priester, 2015).

Medication Assisted Treatment

Medication Assisted Treatment such as Buprenorphine, Naltrexone, and Methadone has helped to reduce re-admission hospitalization rates (Wang, et al., 2020). Methods for decreasing substance use for Buprenorphine and Methadone are the maintenance and taper down programs, one of which keeps you on the program for years while tapering down dose users down to get off of it completely (Smith, 2020). In four categories where MAT services were explored (inpatient, outpatient, professional services, and certain Medicaid services), providers that had an MAT group had lower costs; \$412 less than non-MAT and a decrease of \$1,625 in inpatient spending

DISCUSSION

The purpose of this research was to analyze the impact of hospitalization rates to determine unmet needs and barriers to receiving treatment for those that have a dual diagnosis. The hypothesis was that mental health participants with dual diagnosis of Substance Abuse Disorder and Mental Illness whom continue to follow through with treatment had a better quality of life, sustain community resources, and smaller risk of re-hospitalization. Medication Assisted Treatment prevents relapse, has reduced cravings, blocks the brain receptors that produce euphoric feeling, and has allowed people to become functioning members of society (Douaihy, 2013). Results from the literature review have shown that with MAT services there has been a decrease in substance abusers due to their mental illness as Medicaid has played a significant role.

Study Limitations

This study was limited due to the number of databases used for secondary research, non-availability of expert interview to ask specific questions in one sitting due to recent increase of

suicide, and bias of interviewee. The study focused primarily on dual diagnosis and MAT services, not mental health treatment.

Practical Implications

MAT services have become more prevalent in states where Medicaid has expanded the services covered. Hospitalization focuses on crisis stabilization, not the rate of costs or re-admissions, however it is a concern in regard to long-term effects if they do not decrease.

CONCLUSION

The purpose of this research was to analyze the impact of hospitalization rates to determine unmet needs and barriers to receiving treatment for those that have a dual diagnosis.

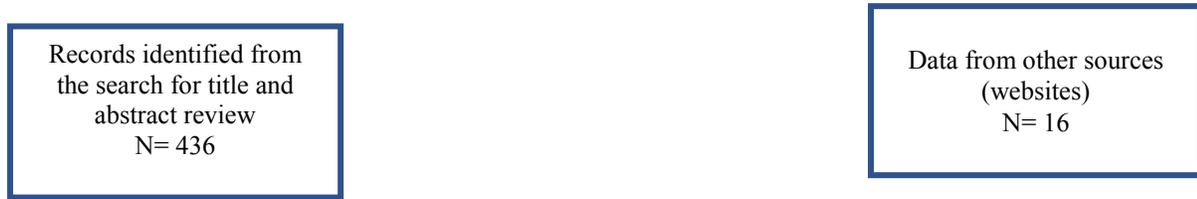
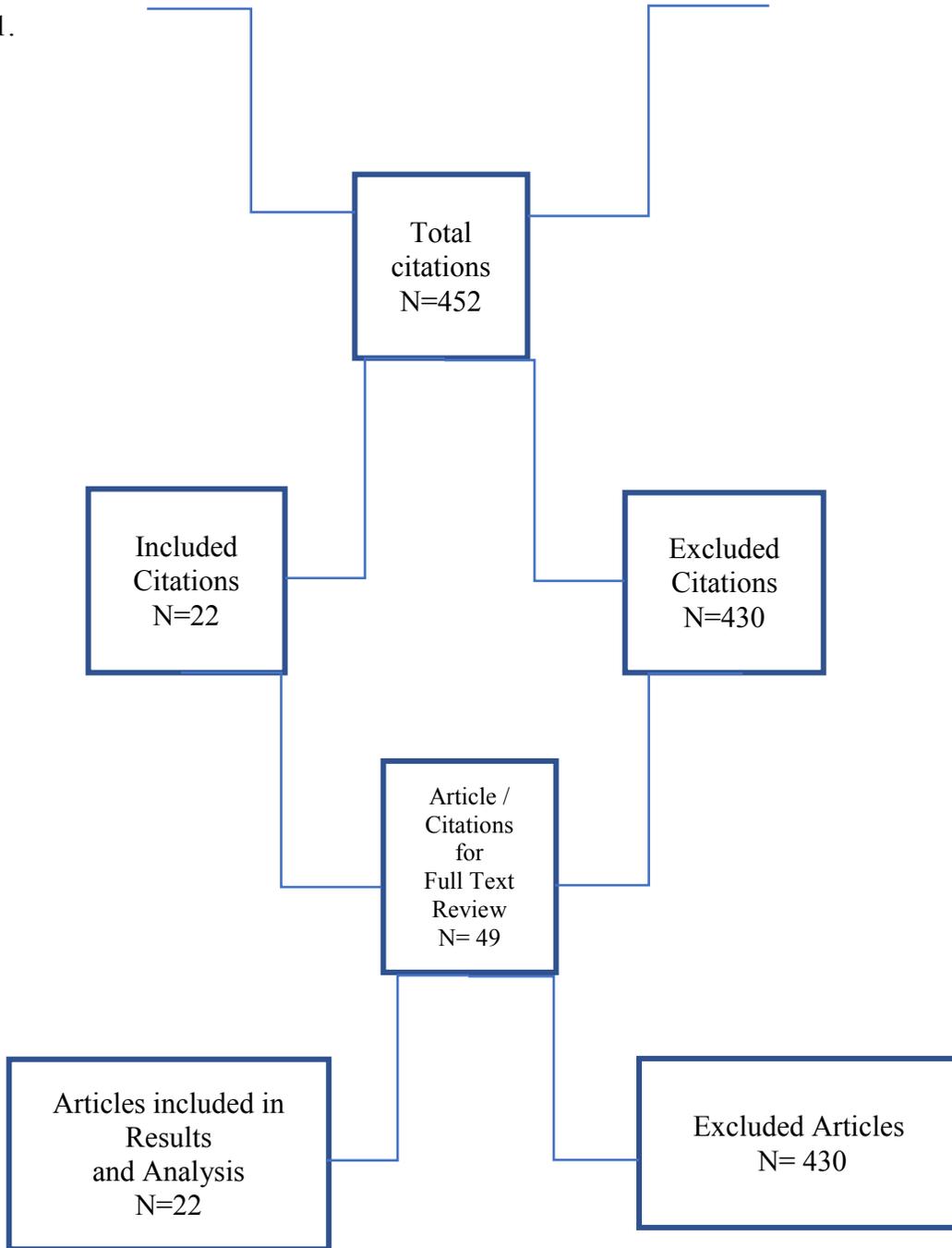


Figure 1.



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