Treating Schizophrenia with Psychodynamic therapy among Elderly Patients

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Abstract

The shifting demographics and inadequate treatment of schizophrenic seniors are creating a worldwide health issue. Soon, those aged 55 and over will make up a quarter or more of the global population of people diagnosed with schizophrenia. Schizophrenia is the third leading cause of disability-adjusted life-years among those 60 and older who suffer from mental and substance-use disorders. It is projected that older persons with schizophrenia have a bigger influence on health care expenses than the majority of other medical and mental diseases, with higher costs per patient as a result. Schizophrenia is a severe mental illness characterised by distorted perceptions of reality. Disabling hallucinations, delusions, and severely disorganised thought and behaviour are all possible symptoms of schizophrenia.

Key words: Schizophrenia, aging, antipsychotics, psychosocial treatments, cognition, psychosis

Introduction

Cognitive, behavioural, and emotional disturbances all play a role in schizophrenia. The inability to operate normally is reflected in a wide range of symptoms, some of which include delusions, hallucinations, or disorganised speech. Some possible symptoms are:

(i) **Delusions:** These are unfounded and erroneous assumptions. Some examples of such situations include: you have reason to believe that you are in danger or being harassed, you have been the subject of threatening behaviour, you are very talented or famous, someone has developed romantic feelings for you, or a tragic catastrophe is about to occur. Delusions are a hallmark of schizophrenia.

(ii) Hallucinations: Experiencing ghostly figures or noises is a common experience. However, for someone having schizophrenia, they carry the same relevance and weight as any other occurrence. Although auditory hallucinations are the most common, other senses may play a role as well.

(iii) **Disorganized thinking (speech):** Your nonsensical speech indicates that your thoughts are similar. It's possible that questions may be only partially answered, and that communication will be inhibited as a result. The use of word salad, whereby words with no obvious connection to one another are tossed together to form a new meaning, is uncommon in normal discourse.

(iv) **Extremely disorganized or abnormal motor behavior:** The manifestations of this range from infantile nonsense to irrational anger. The inability to complete tasks is a direct result of undirected behaviour. Inappropriate or strange posture, a total lack of reaction, or unnecessary and excessive movement are all examples of problematic behaviour.

(v) Negative symptoms: Impairment of, or incapacity for, typical daily activities. Some signs of emotional distance include a lack of interest in personal grooming and the use of monotonous speech or emotions. They may also retreat from friends and family or be unable to enjoy life in general.

Changes in symptom kind and severity, as well as periods of worsening and betterment, are possible during the course of treatment. It's possible that certain symptoms might last forever. Males around the ages of eighteen and thirty are more vulnerable to developing schizophrenia. In most cases, symptoms won't show up until a lady is in her late twenties. It's very unusual to develop schizophrenia before the tender age of 18, but much less common above the range of 45 years old.

Types of schizophrenia

There are several types of schizophrenia:

(i) **Paranoid schizophrenia:** The majority of people with schizophrenia suffer from this kind. Possible later onset in life compared to other types. One may have illusions and/or delusions, but one's ability to communicate and/or feel emotions may be unaffected.

(ii) **Hebephrenic schizophrenia:** This kind of schizophrenia, often called "disorganised schizophrenia," generally manifests between the ages of 15 and 25. Disarray in conduct and cognition, as well as temporary hallucinations and delusions, are typical symptoms. It may be difficult to comprehend the patient due to disorganised speech patterns. Individuals afflicted with disorganised schizophrenia are characterised by a lack of emotional expressiveness in their appearance, speech, and behaviour.

a) **Catatonic schizophrenia:** The most extreme form of schizophrenia is marked by restricted and abrupt movement. The patient's activity level may fluctuate widely, from extremely high to very low. It's possible that this person doesn't say much and instead acts and talks like everyone else.

b) Undifferentiated schizophrenia: Paranoid, hebephrenic, and catatonic schizophrenia may all share symptoms with this diagnosis, but it may not fit neatly into each of these categories on its own.

c) **Residual schizophrenia:** A diagnosis of residual schizophrenia may be made if the patient has a history of psychosis but now displays solely negative signs (such as sluggishness, forgetfulness, lack of attention, and poor hygiene).

d) Simple schizophrenia: Schizophrenia without further symptoms is a rare diagnosis. However, adverse signs, such as slow movement, poor memory, lack of concentration, and poor hygiene, are more visible early on and worsen with time, whereas beneficial signs, such as hallucinations and disorganised thinking, are seldom noted.

e) Cenesthopathic schizophrenia: Unusual body feelings are a hallmark of cenesthopathic schizophrenia.

f) **Unspecified schizophrenia:** All the criteria for a diagnosis have been met, yet the symptoms do not fall neatly into one of the aforementioned groups.

Causes, Risk Factors and Complications

However, scientists think that genetics, brain chemistry, and environmental factors all have a role in the development of schizophrenia. Schizophrenia may be caused, in part, by imbalances in neurotransmitters like dopamine and glutamate, which are naturally occurring substances in the brain. The brains and central nervous systems of patients with schizophrenia are different, according to neuroimaging research. The importance of these alterations is still being debated, although they do point to schizophrenia being a neurological disorder.

It is unclear what exactly causes schizophrenia, although there are certain risk factors that appear to be especially important:

a) Having a history of schizophrenia in one's own family

b) Hunger or exposure to chemicals or viruses during pregnancy or childbirth are only two examples of the kinds of problems that might affect a baby's brain development.

c) Using medications that change one's state of mind (also known as psychoactive or psychotropic) while one is a teenager or young adult.

Schizophrenia may have devastating effects on a person's life if it is not properly managed. Schizophrenia is connected with or may cause the following complications:

- a) Suicide, suicidal ideation, and suicidal behaviour
- b) Mood and anxiety disorders, including OCD.
- c) Depressive disorder
- d) Misuse of alcoholic beverages, illicit substances, or tobacco products
- e) Not being able to go to work or school
- f) Homelessness and money issues
- g) Non-social interaction
- h) Illnesses and health issues
- i) Isolation as a victim
- j) Aggression, although unusual, occurs sometimes.

Although there is currently no known strategy to prevent schizophrenia, patients who adhere to their treatment plan have a lower risk of experiencing symptom recurrence or worsening. Researchers are also hopeful that a better understanding of the causes of schizophrenia would allow for more timely detection and treatment.

Both early-onset and late-onset patients are included in the category of older patients with schizophrenia. Those aged 75 and over are the "old-old," whereas those aged 55-74 make up the "young-old" population of people living with schizophrenia today. The life expectancy of people with schizophrenia is increasing, although it is still lower than that of the general population. Patients with schizophrenia have a two- to threefold higher mortality risk compared to the general population as a whole, and this disparity has been widening over the last several decades. There is an increased risk of death among older persons with schizophrenia compared to their healthy colleagues.

Congestive heart disease, chronic lung disease, and hypothyroidism are all more common in people of advanced age who have schizophrenia. Antipsychotic medication and lifestyle variables including unhealthy eating and smoking contribute to this. Research is required to uncover modifiable medical and social risk factors for the increasing morbidity and death in older people with schizophrenia because of our inadequate understanding of the processes behind this trend.

The Positive and Negative Symptoms of Schizophrenia

It is generally accepted that positive symptoms of schizophrenia lessen with age, whereas negative symptoms become more prominent. However, this theory has been debunked by the results of multiple research. Seventy-seven percent of patients in the International Study of Schizophrenia (ISoS) showed no signs of substantial negative symptoms during the duration of their disease, based on an evaluation of 18 worldwide cohorts between 15 and 25

years.3 The negative symptoms of schizophrenia did not significantly improve with time in a longitudinal trial of institutionalised elderly individuals.4 Clinically, negative symptoms of schizophrenia are not more prominent in older individuals and are typically displayed at the same intensity as in younger patients.

The inability to think clearly is a hallmark of schizophrenia that persists throughout the lifespan of those who have it and is a major predictor of functional impairment. About half of the expense of treating schizophrenia is due to functional impairment, which rises dramatically in later life. Significant cognitive impairments in areas such as executive functioning, processing speed, attn/vigilance, working memory, language acquisition, visual learning, logic, and problem solving are shown in older persons with schizophrenia.

Studies of elderly people with schizophrenia have shown residence status to be a significant predictor of the course of cognitive decline. Patients with schizophrenia who live in the community show no more cognitive impairment than the general population until they reach the ages of 65 and 70. It is not possible to rule out the possibility of rapid mental deterioration in those over 70 who have schizophrenia. Long-term institutionalisation increases the risk of cognitive deterioration in older persons with schizophrenia, particularly those over the age of 65.

Patients with schizophrenia were divided into one of three cognitive function trajectories in a long-term research. Half of the group showed no change in cognitive abilities, while 40% showed a moderate drop, and 10% showed a fast decline. The normal population follows the same pattern of cognitive deterioration as the stable schizophrenia population.

Premature ageing is thought to be a hallmark of schizophrenia due to the lack of cognitive deterioration shown in older individuals with the disorder compared to their healthy counterparts in most investigations. The advantages to both the person and the community of preserving and enhancing cognitive function in older individuals with schizophrenia are substantial.

Onset and Perpetuation of Dementia

Identifying the differences between schizophrenia or Alzheimer's disease with psychosis in the elderly may be challenging, but it is possible. Dementia is predicted to become a major problem for schizophrenic seniors. When compared to the general population, those over the age of 60 who have schizophrenia are at a higher risk of having dementia by the age of 80. Age, poor educational achievement, premorbid memory loss, cardiovascular illness, polypharmacy, and previous instances of alcohol and/or drug misuse are all variables that raise the risk of dementia.

In elderly people with schizophrenia, the cause of their dementia is a mystery. However, both people with and without schizophrenia have been shown to suffer from cognitive impairments after prolonged exposure to a high anticholinergic in load. A significant anticholinergic load in older persons with schizophrenia has been linked to a memory loss profile similar to that seen in Alzheimer's disease.

Insight impairments range from mild to severe in more than half of those with schizophrenia. Patients with impaired insight are less likely to understand the nature of their mental illness, recognise its symptoms, and comply with therapy, all of which have serious consequences for their health. A U-shaped progression of reduced insight into disease was found in an analysis of the impact of ageing on schizophrenia in adults. Insight is particularly decreased after the first psychotic episode, recovers somewhat by midlife, and then diminishes once again in old age. When comparing older people with schizophrenia to younger patients, the correlation between decreased insight and disease severity and cognition is higher in the former group. Cognitive-enhancing drugs, noninvasive neurostimulation treatments, and early intervention to promote disease insight are all options for treating schizophrenia in the elderly.

Pharmacotherapy

Negative reactions to antipsychotics are more common in the elderly than in younger people. This is due to pharmacodynamic changes that reduce the total amount of neurons with dopamine and D2 receptors per neuron in the brain, as well as pharmacokinetic shifts that increase the sent weight and removal half-life of antipsychotic medications as a result of ageing. Compared to younger patients, older persons with schizophrenia have

extrapyramidal symptoms with lower occupancies of D2 receptors. Parkinsonism, tardy dyskinesia, falls, and the metabolic syndrome are all side effects of antipsychotics that are more common in the elderly. For elderly people with schizophrenia, these side effects may have a devastating impact on their ability to think and operate normally. Antipsychotics are successful in managing psychotic symptoms in older persons with schizophrenia, despite the lack of data and difficulties associated with their use.

Antipsychotic medications should be recommended cautiously, and only at the minimum effective dosage, due to the potential for serious side effects. More than 80% of individuals with stable late-life schizophrenic may safely lower their antipsychotic dose, according to a longitudinal PET research.11 Reduced D2/3 receptor activation resulted in fewer side effects and additional symptoms, decreased hyperprolactinemia, and better clinical symptoms. A further investigation shown that by decreasing antipsychotic doses by as much as 40%, D2 receptor accessibility in the striatum was enhanced. Interventions that aim to improve cognitive abilities in older people with schizophrenia may focus on this improvement since it permits the striatum's D2 receptors to make a more substantial contribution to cognitive function.

Treatment for schizophrenia usually lasts a person's whole life. The long-term prognosis may improve if symptoms are managed early on, before more significant consequences arise.

Non-pharmacologic Psychosocial Interventions

Psychosis may be treated with medication and nonpharmacologic therapies to lessen the severity of symptoms. Repetitive task practise and/or the learning of new strategies are at the heart of cognitive remediation, a behavioural intervention designed to address cognitive deficiencies. Although cognitive remediation is most effective for patients with early stages and earlier than normal-chronic schizophrenia, current programmes may be adapted to meet the cognitive demands of older adults with schizophrenia.

When it comes to helping older persons with schizophrenia with their social relationships, their positive and negative symptoms, and their overall mood, cognitive behavioural treatment is another popular non-pharmacologic intervention. Similarly, social skills treatment has been used to address issues with social interaction, and exercise programmes have been shown to slow the decrease of cognitive abilities and ADLs in this group. The use of handheld devices to aid in the delivery of these psychosocial therapies has the potential to increase their reach in the community.

There are several causes of psychotic symptoms in the elderly. This article discusses pharmaceutical and nonpharmacological approaches to alleviating these symptoms in people with schizophrenia and neurodegenerative diseases. Antipsychotic medication has long been the standard of care for treating psychotic symptoms. It is generally known that atypical antipsychotics are effective in treating both chronic and late-onset schizophrenia, and that these drugs are better suited to the elderly due to their lower risk of adverse effects. Concerns concerning their efficacy in dementia-related psychosis have grown in recent years. It has brought to light the necessity to embrace and develop non-pharmacological approaches, even while the discussion continues over whether an outright ban on their usage is necessary.

Psychosis is characterised by a person's inability to accurately see and understand their surroundings, the development of erroneous ideas, and the emergence of chaotic patterns of language and activity. Psychosis is often used in clinical settings to represent serious mental disorder characterised by pervasive delusions and hallucinations.

There is a broad variety of illnesses that might manifest as psychotic symptoms in the elderly. Symptoms and their clinical presentations are often unique to the underlying illness. Delirium brought on by an illness, substance intoxication, or drug usage may all cause sudden onset psychosis. Psychotic symptoms that last for an extended period of time may be the result of a neurodegenerative disease like Alzheimer's, vascular dementia, Alzheimer's disease with Lewy bodies, or Parkinson's disease, or they may be the result of an elementary psychotic disorder like schizophrenia or bipolar disorder.

Fast Paced Aging in Schizophrenia

Changes in the pharmacokinetics of antipsychotics that occur with age include a greater volume of distribution, a longer half-life before elimination, and a higher percentage of "free" (biologically active) medication in the blood as a result of decreased hepatic protein synthesis. "Also, antipsychotics may be more bioavailable in the brain at a given plasma concentration as a consequence of age-related modifications to the permeability of the barrier between the blood and the brain. The absolute number of neurons that produce dopamine and the density of receptors for D2 in the brain both decline with age, which has implications for pharmacodynamics. Extrapyramidal symptoms have been reported at D2 receptor occupancies as low as 33%-79% in the elderly, compared to 80% in younger people. Parkinsonism, falls, and metabolic syndrome are all adverse effects of antipsychotics that are more likely to occur in the elderly."

The pace of cognitive ageing in individuals with schizophrenia who live in the community seems to be similar to that of the general population, despite the existence of minor baseline cognitive decline that precedes the beginning of the psychotic disease. Schizophrenia often does not manifest until about age 40 in around 20% of elderly and older persons. Late-onset schizophrenia tends to fare better than its early-onset counterpart, and it also needs smaller daily antipsychotic doses. The results of older persons with early-onset schizophrenia are mixed, but curiously, ageing is linked with better psychosocial function, less drug use, fewer or no psychotic symptoms, a lower likelihood of psychiatric hospitalisation, and a higher quality of life in terms of mental health.9 A survivor bias might only account for some of the rise in quality. Only a tiny fraction of people achieve long-term remission from their condition.

Those who acquire schizophrenia in old age and those who were born with the disorder are the two primary categories into which older persons with schizophrenia have historically been placed. Kraepelin, in the early 20th century, was the first to notice that middle age and old age may represent the onset of the quasi-affective psychosis in young people that he termed "dementia praecox." The term "late-onset schizophrenia" was first used by Bleuler to characterise a condition similar to schizophrenia that manifests in elderly people without the presence of organic neurological conditions or amnestic syndrome.

Since then, the diagnosis and categorization of dementia-related psychosis have been hotly contested. Others stress the dissimilarities in aetiology, phenomenology, and outcome, while yet others stress the parallels between the early-onset and late-onset diseases. It was decided to keep using the term schizophrenia for both the early-onset and late-onset diseases on the basis of study findings on symptoms, genealogy, brain imaging investigations, and the type of the cognitive abnormalities seen. In contrast, the term "late-onset sickness" was further broken down into "late onset" (first symptoms appearing after the age of 40) and "very late onset" (first symptoms appearing after the age of 60).

Conclusion

Research possibilities exist due to various significant gaps in our understanding of schizophrenia in older adults. Treatment choices, prognosis, and the development of new treatment regimens might all be aided by a better understanding of the neurobiology underpinning the clinical diversity of early-onset schizophrenia. There needs to be more research into the causes of late-onset schizophrenia, particularly the reasons why women are more likely to be affected than males. Finally, developing medications to alleviate cognitive deficiencies in older persons and understanding the molecular processes causing cognitive impairment in schizophrenia should also be prioritised. The present understanding of schizophrenia in older people indicates a distinct health status compared to those diagnosed at a younger age. Improving deficits in older persons with schizophrenia requires further study into the neurobiology behind its clinical characteristics as well as the development of unique age-appropriate services and therapies.

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