

# A Case of Schizophrenia in a Young Female Following Unsuccessful Civil Service Exam: The Influence of Environmental Factors and Public Awareness on Patient's Progress

Xinxi Chen\*

The University of Hong Kong, Hong Kong 999077, China

\*Corresponding author: Xinxi Chen, c.cichen79@gmail.com

**Copyright:** © 2023 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

**Abstract:** Schizophrenia is a severe mental disorder affecting patients' cognition, perception, emotion, linguistics, behavior, and sense of self. Both early detection and interventions are crucial for treatment outcomes. Furthermore, the causes of schizophrenia remain uncertain, with identified links to hereditary, brain chemistry, and physiological factors. This article presents a case study of a young Chinese woman diagnosed with schizophrenia, highlighting the potential influence of environmental exposures as an additional factor. The article also examines the impact of public knowledge on perpetuating stigma around psychosis and its effects on treatment efficacy.

Keywords: Schizophrenia; Environmental exposure; Psychotic stigma

Online publication: September 28, 2023

# 1. Introduction

Schizophrenia is a chronic and severe psychological disorder that affects cognition, perception, emotion, linguistics, behavior, and sense of self aberrations, thus affecting the patients' daily life<sup>[1]</sup>. The classic expressions of schizophrenia could include hallucination, delusion, disorganized speech, or behavior for positive symptoms while also experiencing some negative symptoms for behavioral deficits<sup>[2,3]</sup>.

Since schizophrenia is characterized as a chronic disease that affects patients' lives, the forward discoveries and interventions for mental disorder patients at an early age are fundamental. Meanwhile, the stigma against mental disorders could be one attribute influencing treatment outcomes. Specifically, public belief, acceptance, and relevant information can affect a patient's diagnosis and treatment efficiency <sup>[4]</sup>. Correspondingly, social and family environments could affect the mental health of youth and adolescents or their attitude towards treatment.

Public environments can not only affect the efficacy of a treatment, but it also might be a potential cause schizophrenia. The causes of schizophrenia are complex and not fully understood, arising from a combination of factors and interactions across different stages of life <sup>[5]</sup>. These correlations include heredity,

brain chemistry, and physiology <sup>[6-10]</sup>. Besides the above three components, environmental factors could also cause schizophrenia, especially for younger generations. For instance, urbanization, trauma, and social injustice are common environmental factorsAt the same time, certain social stimuli can impact an individual's mental health, especially among youth who may have limited tolerance for depression <sup>[11]</sup>. According to a demographic publication by the World Health Organization on schizophrenia, it has been noted that around 0.45% of patients are typically found among adults, with a higher risk observed between their twenties and late adolescence <sup>[11]</sup>. Consequently, there is value in assessing the impact of environmental exposures on the experiences of individuals with schizophrenia.

This paper aims to explore how environmental factors and public awareness can influence the experiences of individuals dealing with schizophrenia. This will be done through a detailed case study of a young Chinese woman who developed schizophrenia under the weight of family expectations to excel in civil servants' exams. The discussion will then delve into how environmental factors and public knowledge, along with the associated stigma surrounding mental health, play a role in this case.

### 2. Case presentation

A female adult in China who had been suffering from schizophrenia was presented to the hospital for in 2023. The factors contributing to her mental disorder revolve around her societal pressures and family dynamics. In China, pursuing a career as a civil servant is highly valued, driven by the stable income, social benefits, and elevated status it offers. In her case, the compulsive demands from her parents to succeed in this path played a significant role in her mental health struggles. The popularity of this job causes a high failure rate for civil servant tests due to countless competitors for limited spots. She stated that stressful situations could aggravate her symptoms, which was prominent after she failed the civil servant test five times.

The patient started preparing for the civil examination after graduating university in 2018 under her parents instructions. She was not allowed to explore other career options. As a result, she failed the examination 5 times. According to her account, her five years were dominated by relentless and high-pressure studying, devoid of any social activities or entertainment. This monotonous routine led to mounting frustration due to consistent exam failures, coupled with incessant criticism from her parents. These factors culminated in emotional changes in 2022. Specifically, she exhibited early signs of schizophrenia, including isolation and heightened depressions. For instance, she consistently isolated herself in her bedroom, refusing to engage in social interactions or spontaneous activities.

Initially, her parents overlooked her psychological symptoms, leading to a lack of treatment and a worsening of her mental health. A year later, her condition deteriorated further, with the patient exhibiting heightened nervousness and irrational reactions during conversations with her parents. This was accompanied by frequent episodes of mumbling and unconscious dancing. Furthermore, she exhibited positive symptoms such as delusions, which were prominent in her behavior. For example, she repeatedly presented herself as a genius and the director of a bureau in public settings, showcasing classic examples of grandiose behavior. She was then sent to the hospital, where she got diagnosed with schizophrenia. It was an unexpected result for the parents and they felt ashamed about it. The patient was admitted to the hospital one year after the initial signs of schizophrenia appeared. She underwent a treatment regimen that primarily included drug therapy and psychotherapy. This approach aimed to manage her symptoms more effectively and achieve better control and outcomes.

# 3. Discussions

This case reflects the potential impact of environmental factors on the development of schizophrenia. It indicates that environmental factors can modify the outcome of schizophrenic patients, even in the presence of genetic predisposition, highlighting the role of environmental interventions in influencing the occurrence of schizophrenia <sup>[8]</sup>. In this case, the initial trigger was the failure of the civil servants' examination, which led the parents to force their daughter into retaking the test many times. The challenging reality of a low pass rate among a large number of participants competing for a limited number of positions led young adults to shift their career paths, opting instead to explore other job opportunities in a highly competitive job market. Likewise, the patient's persistent frustration resulting from five consecutive test failures, coupled with the intense academic pressure and limited opportunities for leisure and socializing, could have contributed to the development of schizophrenia. The excessive anxiety and depression triggered by these external stressors, especially considering the challenges of managing stress at a young age may have played a significant role in the emergence of prominent schizophrenia symptoms <sup>[12]</sup>.

Additionally, family environmental factors could also have played a role in the outcomes. For instance, in this case, the parental insistence on dictating their child's career path may have contributed to the gradual development of the patient's schizophrenic symptoms. The patient's parents forced her to participate in the fierce competition of civil examination as soon as she graduated, with great persistence. However, when she failed the test, it severely impacted her confidence, and she was scrutinized by her parents, which affected her bond with them. Based on Freud's theories of defense mechanisms and energy systems, the suppressed emotions unconsciously stored within her as undischarged energy, shielding her from the hurtful remarks by her family. This repressed emotion then emerged as a defense mechanism, safeguarding her for five years. This process is evident in her early signs of schizophrenia, manifested as depression and isolation in 2022 <sup>[13]</sup>. Therefore, this shows that an unhealthy family environment could also interfere with the outcome of a schizophrenic patient.

Besides, public opinion and knowledge towards mental diseases could also affect the outcome of schizophrenic patients. In this case, the patient exhibited atypical emotions and behaviors, including isolation and depression, which often go unnoticed but align with early signs of schizophrenia <sup>[14]</sup>. However, the lack of awareness from her parents exacerbated her symptoms. Her condition escalated, leading to the emergence of delusions after delayed treatment. It was only a year later when she began displaying frequent irrational behaviors, such as delusions of grandeur, that her parents recognized her unusual behavior and sought medical attention. This ultimately led to the diagnosis of schizophrenia. However, upon receiving the diagnosis, the patient's parents exhibited low acceptance and shame, reflecting a broader issue of limited public understanding and stigma surrounding mental illnesses <sup>[4]</sup>. This lack of acceptance and stigma can result in insufficient community support for patients who are denied medical treatment <sup>[15]</sup>. Meanwhile, early detection and intervention are vital for schizophrenia due to its chronic and recurrent nature, allowing for symptom management and an improved quality of life for patients <sup>[4,15]</sup>. Hence, it is crucial to raise public awareness about mental health acceptance and accurate knowledge to foster an inclusive social environment that facilitates better treatment outcomes.

# 4. Conclusion

This case underscores the significant impact of environmental factors on the onset of mental disorders and highlights the need to address the lack of public awareness and social-cultural attitudes that can affect the wellbeing of individuals with such disorders. This includes reducing stigma to ensure effective treatment. Therefore, it is important to initiate public discussions about appropriate family responses when dealing with changing social contexts, as illustrated by the findings in this case. Moreover, society should give more attention to recognizing the mental health journey of young adults and fostering a basic understanding of early signs, which can contribute to timely interventions in potential cases.

### **Disclosure statement**

The author declares no conflict of interest.

# References

- [1] World Health Organization, 2022, Schizophrenia, viewed July 1, 2023, https://www.who.int/en/news-room/fact-sheets/detail/schizophrenia.
- [2] Opare-Addo MN, Mensah J, Aboagye GO, 2020, A Case of Schizophrenia in a Young Male Adult with No History of Substance Abuse: Impact of Clinical Pharmacists' Interventions on Patient Outcome. Case Reports in Psychiatry, 2020: 3419609. https://doi.org/10.1155/2020/3419609.
- [3] Tandon R, Gaebel W, Barch DM, et al., 2013, Definition and Description of Schizophrenia in the DSM 5. Schizophrenia Research, 150(1): 3–10.
- [4] Gearing RE, Chen W, Kathryne B, et al., 2022, Examining public stigma of schizophrenia in China, China Journal of Social Work. https://doi.org/10.1080/17525098.2022.2079164.
- [5] Howes OD, McDonald C, Cannon M, et al., 2004, Pathways to Schizophrenia: The Impact of Environmental Factors. International Journal of Neuropsychopharmacology, 7(Suppl 1): S7–S13.
- [6] Arnold SE, 1999, Neurodevelopmental Abnormalities in Schizophrenia: Insights from Neuropathology. Development and psychopathology, 11(3): 439–456.
- [7] Pickard B, 2011, Progress in Defining the Biological Causes of Schizophrenia. Expert Reviews in Molecular Medicine, 13: e25, https://doi.org/10.1017/S1462399411001955.
- [8] Tsuang M, 2000, Schizophrenia: Genes and Environment. Biological Psychiatry, 47(3): 210–220.
- Keshavan MS, Tandon R, Boutros NN, et al., 2008, Schizophrenia, "Just the Facts": What We Know in 2008, Part 3: Neurobiology. Schizophrenia Research, 106(2–3): 89–107.
- [10] M'Barek L, Mercy G, Gautier C, et al., 2022, Frontal Lobe Functions in Schizophrenia: Interest of the Stuss Approach. Brain and Cognition, 160: 105878. https://doi.org/10.1016/j.bandc.2022.105878.
- [11] Gomes FV, Zhu X, Grace AA, 2019, Stress During Critical Periods of Development and Risk for Schizophrenia. Schizophrenia Research, 213: 107–113. https://doi.org/10.1016/j.schres.2019.01.030.
- [12] Moustafa AA, Tindle R, Frydecka D, et al., 2017, Impulsivity and its Relationship with Anxiety, Depression and Stress. Comprehensive Psychiatry, 74: 173–179, https://doi.org/10.1016/j.comppsych.2017.01.013.
- [13] Freud S, Kistner U, Haute P, et al., 2017, Three Essays on the Theory of Sexuality: The 1905 Edition, Verso Books, London.
- [14] Häfner H, 2000, Onset and Early Course as Determinants of the Further Course of Schizophrenia. Acta Psychiatrica Scandinavica, 102(s407): 44–48.
- [15] Jorm AF, 2000, Mental Health Literacy: Public Knowledge and Beliefs about Mental Disorders. The British Journal of Psychiatry, 177(5): 396–401.

#### Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.