

Schizophrenia: Are its Poor Recovery Rates Reflective of our Society as a Whole?

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ABSTRACT

Schizophrenia is a specific mental disorder that significantly impacts individuals' lives worldwide. This paper investigates the complex causes, including genetic, developmental, and environmental influences, as well as an emphasis on dopamine's crucial role on the brain. This condition can go through 3 different stages in general: the early symptoms stage, active phase with more defined symptoms, and residual phase with a reduced amount of symptoms. Treatment can sometimes involve medication, but with this treatment, there are challenges that come along with it such as side-effects and hesitation to take the medication. Even with various treatment plans in place, recovery rates continue to be low, making it necessary to dedicate more time and effort towards research and more healthcare support.

Introduction

Schizophrenia is a severe and enduring, lifelong chronic brain disorder. The prevalence of Schizophrenia globally has been reported to be 24 million people or 1 in 300 people (0.32%) ("Schizophrenia", 2022). This mental illness exerts a profound impact on certain individuals causing thoughts of suicide, experiences of mistreatment, and sinking into a state of depression. Not only this, people with this condition begin to go into social isolation, causing their relationships to be hugely impacted. People diagnosed with schizophrenia also encounter discrimination, leading them to not have access to certain resources such as education, general health care, housing, and employment. Examining the spectrum range of this mental illness, there are three total stages that a person can reach. The first stage is called the prodromal stage, known to be the stage when the symptoms first begin. The next phase, also known as the active stage, is when the symptoms begin to be more distinguishable and evident. Lastly, the residual phase is the last stage of schizophrenia to which there is a reduction in the severity of the symptoms, but the condition will not completely stop, and lingering side effects continue.

Etiology

Being a subject to extensive research, the etiology of schizophrenia has been identified to be not only one, but multifactorial, including introduction to neurodevelopmental, genetics, and neurobiological theories. It is often suggested that there is a genetic predisposition, however, the condition usually manifests after a trigger, usually connected to a stressful life event. Moreover, the use of alcohol and particularly illicit drugs are said to have a catalytic effect on this process, aggravating the risk factors that assist in the development of schizophrenia. However, internally, in the brain, its main mechanism of action is predominately correlated with the dopamine pathway.



Pathogenesis

Dopamine, also known as a "chemical messenger", is a type of neurotransmitter that your body creates and messages are sent between various nerve cells through your nervous system. It's important to recognize dopamine, especially as it has an influential role in our ability to think, plan, and helps us experience things like pleasure. Dopamine can be found being spread throughout our brain, specifically four different major pathways, nigrostriatal, mesocortical, mesolimbic, and tuberoinfundibular pathways. It is produced by converting amino acid tyrosine into a different substance called dopa, which eventually transforms into dopamine. Basic physical and behavioral functions like your attention span, motivational levels, and your sleep are all affected by dopamine. Not only that, dopamine is known to be a popular link to mental health disorders, for example, schizophrenia. Researchers theorize that an overactive dopamine system is the cause of symptoms emerging for this condition, especially when there is too much of it in our brain, leading to things like hallucinations or delusions. However if you don't have enough dopamine in other specific parts of your brain, this could also lead to an impact of lack of motivation or a lack of other functions.

Symptomatology

Schizophrenia, in general, is a very hard disorder to be able to quickly recognize as it progresses quite slowly and often develops during one's teenage years. Symptoms for schizophrenia are usually divided into two categories, positive and negative symptoms. If the symptom is categorized as positive, it encompasses any behavioral changes or thoughts that emphasize a distortion from normal actions. Examples of this can be hallucinations, delusions, hyperactivity, and disorganized behavior. However, negative symptoms are defined as when behaviors begin to become distant and the person shows a lack of motivation to do simple activities, appearing emotionless and absentminded. Affective, communicative, and relational deficits are examples of negative symptoms. The reason for having a distinction between positive and negative symptoms was to provide assistance regarding clinical observations as well as help describe the state of the disorder according to these symptoms. Overall, the symptoms are quite important to differentiate, and the negative symptoms specifically, are a core component to schizophrenia, having contributed to long-term morbidity in schizophrenia.

Long-Term Impacts of the Condition

Schizophrenia impacts the majority of people to a large extent which also emphasizes the need for life-long treatment, required to deal with the many challenges associated with this mental health condition. Even later on in life, some people living with schizophrenia will still continue to face issues, for example, facing episodes that can cause them to be frightened and isolated. These certain individuals will continue not being able to focus on certain tasks and commit to doing work as the disorder can be quite disruptive. Once someone develops schizophrenia, it is possible that they face long term effects like addiction, decrease in health due to ignorance of self-care, and ruined relationships with those close to them. Although not everyone diagnosed with schizophrenia is required for immediate medical attention, those facing more difficulty and containing more negative symptoms understand the crucial need for continuous treatment, delving into recovery options.

Prognosis

Though, before recognizing the different recovery options, it is crucial to look at the prognosis of schizophrenia as it's influenced by many different factors including the person themself. Globally, there are many individuals who may not even realize that they have developed schizophrenia or barely have any recognizable symptoms,



so it is important to understand that even if one is diagnosed with schizophrenia, it depends on the person's symptoms to see the prognosis. This is also why the prognosis of schizophrenia is commonly said to be unpredictable especially because a lot of these people with the disorder do not receive mental health care. There are a couple factors to take into consideration when discussing poor prognosis and good prognosis. Regarding poor prognosis, there are certain components that can be correlated such as having strong negative symptoms, being male, having a history of substance abuse, or even poor nutrition. On the other hand, good prognosis can be associated with being female, prompt treatment, having strong relationships before the diagnosis, or if you have no family history with schizophrenia.

Biopsychosocial Treatments

Even if symptoms have subsided, it is still important to continue treatment to focus on the journey of recovery. Depending on the specific person, the recovery process will look different based on their current state. One can have complete recovery, where there is a loss of psychotic symptoms, returning to the level of functioning before being diagnosed or even social recovery, where one returns to working enough to be able to provide for themselves and not be dependent on anyone else regarding housing. Generally, the most common treatments are given with medications, psychosocial therapy, and sometimes even hospitalization. Out of all of the prescribed medication, antipsychotic pills are the most common and this is because it affects the brain neurotransmitter dopamine which is in charge of symptoms. Whether the doctor recommends antipsychotic pills, antidepressants, or even anti-anxiety drugs, the primary objective of the medication is to be able to control symptoms effectively, while minimizing the dose. However people tend to be uncertain and reluctant to take these pills as they can cause various side effects. When someone doesn't take their medication consistently, it may affect the treatment, which is why some are given long acting injections named depots, rather than a pill. Regarding antipsychotics, there are first-generation and second-generation antipsychotics but second-generation medication is often preferred as it has a lower risk overall. However, more recent research informs that although firstgeneration can give significant neurological side effects including tardive dyskinesia, a movement disorder, second-generation can also cause metabolic syndrome, this includes diabetes, high cholesterol, and even increasing heart problems. Treatments including hospitalization only occur when the crisis point is reached and the person must be kept in the hospital to ensure safety, sleep, and a stable pathway to recovery.

Recovery Rates

Regarding recovery rates, investigated by many researchers, many different results were shared, some saying the rates improved due to prescribed medications but majority saying the rates, in fact, are not improving. According to a case study done in 2022, approximately only 21% of a recovery rate was found with minimum impact caused by different moderators. Seeing as there hasn't been large changes in rates in the past years, it is clear that the rates for the next 50 years will also continue to make small improvements, unless we make a change. Even though these small improvements like communities beginning to show support as well as increasing awareness is important, all of this is very limiting, leading to less substantial impact than desired.

Conclusion

In conclusion, the ongoing lack of parity between mental health and physical health is a constant challenge that impacts individuals' overall health and undermines the care needed for these citizens. Based on various research findings, individuals who have developed schizophrenia face a 2 to 3 times higher risk to die early compared to the overall population and this is primarily attributed by physical ailments, such as cardiovascular, metabolic,



and infectious diseases. Additionally, there is the possibility that the progress of recovery rates are largely influenced by the insufficient research and funding for bringing out more new and novel treatments for it, deficient to how much attention is actually needed regarding this topic. This is particularly evident when compared to the recovery rates of physical health conditions, such as, diabetes and cancer. Not only this, but it is also often pondered upon if this lack of parity reflects the lack of focus on conditions found a lot more in the lower socioeconomic strata and although it isn't a condition exclusive to socioeconomic status, stigma is also a limiting barrier in others speaking up and the needed progress being made.

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