Suicidal or schizophrenic:

 (The correlation between schizophrenia and suicide)

 PSY 265-5001/Prof. Durmysheva

Manny Febus, Rhondean, Khemwattie, Jenkins

ABSTRACT

 Schizophrenic suicides aggregate to approximately 10% of all suicidal rates. There is a link between first suicidal attempt and schizophrenia, once in a lifetime. Studies show that people affected by schizophrenia and related disorders usually develop a sense of suicide and psychosis. There is a concept among communities that the use of cannabis is not related to cognitive changes. However, numerous studies have shown that cannabis significantly changes cognitive thinking and leads to suicide. Therefore, it is useful for people to have knowledge and information related to the mechanism of how cannabis causes suicidal thoughts among individuals. Better policies, more collaboration and participation, compassion, and better awareness among communities can significantly lower the burden of schizophrenia and related diseases in communities. Many articles have shown a positive association of treating people with medication and better management policies. Medication and therapies collectively can essentially help patients with schizophrenia. The current study has significantly evaluated the role of cannabis in triggering suicidal attempts and how better management and treatment policies such as weekly therapy along with family and community engagement can help the patients with schizophrenia and related disorders. The study has concluded that administering pills along with therapy can help patients with schizophrenia.

*Key Words:* Schizophrenia, suicidal thoughts, schizophrenic suicides, community engagement.

**Suicidal or Schizophrenia**

 Suicidal rates within the schizophrenic population may have a possibility of lowering. Based on the studies and information gained through research, some several methods and ideas can be executed and provided given what we have. Schizophrenic suicides amount to nearly 10% (Hor & Taylor, 2010) of all suicidal rates and given these statistics, we see this as a good enough reason to further our research into schizophrenic suicides and how to prevent them, what methods can be used, the types of pharmaceutical and drug resources that may help, etc (Hor & Taylor, 2010). The studies we dive into provide further details as to why this is a good topic for the group to discuss.

 The first article Manny reviews stress the importance of suicides and the factors contributing to suicidal behaviour. It is significantly a problem in most Western countries and poses a threat to society, humanity all in one. The policies that countries per taking on the subject of suicide are factors in the contribution of the suicidal rate (Hor & Taylor, 2010). Saying, if a country shows little policy effort in combating self-destructive behavior, it will show in society. Tie this back to the stigmatization of certain mental illnesses, specifically schizophrenia (in locations like the United States) and it becomes clear why some patients may be more suicidal than those who may not have an illness.

Differentiating factors could further help pinpoint why suicides happen. Now if we take the information given and provide much better treatment, patients will be less likely to be suicidal, stigmatized, and excluded from social activities (Hallford & Sharma, 2019). Particular factors like being excluded from social events matter because humans are social species who need interpersonal interactions in order to survive. When suicide and suicidal behavior is part of a major public health concern because it amounts to a huge number of people pertaking in this behavior, it’s important to remember the significance that countries have in this matter.

 Better policies, more awareness, more empathy, compassion, information, and medicines all come from the roots of how our governments and societies care about a mental illness. Not enough action taken could result in seriously bad consequences. Take the example of the politician who’s son’s suicide resulted in passing legislation that requires all schools to have some type of mental health service in place to help with suicidal behaviors and stress in general (Hallford & Sharma, 2019). Actions must be taken more appropriately in a timely manner to fight self-destruction on all angles.

 Second article reviewed by Manny digs deeper into the importance of stigma and the effects of schizophrenia inside the family environment. Schizophrenic patients are seen as burdens and are less likely to be invited to social activities. Aside from betrayal being one of the most known factors to emotional distress, being left out is one of the biggest stressors for us as human beings. Each author that contributed to the article stresses the importance of suicide prevention and are all trying to help prevent suicides in by focusing in different areas, some directly to schizophrenic patients (Waterreus et al., 2018). This helps reiterate the importance of our topic, seeing how many people are involved together for the same cause.

In the articles Jeenkins found it demonstrates how suicide is a pertinent reason for death among patients suffering from schizophrenia range disorders. The proportion of endeavored suicide in psychotic individuals varies from 10 to 50%. Suicide in the early stage of schizophrenia was the subject of the research conducted by Ventrilo and colleagues in 2016 (Ventriglio et al., 2016). Persons affected by schizophrenia usually feel suicidal and attempt suicide at least once in a lifetime. The study has suggested a link between schizophrenia, the first episode of psychosis and suicide. The study has collected data from PubMed, Cochrane Library, Web of Science/Web and Google Scholar (Ventriglio et al., 2016). All studies conducted from 1997 to 2016 were taken for this research. It is distinguished that schizophrenia is linked with noteworthy damage in functioning, which usually starts in earlier stages of the disease. Also, persons with current suicide ideation have shown a lower score and displayed subordinate functioning. Studies have established that communal drift is common in psychotic illnesses and persons with the first episode of psychosis (Ventriglio et al., 2016). The individuals with suicide attempts were recognized from lower community classes (Ventriglio et al., 2016). This has also led to the suggestion that individuals from lower community classes suffer from depression, anxiety, and suicidal thoughts in a greater proportion as compared to the normal population. Though, the connection between community class and prediction is multifaceted (Ventriglio et al., 2016). Hopelessness and depression may also develop in individuals in higher community classes. Individual from lower middle class once modify their lifestyle, depression, and anxiety level decreases gradually.

In his second article he dicusses how 120 desperate psychiatric individuals were assessed for depression severity, desperateness, previous challenges, and a desire to commit suicide. These

patients were from the emergency psychiatry center between ages 17 to 60 years. This study was carried out by Singh and other colleagues in 2016 to see the correlation of suicide among patients of schizophrenia and other related disorders. Among these, 20 % had Schizophrenia and related disorders, 65% had affective disorders and 6% of individuals were with other disorders (Singh et al., 2016). Numerous studies were conducted examining the part of family medical history in suicidal attempts by patients with schizophrenia (Singh et al., 2016).The results were contradictory as positive medical history was less prevalent in patients with schizophrenia (Singh et al., 2016). Patients with schizophrenic disorders and other related disorders have presented diverse explanations for suicidal thoughts. Family relationships, divorce, separation, lifestyle changes, and social stressors were the chief reasons behind suicide attempts. Past suicidal attempts and socioeconomic status were also associated with it (Singh et al., 2016). It has been observed that relevant better interventions including cognitive therapies, behavioral changes and interferences based on problem-solving, can significantly decrease the suicide rate among patients with schizophrenia and other related disorders.

 Rhondean’s first article dicusses the suicide attempts made by people suffering from different mental illnesses. The article was aimed to test the participants blood and analyzed their lifelong suicide attempts. Their antibodies were also tested. The outcome they had gotten was people suffering from schizophrenia had a higher suicide attempt. Also, people who smoked were also at a higher risk (Waterreus et al., 2018). The data in the article also showed that Toxoplasma had a high affect on people's suicide attempts. I found this article useful because I liked how the data was broken down by using other mental illnesses. This is useful because it is showing that people with schizophrenia is at a higher risk for attempting suicide.

 The second article talks about the used of cannabis being a risk factor for suicide is being discussed. The article specifically gets into details discussing suicide rates between the two genders. It tells the difference in attempted suicide and successful suicide rates between males and females. It discuss how much cannabis can have an affect on someone attempting to commit suicide. I find this to be important because many people use cannabis and believe it doesn't have an effect on one's cognitive thinking. Which this article gives details on how cannabis does have an affect on people's minds. The article shows how when people suffering from schizophrenia use cannabis they become more vulnerable to suicide. Cannabis does not only affect people with mental illnesses either it also affects the people of the general population.

In Khemwattie’s article she chose one that discusses the suicide trends associated in recent research that are linked to reasons that make it worse for those with mental illnesses such as schizophrenia. The article also touches on the trends associated with schizophrenia and how studies are hard to conduct because its always an uncontrolled setting with patients with schizophrenia and who are suicidal (Dickerson et al., 2017). However those who have schizophrenia are more prone to have suicidal tendencies and thoughts more than other mental disorders. this article also touches upon other factors like alcoholism, physical illness and socioeconomic status which when associated with schizophrenia can lead to many red flags going towards the road of suicide. Different treatments are available such as therapy however there is a focus on how the younger generation are the ones who have the largest number in suicide and how we should start to do more studies and be concerned with them as well. With the younger generation there is a lot of new studies that this article touches upon. Depression is more prominent in those age groups along with suicide rates going up. From 15 years of age 19.

The second article mentions how schizophrenia and major depressive disorder are on the same spectrum. suggests that the lack of the ability to feel pleasure is the reason people with the disorder and major depressive disorder are more prone to commit suicide.

“Anhedonia is diagnostically characteristic of two psychiatric disorders. In the case of schizophrenia, anhedonia might be considered as part of a cluster of negative symptoms including apathy, avolition, and social withdrawal. In major depression, anhedonia is a core diagnostic criterion referred to directly in terms of loss of interest and pleasure from experiences that were previously enjoyed (American Psychiatric Association, 2013).” it talks about how "anhedonia" that can hinder in the moment responses to things that are supposed to give pleasure to a person. so the lack of happiness / pleasure therefore leads to the emptiness and sadness that turns into depression and leading to suicide.

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 To conclude, all of these articles are benifital to our study on schizophrenia and suicide and how on a soectrum they are linked and can be tested.

SSuiPP

PARTICIPANTS

The Participants we outreached for this study had age ranges from 18- 28 years old. This for the simple fact that we did not want to have participants in such a wide age range where there could be other possible factors that create variables for the experiment.

After coming to this conclusion, we also wanted to keep the study home base. Therefore looking for hospitals in New York City to draw patients with schizophrenia. We came into contact with the head department of the mental illness department at Mount Sinai in East New York. We asked if they had any schizophrenic patients that they knew indeed were also suicidal (Lien et al., 2018). We had told them that each patient would be getting treatment but differentiating in therapy and medicine. As a Psychiatric company my colleges and I wanted to find participants who were elegible to take a form of medicine for Suicide for a year long period. Also dedicated to taking treatment in the form of therapy once a week.

Our participants vary in many ethnicities due to the hospital being in New York city. We did not care for any specificic rates in general hower were still aware that the highest rates for suicide for schizophrenic partients came from -----

We decided to have 30 participants. 15 women and 15 men. We put these participants in no particular pairing giving the men and women numbers “one” and two” then sectioning them off into groups A and B.

The compensation that the participants were promised were 2k per person at the end of the year.

We also took into account the participants physical health, like weight and height. No preferences, but just acknowledgment if their physical health contribute in anyway.

METHOD

Details of treatment: People in both groups would have to commit to a year of weekly psychotherapy and medication to see how the lives of the clients play out during and after the study. Group A would recieve our medicaiton for suicide vs. group recieving thearpy to see which one has the best effect on preventing suicide. Ages would have to be 5 years (18 yrs - 23 yrs - 28 yrs) apart because anything further could disrupt the results dramatically, as an individual is more likely to be more settled and mature in life or the opposite if the ages are too far apart.

Group A: Receives treatment on schizophrenia + suicidal medication provided by our company

Group B: Receives treatment on schizophrenia + therapy supervised by our company

They will be receiving a survey of numeral questionnaires each time we meet to see how they’re doing. Each participant will get the same exact one. The questionnaires would be similar to these questions presented;

1. On a scale of 1-10 how happy are you feeling?
2. On a scale of 1-10 how angry are you feeling?
3. On a scale of 1-10 how energetic do you feel?
4. Do you prefer hot or cold weather?
5. On a scale of 1-10, how often do you have suicidal thoughts? 10 being it disrupts your life and creates problems.
6. On a scale of 1-10 how suicidal do you feel right now? Etc..

As per the participants the only difference would be therapy in the form of a psychologist. However after separating them into two groups: one group would indeed get out medication however the other would get Therapy. - Ethnicities would be divided by 25%, caucasian, asian, african/black american, and hispanic, as different cultures contribute to different lifestyles and impact the clients.

We’ll be recording behaviors by giving surveys and talking for a brief moment on how the clients are doing and feeling (Lönnqvist et al., 1995). They’ll also be given the same instructions by the same person, the same day, to lessen any disruptions towards the study. This will happen with group B members once every week throughout the year for an hourly session.

The medication that we’ve created has high amounts of clozapine and ketamine which is known to not only lessen the symptoms of schizophrenia but more specifically target those with suicidal tendencies (“Clozapine Treatment for Suicidality in Schizophrenia—Correction | JAMA Psychiatry | JAMA Network,” n.d.). **(Common clozapine side effects may include weight gain**; tremor, dizziness, spinning sensation;headache, **drowsiness, nausea**, **constipation**;**dry mouth**, or increased salivation;blurred vision; or.fast heart rate, increased **sweating.)**

 PROCEDURE

January 1st 2017 - We first greet all of our participants. We as in my colleges Manny, Rhondean, Jenkins and Myself Khemwattie. We have the 30 participants in the same room and explain to them who we are and why we decided to start the Program. We then number the participants off “one” and “two” therefor unbiasedly deciding which group goes into group A and which goes into Group B.

We had : 7 women and 8 men in group A.

7 men and 8 women in group B.

We then gathered their names and information and took the day to sort everything out ourselves.

We decided then Group A: Receives treatment on schizophrenia + suicidal medication provided by our company

Group B: Receives treatment on schizophrenia + therapy supervised by our company

We asked them to then come in the week after so we could start our study and therefore they could start the treatment we were going to provide.

January 8th 2017 - One of our colleges goes in and speaks to Group A while another speaks to group B. Our colleges alternate but we all have a set script we say to the patients in both groups. For Group B the script is :

“ Hello! My name is \_\_\_\_\_ and I am apart of SSuiPP. I’m here to give you your medication and document how you feel with this survey.” - and then we provide a numerical survey to tract the persons mood over this period of time.

For Group A the script is :

“Hello! My name is \_\_\_\_\_ and I am apart of SSuiPP. I’m here to provide you with your weekly therapy. How are you doing today?’’

We met with our patients every Sunday.

We continued this every week until the 8th of Jan 2018.

We decided to only give Group A a new treatment, plus medication they were taking already for schizophrenia. Group A took their medication in the hospital, daily, when it was time for them to take their other medication. The participants were aware they would be receiving an extra pill, and they knew what the pill was for. They did not receive any therapy.

 We noticed the medication was effective to only 5% of group A participants.

Group B was only given therapy, but they were still taking their original medication for schizophrenia. Group B would take their medication in the hospital like they would normally do. We visited the hospital once a week, in order for Group B participants to receive therapy for an hour. During therapy, we would ask the participant, how they’re feeling, and would focus on speaking to them about their moods, emotions, and what they wish to get out of therapy. The therapy sections always went well, the participants found therapy to be helpful to them. The outcome was therapy had worked for 80% of the participants.

The ending results of the research was, Group B, the participants who received therapy was more successful than Group A, the participants who received our treatment. There were 5 participants from Group A who commited suicide, 6 people who found the treatment noneffective and only 4 participant the treatment worked successfully with. In Group B, 3 people committed suicide, 2 people found therapy to be useless, and 10 participant therapy worked succefully with.

**Conclusion**

To conclude the results of this year long trial showed that the weekly therapy worked better than the medication alone.

Group A had 5 suicides- 6 although a bit better still suicidal - 4 successes (with the medication alone)

Group B had 3 suicides- 2 non effective -**10 successes** (With therapy alone)

We conclude that we should try to administer the treatment pill on schizophrenia along with therapy together when treating patients who are suicidal with schizophrenia. Suicidal rates within the schizophrenic population may have a possibility of lowering based on the studies and information gained through this research. In addition, upon the therapy we also noted that Group B became happier and more comfortable with themselves over group A. That could also be a factor as to why the therapy session worked more.

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