

Role of Trauma in Psychosis and Its Possible Treatment

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Abstract

Psychosis is considered to be the amalgamation of various symptoms that can result in losing contact with reality. Exposure to trauma can lead to the development of psychotic symptoms, such as depression, hypervigilance, flashbacks, paranoia, hallucinations, delusions and so on. The paper aims to explore the role of trauma in psychosis and its possible treatments. Adopting a secondary, qualitative study design, the paper analyses the role of trauma in psychosis. The deductive approach has further helped the study to make logical assertions on the degree of psychosis experienced by patients faced with severe trauma. The results indicate a significant correlation between trauma and psychosis, with negative schema, and rumination as mediators. The four major symptoms related to psychosis are disorganisation, delusion, hallucination and paranoia. Childhood trauma can be manifested as rumination and negative schema leading to suicidal ideation among patients with early psychotic symptoms. Furthermore, childhood trauma is also related to alterations of the brain related to its function and structure and a deficiency of basic neurocognitive abilities. The current treatment models available for psychosis are related to therapeutic sessions, antipsychotic medicines and social support. CBT is considered to be the most beneficial treatment model for psychosis.

Keywords

Psychosis, trauma, CBT, antipsychotic medication, treatment model.

INTRODUCTION

Exposure to trauma has a significant impact on the human psyche. The ability to cope with adverse life events can lead to various types of mental issues such as psychosis. PTSD from childhood can reflect upon the lack of proper mental development of an individual. On the other hand, traumatic experiences among adults can be manifested as hypervigilance, delusion, flashbacks and so on that can significantly impact the quality of life. Population-based research has suggested that childhood trauma can be a high-risk factor for the development of psychosis leading to various biological dysfunctions as well such as increased sensitivity, stress and dysregulated cortisol [1]. The quality of life among psychotic patients is also seen to deteriorate, as they are more prone to substance abuse, depression, suicidal attempts and anxiety. Therefore, trauma, in all its varying degrees, is highly critical for the patients and proper medical treatment and intervention are needed to ensure positive outcomes are achieved.

Psychosis is considered to be the amalgamation of various symptoms that can result in losing contact with reality. Various psychotic episodes among people who are not properly diagnosed or treated can lead to long-term psychotic symptoms impacting the overall health of the patient. It is reported that despite 1.5%- 3.5% of people meeting the criteria for psychosis treatment, a larger segment of people experiences psychotic episodes at some point in their lives at least once [2]. Psychosis is considered to be a common aspect of various neuropsychiatric, psychiatric,

neurodevelopmental, neurologic and medical issues. Psychosis is also related to various types of schizophrenia, along with other types of psychotic disorders. It is further stated that first-time psychosis episodes are around 50 in 100000 people while 15 in 10000 people are identified with incidents of schizophrenia [2]. Therefore, psychosis, especially trauma-related psychosis can be highly critical for patients, endangering their well-being as well as those around them.

Treatments for PTSD and psychosis are required to be effective to manage the symptoms on a long-term basis. Trauma-focused psychotic treatments can provide positive results [3]. The trauma-focused treatment is solely focused on reducing the impact of traumatic experiences with therapeutic approaches for identifying and accepting the experience and continuing further with life. In essence, the current treatment for psychosis is related to the prescription of antipsychotic medicine, therapy and social support. However, the effectiveness of traditional treatment must be evaluated.

The process of recovery for psychotic patients is challenging and complex. The current treatment model is specifically designed for ameliorating symptoms and skill deficiencies while challenges of self-experience and subjectivity are not addressed [4]. Considering the challenges of psychosis treatment as the problem of the study, the researcher aims to explore the role of trauma in the development of psychosis. Analysis of various types of treatments for psychosis is also conducted to indicate the most effective treatment model for the patients.

LITERATURE REVIEW

Analysing the development of psychosis due to trauma

Symptoms of psychosis can be related to various types of traumas as these diverse events in life can create intense negative emotions, impacting the ability to associate with reality. Distancing from reality, a patient with psychosis creates a delusional or imaginative world which leads to further psychological problems. Adverse experiences during childhood are more commonly seen among special needs children who may face bullying during their developmental stages [5]. Individuals with specific chromosome architecture, especially 22q11.2 deletion syndrome (22q) face various types of difficulties related to physical development that can lead to higher levels of bullying [5]. These individuals are also prone to developing various psychosis-related disorders and schizophrenia [5]. Therefore, a correlation between psychotic disorders and trauma and stress is identified as childhood experiences of bullying leading to maladaptive functioning risks and psychotic disorders.

Patients of schizophrenia, who have experienced childhood trauma and reported adult suicidality to create a significant correlation between the two. Childhood trauma is capable of leaving a significant imprint on the human psyche as the inability of understanding the cause of the diverse event and lack of control among children creates complex, negative emotions. Childhood trauma can be manifested as rumination and negative schema leading to suicidal ideation among patients with early psychotic symptoms. Based on a study including 314 patients with signs of early psychosis, 90.1% of the participants have experienced childhood trauma in the form of physical punishment (37.3%), sexual events (6.4%) and emotional abuse (35.6%) [6]. Depression, rumination and negative schema are indicated as mediators for suicidal ideation as the patients are more vulnerable to the emotional turmoil of the adult's life. Hence, trauma experienced in childhood can impact the healthy development of mental and physical properties, reducing their ability to participate as sound and active members of society.

Experiencing trauma during the early years of an individual's life can increase the possibility of developing psychosis. Hallucinations, paranoia and delusions can be experienced due to childhood trauma. Emotional dysregulation, dissociation and PTSD symptoms such as hyperarousal, numbing and avoidance play a mediating role between the development of hallucinations and trauma [7]. Additionally, mental constructs of specific meanings can be associated with the negative schemata that contribute to the development of psychosis manifested through various symptoms. The role of childhood trauma in the development of psychotic-like experiences, indicating that childhood trauma has a direct correlation with cognitive biases and cannabis use among adults with adverse childhood trauma [8]. These two factors can develop various types of

psychotic-like experiences that impact the reasonability and senses among adults. Childhood trauma based on various types of sexual physical and emotional abuse as well as negligence is often related to the development of low self-efficacy and emotional stability. Therefore, prolonged exposure to childhood trauma can be reflected in the inability of individuals to understand reality as it is. Psychotic symptoms can be of various degrees and exposure to frequent traumatic experiences without proper support can have a significant impact on the development of high levels of Paranoia delusion anxiety depression and so on.

Analysis of symptoms of psychosis among patients

Various symptoms of psychosis among patients are reflected in their attitudes, behaviour and actions. In many cases, childhood trauma can impact the brain structure through oxidative stress. The level of blood glutathione peroxidase activity that is involved in the production of peroxides is considered among traumatic patients, indicating that psychotic patients with high blood oxidation possess a smaller hippocampal volume which is further associated with severe symptoms of psychosis [9]. Lower levels of oxidation status contribute to better cognition among patients along with the activation of peroxiredoxin or antioxidant thioredoxin system.

Cognitive behaviour among psychotic patients is impacted by traumatic experiences. Childhood adversity has a significant correlation with psychosis. Various biological and psychological pathways can be identified as the mediator of psychotic symptoms. Negative cognition is linked with psychosis and such negative schema is considered to be a symptom of the disorder along with PTSD [10]. However, proper biological mediators for psychotic symptoms are not studied adequately. Various measures for intervention utilising the cognitive behavioural approach and pharmacological suggestions are made for mitigating these symptoms.

Hallucinations, confusion, disturbed thoughts and delusions are associated with psychotic episodes among patients. Hallucinations can be associated with sight, sound, smell, taste and touch. On the other hand, delusions are the unshakeable belief of a false notion or thought that can lead to stressful situations for the patients. The four major symptoms related to psychosis are disorganisation, delusion, hallucination and paranoia [11]. Dissociative phenomena are also related to hallucinations that can impact the quality of life of patients. Lack of understanding among patients experiencing psychotic episodes in the early stages of diagnosis experience high levels of stress and anxiety. Therefore, the symptoms through which diagnosis is made are dependent on the observation of both psychological and biological discrepancies.

Available treatment for psychosis

The current treatment models available for psychosis are related to therapeutic sessions, antipsychotic medicines and

social support. Certain variations among the treatment models nowadays reflect the development of holistic care as both psychological and biological treatments are provided to the patients. Schizophrenia, for example, is a global mental health issue that can debilitate without proper care. “Dopamine D2” receptor antagonists, introduced in the 1950s had transformed the treatment of psychosis [12]. However, the consequent side effects of antipsychotic medicines can be long-term, imparting the overall health of patients. Cannabidiol (CBD) which is a non-intoxicating constituent of cannabis is proposed as an antipsychotic medication with beneficial potential [12] Thus, the current medication for psychosis can be replaced with opinions that have lesser side effects.

The development of a preventive treatment framework for the early onset of psychosis is considered for clinical high-risk psychosis patients. Study results reveal that functionally impaired individuals have a 20% risk of developing psychotics at 12 years of age [13]. The triggers from childhood trauma require an innovative treatment model to ensure that childhood trauma is treated to prevent it from developing into psychosis during adult life utilising a hype cycle. The treatment structure is reliant on the development of preventive measures that have long-term effects for those with higher clinical risks. Therefore, the available models for treatment hold significance for positive outcomes, however, they can be improved further to reduce the side effects associated with medications.



Figure 1. preventive treatment structure for psychosis (hype cycle) [13]

METHODOLOGY

The methodological structure of the paper follows a qualitative and deductive approach. The process of data collection and interpretation is conducted by the development of a framework that informs evidence-based and scientific conclusions. The qualitative approach adopted for the study helps to design the descriptive framework which contributes to the analysis of data based on the aim of the study. On the other hand, the methodological structure of the paper relies on the analysis of secondary sources that contribute to presenting a comprehensive and multidimensional

evaluation. The deductive approach is an effective syllogistic reasoning for data analysis that is based on the formation of hypotheses based on proven theories and information. In essence, the deductive approach to the study in conjunction with the descriptive study design has contributed to the research work significantly. The deductive and qualitative approach has helped the researcher to analyse and interpret diverse and robust secondary sources, based on which specific findings and conclusions are made.

The secondary data collection technique included the development of a keyword-based search in various electronic databases such as Google Scholar, PubMed, ProQuest and so on. Purposive sampling technique for establishing certain inclusion-exclusion criteria which included the collection of peer-reviewed journal articles, newspaper articles, medical reports, books and so on, published in the last 5 years, published in the English language and accessible in full-text pdf format, is adopted for the study. Based on the data collection methodology, reliable, relevant and scientific resources were gathered. However, as the paper specifically aimed at collecting recent data for the topic, resources from books were not collected in sufficient quantity. The collected data were analysed using a thematic analysis strategy that helped in categorising the topic according to the critical points associated with it. The data analysis technique for the study helps the researcher to gain insight into the role of trauma in the development of psychosis and the available treatment models for it. The validity and reliability of the paper are maintained based on the methodological structure that provided the paper with sufficient support to conduct scientific and logical analysis.

FINDINGS AND DISCUSSION

Role of trauma in psychosis

Childhood trauma enhances the risk of psychosis significantly, manifested through the development of various symptoms that require proper medical attention. Aberrant salience and self-disturbances are related to childhood trauma and the development of psychotic experiences among individuals [14]. Childhood trauma and abuse have a mediating role which is further affected by gender. Furthermore, childhood trauma is also related to alterations of the brain related to its function and structure and a deficiency of basic neurocognitive abilities. The risk factors associated with childhood trauma and psychosis explain the significant role of unresolved trauma in the development of negative experiences.

On the other hand, mediators of psychosis are related to early traumatic experiences that contribute to the development of cognitive biases, depression and resilience. There is a significant correlation between childhood trauma, depression, resilience, cognitive biases and psychosis-like experiences [15]. In essence, the mediators of psychosis or psychotic experiences among young people can create severe impacts on the neurological pathways, decreasing the

possibility of successful treatments. Similarly, dissociation is identified as the initial defensive response to traumatic experiences and acute stress which can contribute to the impairment of memory and distortion of meanings [7]. Exposure to childhood trauma can further be identified as the cause of anxiety. Individuals experience distortion of meaning and consider neutral environmental stimuli as threats prompting Paranoia and delusions.

Schizophrenia spectrum disorder (SSD), is a psychotic disorder it's caused by various environmental factors and genetic susceptibility. The factors related to the external environment such as trauma, substance abuse and so on are correlated with psychosis among individuals. Childhood trauma and substance abuse are associated with Schizophrenia spectrum disorders (SSD) [16]. Traumatic experiences induce high levels of stress and anxiety along with the feeling of losing control over the said experience. The inability to accept and cope with the traumatic experience is manifested as psychotic symptoms that lead to delusions, hallucinations or detachment from it. Based on a clinical study, 87.5% of respondents met the Diagnostic criteria for post-traumatic stress disorder manifested through the symptoms of hyperarousal, avoidance, re-experiencing, auditory hallucinations, delusions and trauma-related meaning generation [17]. These symptoms are indicative of trauma-related beliefs that influence the human cycle. It is also related to the development of hypervigilance and flashbacks. Therefore, it can be stated that psychological mechanisms and psychotic symptoms have a significant correlation with trauma-related beliefs.

Experience of personal loss can be traumatic for individuals with inadequate social support leading to anxiety, delusions and other such symptoms. Bereavement hallucinations (BHs) are identified among individuals, facing distress due to the inability to cope with the loss and loneliness [18]. In essence, bereavement can produce high levels of stressful emotions that can lead to psychosis, primarily associated with the inability to accept the reality of loss. On the other hand, the relationship between trauma with auditory hallucinations, indicating that it holds a dynamic and an arbitrary relationship for some cases there is a correlation between the two while in some cases there is no correlation [19]. The role of trauma in increasing the risk of psychosis among the population is exposed to intensely traumatic experiences are more likely to block out the experience or suppress it which may lead to dissociative and schizophrenic symptoms. Therefore, it can be stated that the role of trauma in psychosis is acknowledged by multiple studies as the experience itself damages the ability of healthy psychological functions and brain structure.

Interventions and treatment models for psychosis

The approach for treatment differs based on the specific requirements of the patient. Various types of approaches to therapy can be adopted for psychotic patients in order to ensure that positive results are achieved. The approaches for

intervention include cognitive-behavioural, humanistic, psychodynamic, psychoeducation and third-wave approaches [20]. Family interventions are also considered to be positive approaches for long-term results. Family intervention based on psychoeducation can significantly reduce the risk of re-hospitalization and relapse. On the other hand, CBT is effective in reducing the distress associated with various psychotic symptoms. Mindfulness-based approaches further help the patient to accept and move past their traumatic experiences and develop social and metacognitive skills supported by their surrounding environment. Therefore, the approaches for therapeutic interventions can provide multidimensionality to the therapeutic processes.

Cognitive behavioural therapy, metacognitive reflection insight therapy (MERIT) and metacognitive training is regarded as effective therapeutic approaches for treating psychosis. Therapeutic approaches based on CBT and metacognitive training help to increase awareness among patients and acknowledge their thoughts meaningfully [21]. Emotional regulation and stability of cognition are facilitated with this approach. This intervention model helps to address the core beliefs and thoughts that had been suppressed due to exposure to trauma. On the other hand, evidence-based studies on the waiting time for treatment of mental health services in England are related to patients' health as a longer period of treatment with a prolonged waiting period deteriorates early psychotic symptoms [22]. Therefore, the intervention model for psychosis should be efficient, effective and based on cognitive and metacognitive approaches to achieve positive results.

In recent times, the prescription of medication for psychosis is being debated among medical professionals due to evidence of side effects among patients. However, medication is essential in specific cases where the probability of mental deterioration is higher. Antipsychotic treatment can reduce the risk of relapse among patients for up to 24 months while discontinuation is linked with an increased risk of relapse [23]. Experiencing relapse can reduce the possibility of recovery due to stress factors among patients. The prescription of antipsychotic medication for first-time incidents is required to be controlled and certain guidelines for prescription are also emphasised in the UK [24]. Psychological interventions based on therapy and social support are more prominently suggested to ensure that the treatment of psychotic patients is long-term and holistic.

Benefits of therapeutic approaches the treatment of trauma-based psychosis

Therapeutic approaches help to empower the patients in the knowledge of their thoughts and feelings in a meaningful and stable manner. Different therapeutic approaches are considered to be effective as it addresses the long-term health goals among individuals experienced with PTSD. Therapy for patients struggling with PTSD and depression are benefited from cognitive processing therapy (CPT) as it helps to reduce stress levels due to the beneficial therapeutic tools

used in CPT [25]. In essence, cognitive processing therapy in conjunction with knowledge-building programs and social support can individuals by developing their ability to cope with first live events. Therapeutic intervention is also considered to be effective due to the scope of long-term and holistic mental health improvement. Enabling psychotic patients to feel in control of their own life helps to generate positive emotions [26]. In recent years, digital therapeutic relationships and monitoring facilities are also provided to ensure that symptoms of psychosis are monitored and proper therapeutic intervention is provided promptly.

Cognitive Analytic Therapy (CAT) is considered to be beneficial for psychological interventions. CAT is an acceptable and safe intervention for psychosis as it contributes to the integration of positive personality traits and facilitates recovery [27]. The outcomes of this therapeutic intervention help to guide the patient towards making recovery gradually and sustainably. Consistent exposure to positive therapeutic interventions helps the patients to develop cognition, indicating a significant reduction of anxiety, stress and other forms of delusions. However, it must be stated that the benefits of therapeutic intervention are limited to the early stages of psychosis and severe symptoms among patients are required to be mitigated with proper prescription of antipsychotic medication along with therapeutic intervention.

DISCUSSION

Based on the above findings, it can be stated that the role of trauma in the development of psychotic symptoms among individuals has a prominent correlation. Trauma, experienced during childhood, such as bullying, negligence, emotional, physical and sexual abuse and so on can create mental disturbances that impact the overall behaviour and action of an individual. The symptoms of psychosis are manifested through depression, anxiety, hallucinations, delusions and confused thought patterns. Various psychotic episodes among people who are not properly diagnosed or treated can lead to long-term psychotic symptoms impacting the overall health of the patient. It is reported that despite 1.5%- 3.5% of people meeting the criteria for psychosis treatment, a larger segment of people experiences psychotic episodes at some point in their lives at least once [2]. It is also indicated that meaning construction among patients is related to their traumatic experiences. Therefore, the ability to understand the truth and cope with reality is significantly reduced among psychotic patients.

On the other hand, psychosis is experienced among individuals on a larger scale at least once in their lives. A lack of proper understanding of mental health further limits the ability of individuals to seek help. The severity of psychotic symptoms can damage the structural and functional brain development among individuals. Treatments for PTSD and psychosis are required to be effective to manage the symptoms on a long-term basis. The long-term negative impact of psychosis among patients is damaging, creating

separation from reality through detachment and dissociation. Therapeutic interventions such as CBT, CPT, metacognitive training and so on along with the prescription of antipsychotic medications and social support are considered to be effective treatment models for psychotic patients. Therapeutic interventions during the early stages of psychosis are considered to be beneficial for stabilising the pattern of feeling and thought regulation among psychotic patients. Emotional regulation and stability of cognition are facilitated with this approach. This intervention model helps to address the core beliefs and thoughts that had been suppressed due to exposure to trauma. Therefore, it can be stated that the significant role of trauma in the development of psychotic symptoms should be addressed through the development of an effective treatment model that includes cognitive behavioural approaches for therapeutic intervention and reliance on medication is decreased to ensure that holistic improvement is achieved.

CONCLUSION

Experiencing trauma during childhood or adulthood can contribute to the development of psychotic symptoms. unresolved trauma can lead to the development of PTSD, impacting the quality of life among patients. Trauma can lead to anxiety, stress, hypervigilance, paranoia, hallucinations, confusion, schizophrenia and so on. development of suicidal thought patterns is also related to trauma-based psychosis. The paper, exploring the role of trauma in psychosis and its treatment methods considers the different types of traumas in the development of various types of psychotic symptoms. Patients of schizophrenia, who have experienced childhood trauma and reported adult suicidality create a significant correlation between the two. Depression, rumination and negative schema are indicated as mediators for suicidal ideation as the patients are more vulnerable to the emotional turmoil of the adult's life.

The treatment for psychosis is based on the prescription of antipsychotic medications, psychological therapy and social support. During severe psychotic episodes, antipsychotic medications are prescribed, especially for schizophrenia. The cognitive behavioural therapy approach is considered the most beneficial one as it helps to empower the patients and regulate their thought patterns. On the other hand, psychotic education for meaningful family interventions is also important to ensure that identification of early psychosis is possible. These treatment approaches help to reduce the risks of relapse by improving the neurological pathways of psychosis. Therapeutic interventions are nowadays provided with more importance as certain antipsychotic drugs can have side effects on patients. Effective therapeutic intervention focuses on the development of cognition and the ability to cope with adverse life events. Therefore, it is concluded that trauma plays a significant role in psychosis and the current model of treatment can help in achieving positive outcomes through therapeutic interventions and medication.

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