

Comparison of COVID-19-Related Suicidal Ideation Prevalence in SMI and Non-SMI Psychiatric Populations

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Abstract

Original Research Article

Background: This study investigates differences in the prevalence of COVID-19-associated suicidal ideation in individuals with psychiatric diagnoses at opposite ends of the DSM diagnostic severity spectrum. These opposite poles were represented by Adjustment Disorder (Ajd) at one end and disorders categorized as Serious Mental Illness (SMI) at the other. The study hypothesized that persons with SMI disorders would be more likely to report Covid-19-related suicidal ideation compared to individuals with non-SMI disorders. **Methods:** An observational, cross-sectional model was used to collect data from new client intake forms completed between April 2020 and December 2020. Participants were 24 male and 26 female U.S. citizens (mean age = 32) diagnosed with either SMI or Adjustment Disorder. COVID-related suicidal ideation was assessed by a licensed behavioral health professional during the initial 50-minute client intake interview. Clients were placed in one of two categories: 'suicidal ideation reported' or 'suicidal ideation denied'. **Results:** A total of 5 (18.5%) of the 27 patients diagnosed with serious mental illness reported COVID-19-associated suicidal ideation compared to only one (4.3%) of the 23 patients with a diagnosis of Adjustment Disorder. Due to the small sample of patients with suicidal ideation, a Fisher's exact test was required in lieu of a chi-square test. The difference was not statistically significant ($p = .199$). **Conclusion:** The results of this current study are best considered inconclusive. The fact that persons in the SMI group were 4.3 times more likely to report suicidal ideation compared to persons in the Adjustment Disorder group, yet this difference did not meet statistical significance is discussed. An alternate explanation is offered that the sample size was too small for statistical significance to be accurately measured. The need for the study to be replicated using a larger sample size is discussed and recommended.

Keywords: SMI, Adjustment disorder, stress, suicidal ideation, COVID-19.

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INTRODUCTION

The World Health Organization declared the COVID-19 virus a global pandemic in March, 2020 [1]. As of November, 2022, approximately 635 million people have been infected with the virus resulting in 7 million deaths [2]. The COVID-19 pandemic has resulted in untold negative impact on people's mental health. Mental health issues associated with COVID-19 include stress, anxiety, depression, insomnia, denial, anger, fear, and PTSD [3, 4].

Suicidality is one area of COVID-19-associated psychological symptoms that has received less attention. A review of current studies that assess the mental health impacts of COVID-19 finds a marked absence of attention to the relationship between COVID symptoms and suicidality [5]. This is a concerning omission considering the expression of suicidal ideation

has been identified as a major predictor for suicide completion [6]. Some health professionals have gone so far as to declare suicide resulting from the effects of COVID "a major public health concern" [7].

Mental health disorders have consistently been associated with higher levels of suicidal ideation during the COVID pandemic. For example, persons with a mental health history were associated with higher rates of suicidal ideation compared to those with no mental health history [8]. Other studies have found a mental health diagnosis to be a risk factor for suicidal ideation specific to the COVID-19 pandemic [9-11].

An even less studied area regarding COVID-19 and mental health is the presence of suicidal ideation in individuals with psychiatric diagnoses at opposite ends of the DSM diagnostic severity spectrum, namely

Adjustment Disorder (AjD) and disorders categorized as Serious Mental Illness (SMI).

Differences in quality of physical and mental health have been found between persons with SMI and Adjustment Disorder. Regarding physical health, when compared to persons with Adjustment Disorder, those with an SMI diagnosis engaged in lower exercise frequency, exhibited suboptimal eating habits, and were more likely to have gained at least ten pounds in the past six months ($p < 0.001$) [12].

Mental health differences between the two groups (AjD/SMI) can be understood in the symptom severity differences between the groups. SMI symptom type and severity are distinct compared with the symptoms of Adjustment Disorder. Compared to persons with Adjustment Disorder, an SMI diagnosis was more likely to be associated with a comorbid substance use disorder (29.5% vs. 13.3%), more likely (59% vs. 20%) to have sought services in the general health systems sector, and more likely (17% vs. 0.9%) to have sought inpatient mental health or addictions services [13].

Life stress is a variable long associated with mental health [14, 15]. When comparing persons with Adjustment Disorder or SMI disorder on a measure of perceived COVID-19-related stress, an SMI diagnosis was almost four times (Risk Ratio: 3.89) more likely to be associated with a negative impact on individual perceived mental health compared to a diagnosis of Adjustment Disorder [16].

These realities raise an important question: Is a diagnosis of an SMI disorder associated with a higher incidence of COVID-19-related suicidal ideation compared to a diagnosis of Adjustment Disorder?

In this present study, the differences in reported COVID-19-associated suicidal ideation between individuals diagnosed with an Adjustment Disorder and SMI disorder are compared in a clinical sample of adults. This study hypothesized that individuals with SMI would be more likely to report the presence of suicidal ideation compared to individuals with Adjustment Disorder.

MATERIALS AND METHODS

This was an observational, cross-sectional study based on information collected from client intake forms filled out at the beginning of mental health therapy services. The client intake sheets were collected from April 2020 through December 2020.

Participants

Participants were an online sample drawn from this study author's telehealth mental health counseling caseload. The clients were randomly assigned to the therapist by the telehealth provider. The sample was represented by clients from states representing all four geographical locations of the U.S. (North, East, West, South).

Before beginning counseling, all clients were required to complete an intake interview with a licensed mental health professional. During the course of this interview, the presence of suicidal ideation was assessed by the mental health professional performing the intake.

This study consisted of the intake interview data of 50 clients that met DSM-V diagnostic criteria for either SMI or Adjustment Disorder. Serious mental illness disorders were limited to depressive, anxiety, and OCD diagnoses.

Measures

Suicidal ideation was evaluated based on client responses during the intake interview. For future replication purposes, the question related to this study that best identifies the presence of suicidal ideation would be:

"Have you experienced thoughts of ending your life or wanting to be dead due to the life changes, hardships, and stress being caused by the current coronavirus outbreak? Yes or No."

RESULTS

Fifty patients were included in the study. Their mean age was 33 ± 10 years. The gender and racial composition of the sample are presented in Table 1.

Table 1: Race and gender of the sample

	<i>n</i>	%
Race		
White	39	78.0%
Black	10	20.0%
Hispanic	1	2.0%
Gender		
Male	24	48.0%
Female	26	52.0%

A total of 5 (18.5%) of the 27 patients diagnosed with serious mental illness had COVID-19-associated suicidal ideation compared to only one (4.3%) of the 23 patients with diagnoses of adjustment disorder. Due to the small sample of all patients with suicidal ideation, a Fisher's exact test was required in lieu of a chi-square test. The difference was not statistically significant ($p = .199$).

Table 2: Comparison of COVID19-associated suicidal ideation in patients diagnosed with serious mental illness versus adjustment disorder

	COVID19-Associated Suicidal Ideation						p*
	Yes		No		Total		
Diagnosis	n	%	n	%	n	%	
Serious Mental Illness	5	18.5%	22	81.5%	27	100.0%	.199
Adjustment Disorder	1	4.3%	22	95.7%	23	100.0%	

* Fisher's exact test

DISCUSSION

This study was designed to assess possible differences in the presence of COVID-19-related suicidal ideation in diagnostically opposite psychiatric populations, represented by Adjustment Disorder and Serious Mental Illness. Individuals in the SMI group were 4.3 times more likely to report suicidal ideation compared to persons in the Adj group (18.5% vs. 4.3%). Despite this difference, statistical significance was not achieved using Fisher's exact test. The logical explanation for the lack of statistical significance between the two groups is that the null hypothesis is true in this case – any difference in the presence of suicidal ideation was by random chance alone.

Could there be an alternative explanation? Small sample sizes are known to be associated with decreases in statistical power and the ability to detect significant treatment effects [17]. It is also known that small sample sizes are also associated with failing to reject the null hypothesis when, in fact, the null hypothesis should be rejected (Type II errors) [18].

It is possible that the failure to reject the null hypothesis that there were no differences between the groups was due to the small sample size of this study.

CONCLUSION

Seeing that the expression of suicidal ideation has been identified as a significant predictor for suicide completion and that in this study, persons with an SMI diagnosis was 4.3 times more likely to report suicidal ideation, this topic deserves to be pursued further. It is recommended that this current study be replicated using a larger sample size to ensure and prevent statistical Type I and Type II errors.

DECLARATION OF INTEREST STATEMENT

The author declares no ties of interest.

FUNDING STATEMENT

No funding to declare.

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