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The COVID-19 Pandemic's Effect on the Rate of Patients in Custody Admitted for Psychiatric Evaluation at a Large Inner-City Community Health Center

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ABSTRACT

The COVID19 pandemic affected arguably every facet of our global society, from mental health and healthcare service utilization to economic stability and the function of our criminal justice system. Individuals within the carceral system are amongst the most vulnerable and underserved populations of the United States, facing extremely high rates of severe psychiatric illness, substance use, and distrust of the medical establishment. The pandemic exacerbated these preexisting health disparities, and previous research has shown an overall increase in rates of depression, anxiety, acute psychosis, and substance use during COVID19. This retrospective, longitudinal study investigates psychiatric emergencies amongst the arrested and incarcerated populations of the South Bronx, New York, a critically underserved region of the United States with persistently high rates of violence and arrests. Our results show an increase in rates of suicidal ideation, suicide attempts, and self-injurious behaviors, despite a significant decrease in rates of depression consultations. This study is the first of its kind; it provides a nuanced perspective on a research population often underrepresented in the literature and opens the door for areas of future research.

INTRODUCTION

The unprecedented challenges posed by the COVID-19 pandemic rippled through every aspect of society, profoundly altering daily life and, as emerging evidence suggests, leaving an indelible effect on mental health (1). COVID-19 significantly worsened stress and mental health issues, disproportionately affecting individuals with serious mental illness, intellectual/developmental disabilities, emotional disturbances, and substance use disorders (2). Amongst those suffering from mental illnesses, there is a disproportionately large number of those who are brought into Emergency Departments by law enforcement for emergent psychiatric evaluation (3).

This study aims to analyze data from BronxCare Health System, a large community hospital in the Bronx, New York, to ascertain if there is in fact an increased need for mental health care during times of elevated stress such as the COVID-19 pandemic; specifically, in the population of patients in NYPD or Department of Corrections (DOC) custody whom are brought in for psychiatric evaluation. Prior research revealed a rise in the proportion of involuntary and urgent psychiatric admissions during the entire pandemic year of 2020 when compared to the

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preceding year 2019 (4). Focusing on the year 2019 as pre-pandemic benchmark, 2020 as the pandemic's epicenter, and the subsequent post-pandemic era, we hope to raise awareness to this issue by comparing data from a subset of patients at our hospital who were brought in by NYPD or DOC custody during these time periods for psychiatric evaluation. The significance of this study lies not only in unraveling the interplay between a public health crisis and mental well-being but also in increasing the quality of care available to those who require these services. Due to the lack of resources during the pandemic, women's forensic units were closed down across New York and delayed re-opening following the downward trend in COVID cases. The incarcerated population is one of the most vulnerable and marginalized groups within the United States healthcare system: It is estimated that 44% of those in jail and 37% of those in prison have a major psychiatric diagnosis (5). In fact, Riker's Island, New York City's largest jail, has the distinction of being the largest provider of psychiatric care in New York State (6). The prisons of the United States disproportionately house people of color and those from low-income backgrounds (7, 8). Incarcerated individuals in New York state report insufficient accessibility of healthcare in prison, poor quality of care, and an overall distrust in the carceral healthcare system (9). The Correctional Association of New York found that 54% of those surveyed between the years 2020 and 2021 were dissatisfied with the quality of psychiatric care received in prison, and only "8.8% of all respondents said that they trust doctors or healthcare providers in prison to make medically correct judgments" (9). During the pandemic, the court system ground to an abrupt halt, leading to delays in the processing of prisoners, and dangerous overcrowding in local jails during the peak of the initial outbreak (10, 11). The intense pressure these conditions added to the strained healthcare network within the criminal justice system undoubtedly affected the mental health of arrested and incarcerated individuals.
Guided by the hypothesis that the pandemic led to a surge in the rate of patients in custody admitted for psychiatric evaluations, this paper aims to decipher the multifaceted factors contributing to this phenomenon, encompassing everything from first-time psychotic breaks to the exacerbation of existing psychiatric conditions amidst disruptions in outpatient care. A reason why many psychiatric patients were brought by police for evaluation was due to unmet psychiatric needs. Admissions post-COVID triggered by NYPD were 27 (90%) and from the Department of Corrections were 3 (10%) in contrast to pre-COVID, the admission from NYPD were 11 (84.62%) and from the Department of Corrections were 2 (15.38%). These results were supported by a study in Germany called *Psychiatric Presentations and Admissions During the First Wave of Covid-19 Compared to 2019 in a Psychiatric Emergency Department* (12).

Drawing from an internal report provided by BronxCare Health Systems, which details daily admissions and those involving NYPD interventions, this study aspires to shed light on the nuanced dynamics between mental health crises, law enforcement, and the unprecedented backdrop of a global pandemic. We found no studies that focused specifically on police arrests that resulted in emergency department admissions and psychiatric evaluations. There was an article of violence trends and ED admissions, but most of the studies evaluated the diagnosis and reason for assessment. Most of the research gathered in our review focused on the incidence of mental illness and its severity during COVID, child and domestic abuse during COVID, and violent injury admissions during COVID to name a few. The majority of the studies found centered on how COVID social distancing mandates affected mental health and ED visits. This paper would be the first of its kind, as far as we are aware, to evaluate trends of detained individuals brought in for psychiatric evaluation during COVID by assessing NYPD arrests which led to ED psychiatric evaluations.

BronxCare Health System is a safety-net provider, serving a large percentage of uninsured or publicly insured patients (13). The hospital cares for one of the most disenfranchised and impoverished populations of the United States, with the community district ranking lowest or near the bottom for quality of life, health outcomes and health factors, clinical care, social and economic factors, and physical environment (13). A June 2024 Fortune article sweepingly proclaims, "The South Bronx is a cross section of everything wrong with America" (14); while this statement is far too simplistic to delineate the culture and demographics of the community, it does highlight the fact that BronxCare Health System serves the poorest congressional district in the United States (14). According to the hospital's 2022-2024 Community Health Needs Assessment and Community Service Plan, area residents report an average of five poor mental health days per month, as compared to 3.5 statewide. In 2013, the hospital service area had 1,063 psychiatric hospitalizations per 100,000 people, a rate significantly higher than the city's overall rate of 676 per 100,000 (13). Additionally, New York State Division of Criminal Justice Services reports that the Bronx has the highest violent crime rate in New York City (13). This study is unique in its investigation into psychiatric emergencies amongst one of the most vulnerable populations within a critically underserved region of the United States.

METHODS

For this study, we conducted a literature search using the Google Scholar search engine, the Levy Library Icahn School of Medicine, and OpenWorldCat library. The search was restricted to papers published during the timeline from 2019 to the present. The following keywords were used: "emergency department admissions by law enforcement COVID," "patients brought in by police to emergency department during COVID," "violence and ED visits during COVID," "forensic admissions during COVID," and "arrested patients and ED visits COVID." During data collection, we excluded individuals under the age of 18, patients not requiring inpatient admission, and those outside of the pre- and post-pandemic timeframe. Subjects were included if they were over the age of 18, brought into the ED by NYPD or DOC, admitted to the hospital for psychiatric evaluation, and evaluated during the defined COVID timeframe.

We define our timeframe of "pre-COVID" beginning from January 1, 2019, to March 17, 2020 and "post-COVID" as March 17, 2020 to December 31st of 2022.

DATA COLLECTION

The investigated data was compiled by utilizing daily observation reports and review of arrested patient electronic medical records. The variables include information on patient demographics, clinical presentation, and treatment course. Demographic information includes age, race, gender, and ethnicity. Clinical information includes the reason for psychiatric evaluation, the working diagnosis, the patient's previous psychiatric history, and substance use history, including a positive urine toxicology at time of admission. Treatment course variables include the establishment of care, length of stay and behavioral events such as acute agitation and suicidal attempts while admitted to the hospital.

STATISTICAL ANALYSIS

The analysis of data was carried out using STATA MP17 (StataCorp, College Station, TX, USA). Continuous variables were presented as mean ± standard deviation, and categorical variables were presented as frequency (percentage). The Shapiro-Wilk test was used to assess the normality of the data, which showed a normal distribution. All comparisons between the two

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groups (before and after COVID) for continuous variables were performed using t-tests and chi squares. A p-value less than 0.05 was considered to be statistically significant.

RESULTS

It is important to note that our analysis explicitly matched the patient population with discharges during the study period. This approach was taken to ensure that the observed increase in consultations was not simply due to an overall fluctuation in admissions but rather reflects a genuine increase in patients presenting specifically for evaluation.

An analysis of discharge data from BronxCare's Concourse Division during 2019 and 2020 highlights the effect of the initial pandemic period in Table 1. Discharge numbers for 2019 and 2020 were compared, revealing a significant decline during the early months of COVID. From January to March 2020, discharges remained relatively stable compared to the same months in 2019. However, starting in April 2020, there was a noticeable decline, with 1,801 discharges compared to 2,188 in April 2019, representing a 17.69% decrease. This trend continued in May 2020, with discharges dropping further to 1,514 compared to 2,275 in May 2019, indicating a 33.45% decrease. This overall reduction persisted throughout 2020, resulting in a total decrease of 14.34% in discharges compared to 2019. The data suggests that during the early stages of the pandemic, there was a notable reduction in ED visits, as reflected by the decline in discharges during this period.

The following findings were statistically significant and are highlighted in Table 2. Of the total sample, 16.28% were White, with an increase between the pre-COVID period (7.69%) and the post-COVID period (20%) ($p = 0.05$). Depression was identified as the reason for consultation in 9.30% of cases overall; between the pre- and post-COVID periods, with 23.08% of consultations attributed to depression before COVID compared to only 3.33% after COVID, showing a decrease ($p = 0.04$). The establishment of care at BronxCare was noted in 37.21% of cases; the pre-COVID period of establishment of care at BronxCare (15.38%) and the post-COVID period (46.67%), suggesting an increased engagement with BronxCare after the onset of the pandemic ($p = 0.05$).

The following findings were statistically insignificant, but clinically relevant and are highlighted in Table 3. There was a shift in gender distribution from pre-COVID (76.92% male) to post-COVID (70% male) ($p = 0.62$), as well as the average age of patients decreased slightly from pre-COVID (37.38 years) to post-COVID (32.53 years) ($p = 0.15$). The referral source, whether from NYPD or the Department of Corrections between the pre- (84.62% NYPD) and post-COVID periods (90% NYPD) with an increase of 5.38% post-COVID ($p = 0.61$). There was an increase in consultations for suicidal ideation from pre-COVID (23.08%) to post-COVID (40%) ($p = 0.28$). Consultations for homicidal ideation showed an increase from pre-COVID (7.69%) to post-COVID (16.67%) ($p = 0.43$). Consultations for self-harm increased from pre-COVID (0%) to post-COVID (10%), with an increase of 10% ($p = 0.23$).

The proportion of patients with a previous psychiatric history of psychotic disorders decreased slightly from pre-COVID (38.46%) to post-COVID (26.67%) ($p = 0.43$). There was an increase in the proportion of patients with previous psychiatric history of mood disorders from pre-COVID (30.77%) to post-COVID (46.67%) ($p = 0.33$). There was an increase in previous psychiatric history of anxiety disorders from pre-COVID (0%) to post-COVID (13.33%) ($p =$

0.16). Patients with a previous psychiatric history of personality disorders showed a slight decrease from pre-COVID (15.38%) to post-COVID (6.67%) (p = 0.36).The proportion of patients with previous psychiatric history of Substance-induced disorder increased from pre-COVID (7.69%) to post-COVID (33.33%) (p = 0.07). The proportion of patients with previous psychiatric history of substance use disorders increased from pre-COVID (53.85%) to post-COVID (66.67%) (p = 0.42). There was an increase in in-house arraignments from pre-COVID (0%) to post-COVID (6.67%) (p = 0.34).

Table 1: BronxCare Health System- Discharges by Month and Year Concourse Division

MONTH	2019	2020	2021	2022
JANUARY	2,117	2,152	1,816	1,750
FEBRUARY	2,002	1,973	1,722	1,692
MARCH	2,145	2,032	1,938	1,943
APRIL	2,188	1,801	1,964	1,850
MAY	2,275	1,514	1,924	1,931
JUNE	2,070	1,632	1,828	1,934
JULY	2,110	1,708	1,874	1,833
AUGUST	2,215	1,794	1,970	1,957
SEPTEMBER	2,106	1,793	1,918	1,761
OCTOBER	2,178	1,867	1,904	1,905
NOVEMBER	2,027	1,756	1,899	1,763
DECEMBER	2,059	1,814	1,873	1,784
TOTAL	**25,492**	**21,836**	**22,630**	**22,103**

Caption: This table illustrates the annual and monthly discharge volumes from 2019 to 2022.

Table 2: Statistically Significant Results

Variable	Total (n=43)	Before Covid-19 (n=13)	After COVID (n=30)	P-Value
Race	White: 7 (16.28%) Black/African American: 19 (44.19%) Multiracial/biracial: 9 (20.93%) Unknown/unspecified race: 8 (18.6%)	White: 1 (7.69%) Black/African American: 7 (53.85%) Multiracial/biracial: 5 (38.46%) Unknown/unspecified race: 0	White: 6 (20 %) Black/African American: 12 (40.00%) Multiracial/biracial: 4 (13.33%) Unknown/unspecified race: 8 (18.60%)	0.05
Reason for Consultation	Depression: 4 (9.30%)	Depression: 3 (23.08%)	Depression: 1 (3.33%)	0.04
Establishment of Treatment at BronxCare	16 (37.21%)	2 (15.38 %)	14 (46.67%)	0.05
Medical Diagnoses	Infectious: 6 (13.95%)	Infectious: 4 (30.77%)	Infectious: 2 (6.67%)	0.03

Caption: This table presents statistically significant changes in key variables among patients before (n=13) and after (n=30) the onset of the COVID-19 pandemic at BronxCare.

Table 3: Statistically insignificant but clinically relevant results

Variable	Total (n=43)	Before Covid-19 (n=13)	After COVID (n=30)	P-Value

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Gender	Male: 31 (72.09%) Female: 10 (23.26%) Transgender: 2 (4.65%)	Male: 10 (76.92%) Female: 2 (15.38 %) Transgender: 1 (7.69%)	Male: 21 (70%) Female: 8 (26.67%) Transgender: 1 (3.33%)	0.62
Age (mean ± SD)	34 ± 12.5	37.38 ± 8.6	32.53 ± 10.1	0.15
Ethnicity				
Referring Agency				
Site of Request				
Reason for Consultation				
Previous Psychiatric History				
Transfer				
Discharge				
Working Diagnosis Inpatient				
UTox + on Admission				
Concurrent Substance Use History				
Previous Engagement in Psychiatric Treatment				
Behavioral Event Occurred Inpatient				
In-House Arraignment Occurred				
Length of Stay (LOS) in Days (Mean ± SD)				
Medical Diagnoses				

Caption: This table presents statistically insignificant changes in variables among patients before (n=13) and after (n=30) the onset of the COVID-19 pandemic at BronxCare.

Table 4: Table of Comparability

Variable	**Total (n=43)**	**Before COVID-19 (n = 13)**	**After COVID-19 (n= 30)**
Gender	Male: 31 (72.09%) Female: 10 (23.26%) Transgender: 2 (4.65%)	Male: 10 (76.92%) Female: 2 (15.38 %) Transgender: 1 (7.69%)	Male: 21 (70%) Female: 8 (26.67%) Transgender: 1 (3.33%)
Ethnicity	Hispanic/Latinx: 17 (39.53%) Non-Hispanic/Latinx: 26 (60.47%)	Hispanic/Latinx: 4 (30.77 %) Non-Hispanic/Latinx: 9 (69.23 %)	Hispanic/Latinx: 13 (43.33%) Non-Hispanic/Latinx: 17 (56.67%)
Race	White: 7 (16.28%) Black/African American: 19 (44.19%) Multiracial/biracial: 9 (20.93%) Unknown/unspecified race: 8 (18.6%)	White: 1 (7.69%) Black/African American: 7 (53.85%) Multiracial/biracial: 5 (38.46%) Unknown/unspecified race: 0	White: 6 (20 %) Black/African American: 12 (40.00%) Multiracial/biracial: 4 (13.33%) Unknown/unspecified race: 8 (18.60%)

Caption: This table compares demographic variables, including gender, ethnicity, and race, among patients before (n=13) and after (n=30) the onset of COVID-19.

Table 5: Comparison of Psychiatric Presentations

Total	Before Covid-19	After Covid-19
Depression: 4 (9.30%)	Depression: 3 (23.08%)	Depression: 1 (3.33%)
Suicidal ideation/intent/plan: 15 (34.88%)	Suicidal ideation/intent/plan: 3 (23.08%)	Suicidal ideation/intent/plan: 12 (40%)
Suicide attempt: 3 (6.98%)	Suicide attempt: 0	Suicide attempt: 3 (10 %)
Homicidal ideation/intent/plan: 6 (13.95%)	Homicidal ideation/intent/plan: 1 (7.69%)	Homicidal ideation/intent/plan: 5 (16.67%)
Psychosis: 19 (44.19%)	Psychosis: 7 (53.85%)	Psychosis: 12 (40%)
Physical assault perpetrator: 14 (32.56%)	Physical assault perpetrator: 6 (46.15%)	Physical assault perpetrator: 8 (26.67%)
Self-harm: 3 (6.98%)	Self-harm:0	Self-harm:3 (10%)

Caption: This table summarizes the distribution of psychiatric presentations among patients before (n=13) and after (n=30) the onset of COVID-19.

DISCUSSION

Prior to the onset of COVID, inpatient admissions totaled 13, but with the pandemic's onset, they surged to 30, highlighting a significant increase in hospital psychiatric evaluations of NYPD detainees. Admissions expanded marginally across all gender and ethnicity groups, but the male population saw a more pronounced rise, from 10 to 21 admissions. This suggests the post-COVID surge in admissions is largely due to increased male individuals presenting for evaluations. According to our data, all racial categories, except multi/biracial individuals, experienced growth. Understanding these demographic trends provides valuable insights into the specific groups disproportionately affected by the pandemic's healthcare implications. The study highlights notable shifts in patient demographics and consultation characteristics. For instance, there was a marked increase in consultations among White patients post-COVID and a significant decline in depression-related consultations. The increase in the establishment of care at BronxCare Health System post-pandemic further suggests that patients who might have delayed or avoided care during the early months of the pandemic eventually re-engaged with healthcare services as restrictions eased. These shifts illustrate how patient demographics and clinical needs evolved, reflecting changes in healthcare-seeking behavior during and after the pandemic. While the study did not show a significant increase in the length of stay following inpatient admission, qualitative evidence suggests that the burden on hospital resources intensified, particularly for high-risk patients requiring specialized care. The rise in evaluations for conditions such as substance-induced disorders and suicidal ideation post-COVID reflects the pandemic's exacerbation of mental health issues. These findings point to potential safety concerns and the need for more targeted interventions to address the increased demand for mental health services during such crises.

During the pandemic, many shifts and new trends were observed in Emergency Department visits. An overall decrease in **ED consultation** was found during the initial pandemic period. A paper published by M. Holland in 2019 evaluated the following 6 outcomes for changes in weekly US emergency department visit during COVID: mental health conditions, suicide attempts, all drug overdose, opioid overdose, intimate partner violence, and suspected child abuse and neglect (3). The study utilized data from Centers for Disease Control and Prevention's National Syndromic Surveillance Program. The paper found that for all 6

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outcomes, ED visits decreased in the beginning of COVID in March 2020 (3). Conversely, it found that counts between 2019 and 2020 for suicide attempt, all drug overdose, and opioid overdose were significantly higher. However, the counts for intimate partner violence and suspected child abuse were lower (3). Another study published in 2020 by *Science Direct* examining demographics, visit characteristics, and diagnoses for all ED patient visits to an urban level 1 trauma center before and after a state emergency declaration and comparing them with a similar period in 2019 concluded that there had been an overall decline of 49.3% in ED visits (15). The data analysis reveals a significant reduction in discharges from BronxCare Health Systems during the initial pandemic months, particularly from April to June 2020. This reduction aligns with broader trends of decreased emergency department visits observed during the early stages of the pandemic. The decline in discharge rates is likely attributable to several factors, including fear of infection and the restrictions imposed by lockdown measures, which limited mobility and access to healthcare services. These findings are consistent with existing literature, which also reported a substantial drop in ED visits during the pandemic's onset. Our internal review noted a non-significant overall increase in ED referrals by NYPD and the Department of Corrections with pre-COVID referrals being 11 and 2, respectively; after COVID, these rose to 27 and 3, respectively (p-value 0.61). Although not statistically significant, the small sample size limited the power of these results, suggesting that with a larger sample size, a significant result is more likely.

An overall decrease **in violence related injuries** was found during the pandemic period in some studies, and an increase in other studies. A study published by P. Shepherd in 2020 investigated the association between COVID lockdown and emergency department visits for violence-related injuries in Cardiff, Wales, using detailed violence screening, for violence-related injury, excluding self-injury, for all ED patients pre- and post-lockdown periods. (16). The modeled mean number of violence-related ED attendances per week decreased from 28.4% before lockdown to 16.5% after lockdown (16). Another study published in 2022 by V. Pisl conducted a register-based study in Prague on violent behaviors during COVID that echoed these findings (17). This study found that physical interpersonal violence decreased overall during the COVID lockdown periods, with a more significant reduction observed among males. Additionally, it found an increased risk of alcohol use and intoxication and a decrease in violent crimes rates (17); while another study found conflicting results by a study published later in 2022 by C. Pino. This retrospective cross-sectional study was performed to compare the prevalence of violent penetrating injuries during the first COVID pandemic year (18). This study was performed among all patients with a violent penetrating injury presenting at Boston Medical Center, the largest safety-net hospital and busiest trauma center in New England. The primary outcomes were the incidence and timing of emergency department presentations for violent penetrating injuries during the first year of COVID compared with the previous 5 years. This paper found that there was an increase in injuries during the first pandemic year compared to the previous five years; this was associated with increase in shootings but not stabbings (18). Our internal review regarding violence related injuries including: suicidal ideation (p-value 0.28), suicide attempt (p-value 0.23), homicidal ideation (p-value 0.43), physical assault (p-value 0.21) and self harm (p-value 0.23) showed a non-significant, but still clinically relevant overall increase in all categories.

Individuals with serious mental illness were among populations directly affected by the pandemic and lack of access to care during the shutdown for COVID; this effect can be reflected

by looking at ED visits' trends. Aside from the COVID period, *Medicine* reports that people experiencing a mental health crisis are up to 16 times more likely to arrive at the ED by police than people with medical conditions and nearly twice as likely to arrive at EDs via ambulance in general (19). A paper published in 2021 by A. Simpson found that the pandemic led to an increased number of emergency department visits for behavioral health reasons (20). Even as overall emergency department visits fluctuated, the demand for psychiatric emergency services grew during the pandemic (20). Another study done in the suburban New York City area found that during COVID, there was a noticeable increase in psychiatric emergencies (21). Research indicates a surge in patients presenting for psychiatric emergencies, with unique stressors related to the pandemic contributing to these cases (21). Another study published in 2022 by Xiao, assessed the trends in psychiatric admissions due to psychosis in the ED before and during COVID using 367 cases of psychosis (22). The study found a statistically significant increase in the mean number of psychosis cases when comparing admissions before and during the early phase of COVID in South Miami, Florida (22). An additional study done in New York City utilized electronic health records (EHRs) of 2,358,318 patients from the NYC metropolitan region. The study reported a substantial 242.5% increase in new clinical psychosis diagnoses among COVID negative patients (23). Patients with recent pre-COVID clinical psychiatric diagnoses were found to have an increased incidence of anxiety disorders, mood disorders, and psychosis throughout the study period (23). However, substance use disorders were more common among patients without recent psychiatric diagnoses between March and August 2020 (23). Examining our own data, it's evident that evaluations for depression in our hospital notably declined after the onset of COVID, decreasing from 3 to 1. The decrease in depression consultations observed during the pandemic indicates significant disruptions to preventive care, which includes consistent psychiatric screening. Patients with serious mental illnesses likely encountered more barriers accessing care, whether due to reduced availability of services, fear of seeking in-person care, or competing healthcare demands. These findings underscore the importance of strengthening mental health support systems during crises to prevent care gaps and ensure continuity of care for vulnerable populations. However, other reasons for consultation did not exhibit significant changes in our findings. This suggests that while there was a decrease in evaluations for depression, it is unlikely to be the sole factor driving the increase in admissions. Other contributing factors may have influenced the overall surge in admissions during this period. Therefore, it is essential to consider additional variables and factors that might have played a role in the observed increase in admissions, beyond just changes in psychiatric evaluations.

ED visits' volume by **incarcerated individuals** were also directly affected by the pandemic. An article published in 2021 by A. Magee highlights the disproportionate number of individuals with behavioral health diagnoses that have been arrested by the police and the co-occurrence of substance use disorder (SUD) in the population (24). It found that Arrestees with multiple mental health diagnoses had 2.68 times higher odds of repeat arrest (24). Those with SUD diagnoses had 1.59 times higher odds of repeat arrest. Individuals with co-occurring mental health and SUD diagnoses had 1.72 times higher odds of repeat arrest (24). Another study found that people with severe mental illness in the US are at heightened risk for arrest, incarceration, and over-sentencing; lack of access to needed supports and services while incarcerated, and related rights denials; and, finally, they are more likely to receive the death penalty, despite the US Supreme Court decision in Ford v. Wainwright (1986) (2). The study discussed how COVID had significantly worsened stress and mental health issues, disproportionately affecting

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individuals with serious mental illness, intellectual/developmental disabilities, emotional disturbances, and substance use disorders (2). For those with mental disorders, including psychotic, mood, and anxiety disorders, the pandemic has led to reduced life expectancy, with a median reduction of over 10 years (2). The severity of mental illness correlates with higher mortality rates, such as individuals with psychotic disorders having three times higher mortality rates than those without (2). Stressors linked to COVID, like unexpected expenses or the illness/death of loved ones, contribute to mental health deterioration (2). Although the changes in NYPD referrals and in-house arraignments were not statistically significant, the data suggests that the pandemic had a distinct impact on incarcerated individuals. The observed decrease in consultations related to violent behavior may indicate changes in how this population interacted with healthcare services during the pandemic, possibly due to shifts in crime patterns or alterations in the management of justice-involved individuals. While the differences in in-house arraignments were not significant, the limited sample size likely reduced the statistical power, and a larger dataset could yield more conclusive results. Importantly, BronxCare Health System, which had not previously conducted in-house tele-arraignment, began implementing them during the pandemic, highlighting a notable shift in procedural approaches during this time. Continuing to integrate more telehealth options, similar to the virtual in-house arraignments, can enhance future responses to crises such as the pandemic. Telehealth has continued to positively impact patient health by increasing compliance, improving no-show rates, and amplifying the frequency of appointments (25). As a result of the significant role Telehealth played during the pandemic, it is imperative to continue to improve these practices and urge widespread use.

The increase in ED consultations, along with shifts in the drivers for psychiatric consultations (e.g., increased suicidal ideation and substance use disorders), highlights how the nature of mental health crises evolved during the pandemic. These trends emphasize the need for healthcare systems to remain flexible and adaptable to meet emerging patient needs. As the pandemic revealed, the capacity to quickly shift resources and provide targeted care in response to changing circumstances is critical for maintaining effective healthcare delivery. The study highlights several trends, such as increased NYPD referrals and a rise in violence-related injuries (e.g., suicidal ideation, physical assault), that, although not statistically significant, were observed clinically. This focus on non-significant yet clinically relevant findings is often underrepresented in the literature, which tends to prioritize statistically significant outcomes. This approach provides a more nuanced perspective on how clinical realities do not always align with statistical measures.

CONCLUSION & IMPLICATIONS

COVID has and continues to have a serious impact on individuals with mental illness and our study provides a glimpse into how serious this impact has been. This study underscores the immense importance COVID had on psychiatric evaluations of arrested patients at BronxCare Health System. The findings reveal a significant increase in the number of consultations across multiple demographic categories, emphasizing the vulnerability of a population already suffering from stigma and lack of resources. While some changes were not statistically significant due to the small sample size, the observed trends point to critical implications for public health policy and the criminal justice system, and we ultimately deemed them clinically significant.

Our findings emphasize the resilience and adaptability of healthcare systems during public health crises. Whether managing fluctuations in patient volumes, addressing shifting care needs, or ensuring continued access to mental health services, robust planning and strategic resource allocation are essential. The significant rise in mental health consultations post-COVID highlights the exacerbation of existing vulnerabilities, underscoring the importance of prioritizing accessible mental health care during emergencies to mitigate long-term impacts. The pandemic's effects varied amongst demographics, emphasizing the need to tailor healthcare responses to unique populations, including psychiatric patients, incarcerated individuals, and vulnerable communities, to improve overall outcomes and equity. Disruptions in routine care further indicate the need to reevaluate care models for future crises. The integration of telehealth, which has proven effective in improving patient compliance offers a promising solution, thus ensuring continuity of care for those who might otherwise struggle to access services during emergencies.

This study's focus on a marginalized group within an underserved community provides valuable insights into the intersection of public health, mental health, and the justice system. The results stress the importance of enhancing mental health resources and ensuring equitable access to care for vulnerable populations, especially during disruptive events like COVID. Our data identified a decline in depression consultations during the pandemic, a departure from the prevailing narrative of universally increased mental health crises, thus offering a more complex understanding of how psychiatric needs shifted during COVID. Future research should aim to expand on these findings with larger datasets and broader approaches to fully understand and address the long-term implications on mental health services for incarcerated and justice-involved individuals.

STRENGTHS AND LIMITATIONS

Our study offers several strengths that amplify its contribution to the existing literature. The localized data analysis at BronxCare Health Systems reports a focused examination of ED trends within this specific community, offering insights that may not be captured in broader national or regional studies. This focus on a localized setting is particularly relevant to urban healthcare environments with similar population groups. Additionally, the study explores clinically relevant trends, such as increased NYPD referrals and violence-related injuries, even when these findings were not statistically significant. This approach provides a nuanced perspective that is often underrepresented in the literature, which tends to emphasize statistical significance over clinical realities. The study also draws attention to the discrepancies between mental health trends and hospital admission rates, suggesting that factors beyond psychiatric evaluations played a role in admissions. Finally, the study's specific focus on the mental health of incarcerated individuals during the pandemic adds a new dimension to the literature, offering insights into a subgroup often overlooked in COVID research.

This study has several key limitations that must be addressed. We focus on a specific subset of consultations, rather than overall trends, which limits the generalizability of our findings. This narrow scope makes it difficult to provide a comprehensive picture of how the pandemic affected mental health services more broadly. Due to examining such a specific subset, it is challenging to make direct comparisons with existing literature, as this study is one of the first of its kind to explore these particular dynamics. Additionally, the small sample size in areas of our research reduces the statistical power, making it more challenging to draw definitive

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conclusions. While certain clinically relevant trends were observed, the lack of statistical significance suggests that a larger dataset might be needed for more robust analysis. The retrospective nature of the data also introduces potential biases, as disruptions in healthcare access during the pandemic may have influenced who actively sought care, especially among underrepresented groups. These factors highlight the need for further research with broader datasets and a more comprehensive approach to understand the pandemic's impact on psychiatric services.

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