



Review paper

# Understanding and Addressing the Stigmatization of Schizophrenia:

## Causes, Public Perceptions, and the Role of Media and Healthcare Professionals

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### ABSTRACT

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The stigmatization of schizophrenia represents a significant societal challenge that impacts the individuals living with the disorder. Stigma often arises from a lack of understanding, perpetuated by media portrayals and cultural narratives that associate schizophrenia with violence and unpredictability. Addressing stigma requires comprehensive public education, advocacy for policy changes, and the promotion of narratives that highlight the lived experiences of individuals with schizophrenia. Through these efforts, we can foster a more inclusive society that recognizes the complexities of mental health and encourages recovery and understanding. This article explores the multifaceted nature of stigma, including public misconceptions, discrimination, and the internalization of negative perceptions by those affected.



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Furthermore, while many professionals aim to provide compassionate care, some may inadvertently reinforce stereotypes through biased language, diagnostic labels, or inadequate understanding of the disorder. This can lead to negative patient experiences, discouraging individuals from seeking help. As a result, individuals may face barriers in accessing treatment, employment, and social support, exacerbating their isolation and worsening mental health outcomes.

By identifying the sources and consequences of stigma, this article aims to contribute to the development of more inclusive, empathetic, and effective approaches to treating schizophrenia, ultimately improving the lives of individuals living with the disorder.



### 1. Introduction

Schizophrenia is a serious mental health disorder that exerts a deep impact on how a person thinks, feels and behaves. Its influence leads to a mix of disorganized thinking, delusions and hallucinations. Psychosis, which combines negative symptoms (e.g., diminished emotions, speech, and interest) with positive symptoms (e.g., hallucinations and delusions), and disorganization symptoms, e.g., distorted

syntax and behaviour, is a defining hallmark of schizophrenia.

There is also a prevalence of severe mood symptoms including manic and depressive episodes. Hence these symptoms lead a person with schizophrenia to lose touch with reality (Gejman, et. al., 2010). It consists of a median lifetime prevalence of 4.0 per 1000 and a pathological risk of 7.2 percent per 1000. The onset age is calculated to be adolescence or early adulthood but for it to show up

after the age of 50 or in childhood is found to be rare. Another important thing to be understood is that the course of the disorder is found to be much more severe in males alongside an earlier onset of it. (Gejman, et. al., 2010).

Mental health professionals (MHP) also play a crucial role in stigma reduction by promoting education, fostering open communication, and advocating for their patients. By challenging misconceptions and adopting person-centred approaches, professionals can help dismantle stigma, encouraging a more supportive environment for those with schizophrenia. Ultimately, addressing the dual role of mental health professionals in both perpetuating and alleviating stigma is essential for improving the lives of individuals affected by this complex condition.

In this article, the authors explore the various facets of stigma surrounding schizophrenia and examine the implications of these stigmatizing attitudes on individuals' access to care, social integration, and overall quality of life. Specifically, this article seeks to:

- i. Investigate the role of public misconceptions and media portrayals in perpetuating the stigma of schizophrenia.
- ii. Examine the internalization of stigma by individuals with schizophrenia and its impact on mental health, treatment adherence, and recovery.
- iii. Assess the role of mental health professionals in both contributing to and alleviating stigma within healthcare settings.
- iv. Propose strategies for reducing stigma at multiple levels, including through public education, media reform, and professional training.

For this article, a comprehensive search of peer-reviewed articles, books, and reports related to schizophrenia, stigma, and mental health is conducted. Both qualitative and quantitative studies are included. The findings are synthesized into thematic categories, allowing for a comprehensive understanding of the current state of research on stigma in schizophrenia.

## 2. Causes of Schizophrenia

### 2.1 Genetic factors regarding schizophrenia

#### 2.1.1 DTNBP1 and NRG1

Throughout the years, from various case studies, it has been observed that Schizophrenia's genetic basis is complex, involving multiple genes, such as 'Dystrobrevin Binding Protein 1' (DTNBP1) and neuregulin 1 (NRG1). Hence, it has been reported to belong to a group of pathologies known as complex genetic disorders. Moreover, as per the research,

epistatic interaction between these genes and their products and interactions with the environmental risk factors are also considered highly plausible (Luvsannyam et. al., 2022).

#### 2.1.2 The age of onset (AAO)

The findings of the genome-wide association study (GWAS) era study, which linked several genetic regions to the onset age, were rarely repeated. Whereas, in the post-GWAS era, a new conceptual framework is required to clarify the role of onset age in genetic research in Schizophrenia and also to identify its genetic basis. According to GWAS recently, the meta-analysis that was conducted by the psychiatric genomics consortium (PGC), nearly 300 single nucleotide polymorphisms (SNPs) have been identified as susceptibility variants for Schizophrenia (Zhan, et. al, 2023). To elaborate it better there needs to be an understanding of the age of onset (AAO); It is the age at which psychosis initially manifested itself. On the other hand, it has also been suggested that AAO is the age at which the first "morpho-functional pathological process" manifests itself. For instance, it has been noted that individuals with schizophrenia have a loss of grey matter and an aberrant brain network. These pathological alterations have also been suggested to occur prior to the onset of any observable clinical symptoms. There is currently little and conflicting empirical data supporting a genetic basis for AAO. It is yet unknown if there would be any overlap between the genetic loci affecting AAO and the susceptibility genes for schizophrenia. Further investigation into the genetic causes of AAO in schizophrenia would require improved conceptual models (Zhan, et. al, 2023).

#### 2.1.3 Other disorders

Furthermore, disorders such as Bipolar, schizoaffective and Schizophrenia have several phenotypic aspects in common, when it comes to the symptoms, therapeutics and responding to antipsychotic drugs. On top of that in comparison to the general population, family studies have shown clinically intermediate diagnosis of schizoaffective disorder to be more common in families ascertained from probands with schizophrenia, together with families ascertained from probands with bipolar disorder (Gejman, et. al., 2010).

## 2.2 Neurobiology

### 2.2.1 Subcortical Dopamine Dysfunction

Different studies have tried to figure out and analyze the factors that contribute to the disorder. However, when it comes to neurobiology, no clear link has been

found between the pathophysiology of Schizophrenia and neurotransmitter changes. A few studies have pointed to the role of subcortical dopamine dysfunction as the key mechanism.

It has become clearer from current research on dopamine dysfunction where and when dopaminergic changes can manifest in schizophrenia. Clinical research, for instance, has revealed that contrary to what was previously thought, patients with schizophrenia exhibit elevated presynaptic dopamine function in the associative striatum rather than the limbic striatum. Furthermore, presynaptic dopamine abnormalities in the associative striatum are similar among people considered to be at high risk of developing schizophrenia. As a result, to consider this new knowledge, our understanding of subcortical dopamine activity in schizophrenia is still changing (Luvsannyam, et al., 2022).

### 2.2.2 Gray and White matter

Changes in the grey and white matter have been observed in patients with the disorder; especially more changes in the grey matter have been reported after the onset of psychosis. Due to these pathological changes, it is now being calculated that they might play a role in the impairment of executive functioning, attention and working memory. According to recent findings, disturbances of a specific subset of inhibitory neurons that contain the calcium-binding protein parvalbumin (PV), which may regulate the course of postnatal developmental experience-dependent synaptic plasticity in the cerebral cortex, including the prefrontal cortex (PFC), may be involved in the pathogenesis of the onset of this illness (Woo, 2013).

## 2.3 Environmental factors

### 2.3.1 Environmental risk Factors

The way that schizophrenia was perceived in the 20th century is very different from how we think about it now. Current research indicates that schizophrenia's aetiology involves complex interactions between genetics and environmental factors. The likelihood of developing the disease is influenced by several environmental risk factors, which can act at different degrees over time and function alone or in combination. These risks include problems during pregnancy and childbirth, childhood trauma, migration, social isolation, urbanization, and substance misuse (Stilo and Murray, 2019). Additionally, exposure to environmental factors, such as infections, malnutrition, and neurotoxins, is linked to other neuropsychiatric disorders as well and can significantly affect brain development, which is thought to be a key factor in the genesis of schizophrenia (Brown et al., 2005a).

### 2.3.2 Immigration status

Although the exact mechanism is uncertain, immigration status is also a substantial risk factor, particularly among the African Caribbean population in England. Adverse life events and substance abuse are later environmental risk factors. An interactive model, where genetic predisposition is enhanced by environmental impacts, is more in line with current research than an additive model with several genetic and environmental risk variables of little effect (McDonald and Murray, 2000b).

### 2.3.3 Twin studies

However, the discussion of the causes of schizophrenia has up until now focused mostly on the hunt for genetic abnormalities.

The most compelling evidence for these conclusions comes from research showing that the concordance rate of schizophrenia in monozygotic (MZ) twins is roughly 45–60%, while the rate in dizygotic twins is 10–15%. Less often talked about, though, is the 40–55% discordance rate amongst patients of schizophrenia with identical genes. The most likely reason for this high rate of discordance is the influence of environmental factors, even though stochastic mechanisms have been proposed. These variables could be at play even during the fetal stage, considering that the experiences of MZ twins can vary (Brown, 2010).

## 3. Stigmatization

Arguably one of the most stigmatized mental illnesses is schizophrenia, and patients often view the stigma as a "second illness" (Mannarini, et. al., 2022), hence for us to explore that in the article, we first and foremost need to understand what stigmatisation stands for. It is the defining of an undesirable characteristic or sets of characteristics for a person's social identity to narrow them down to a stereotype. The consequences of it include marginalization and in several cases dehumanization. Stigmatisation often contributes to poor global health outcomes and in particular to the diagnosis and treatment of any infectious disease or mental illness (Chen and Courtwright, 2016c).

### 3.1 Self-stigmatization

It is only human nature that when we are constantly told something about ourselves by a lot of people, we tend to internalize it and believe them. It is not an exception when it comes to people struggling with schizophrenia. In fact, people struggling with schizophrenia are much more likely to experience this in comparison to people with other disorders. As per the reporting of Corrigan and Watson (2002) and many more throughout the years, the process of self-

stigmatisation devastatingly leads to poor self-esteem, quality of life and hope, impaired recovery, poorer social or vocational function and treatment adherence, greater symptom severity, distress, dysfunctional attitudes, depression, and avoidant coping style.

The relationships between self-stigma and clinical and psychosocial factors have been outlined in five reviews of self-stigma among individuals with mental illnesses (del Rosal et al., 2021; Dubreucq et al., 2021; Gerlinger et al., 2013; Livingston and Boyd, 2010; Yu et al., 2021), one of which was specifically focused on schizophrenia (Gerlinger et al., 2013). Reviews by Livingston and Boyd (2010), Dubreucq et al. (2021), Gerlinger et al. (2013), and del Rosal et al. (2021) discovered that self-stigma was related to both psychosocial and clinical variables, such as self-esteem, quality of life, hope, and empowerment, as well as depressive symptoms and functioning. Del Rosal et al. (2021) and Gerlinger et al. (2013), on the other hand, discovered no correlation between insight and self-stigma. Further research by Yu et al. (2021) revealed a direct relationship between experienced and perceived stigma and recovery characteristics, indicating that stigma from the public and stigma from oneself both have an impact on recovery and well-being in individuals with mental illness. The association between experienced/perceived stigma and self-stigma was mediated by collectivism, suggesting that more collectivistic cultures have higher correlations between experienced/perceived stigma and self-stigma.

#### 4. Role of media and public in stigmatization

The media, movies and TV shows are a big culprit in this scenario as they often represent people with mental illnesses and disorders, especially the ones with schizophrenia as violent and out of control (Walton, 2022). When it comes to popular culture, someone who has any sort of mental illness is shown as being a unidimensional character and they also tend to put little to no effort in drawing a difference between multiple personality disorder and schizophrenia which are two very different disorders. Moreover, it is not just the media's representation that is steeped in stereotypes but also the law and the police who play a part no part in making distinctions between mental illnesses and criminal behaviour. As per the research conducted on public stigma, schizophrenia holds the worst mental representation among other mental illnesses such as incompetency, violence, and dangerousness (Angermyer and Dietrich, 2006). When we talk about the treatment and research in the field of schizophrenia, there is not as much funding to start with as there is in the case of cancer or some other diseases. Sadly, it is the overall systemic stigma that is contributing to further the

myths and taboos related to the disorder (Walton, 2022).

Unaware of how their research would be portrayed to the public, four psychiatrists published a study revealing that six out of 23 schizophrenia individuals carried weapons during psychotic episodes. The Sunday Express carried banner headlines that read, "Armed and dangerous: public at risk as mental patients escape the care net," the day after the article was published in the Royal College of Psychiatrists Bulletin in 1998. A journalist for Sunday Express assumed that 1250 community members with mental illnesses were armed and represented "a serious threat to public safety." This assertion was supported by a Zito Trust statistic stating that 5,000 community-dwelling schizophrenia individuals posed a risk to themselves or others (Ferriman, 2000).

Mental health organizations are not surprised by these kinds of distortions. An umbrella body called Focus on Mental Health believes that the media unfairly portrays persons with mental illnesses, using terms like "maniac," "schizo," and "psycho" to further stigmatize them. As a result, it established the Media Forum on Mental Health a year ago in collaboration with the Department of Health, Lilly Psychiatry, and the National Union of Journalists to combat erroneous and unfair media coverage (Ferriman, 2000).

Stigmatization of mental diseases might result from their frequently unfavourable representation. Whether such language uses terms unique to a condition metaphorically or is associated with unpleasant events or behaviours, particularly violent ones, stigmatizing language contributes to the perpetuation of negative stereotypes or ideas about mental diseases. Even when used metaphorically, referring to a disease in a stigmatizing way might give rise to unfavourable associations with it. The general well-being of those who have the illness may be negatively impacted, symptom severity may increase, and social isolation and discrimination may result from such comments if they gain widespread acceptance (Holmberg, 2023).

#### 5. Role of mental health professionals

The health care system alongside the mental health professionals (MHP) is found to be one of the major sources of the Stigmatisation surrounding the disorder (Mestdag and Hansen, 2014). The stigma of mental illness in MHP has been reviewed three times since 2007. The first one found only 10 pertinent surveys in 2007 (Schulze, 2007). 75% of the studies found that MHP beliefs and the desire for social distance were either the same or worse than the general population's. Results regarding stereotyped beliefs (i.e., dangerousness, incompetence, poor prognosis, and responsibility) were mixed, with studies reporting similar, more negative, or more positive beliefs when compared to the general

population. A combination of favourable and unfavourable opinions among MHP was reflected in the second review's "mixed" findings (Wahl and Aroesty-Cohen, 2010).

In MHP, there were generally positive attitudes and views regarding mental illness, according to 14 of the 19 included studies. However, certain unfavourable attitudes and beliefs were also identified in this 14 research. Also, a lot of MHP held the same public views on the dangers of mental illness, recovery potential, and marriage and childbearing status. More recently, De Jacq et al. (2016) reviewed 14 research that evaluated nurses' stigma of mental illness. Additionally, they found that nurses' stigmas of mental illness were mixed and like those of the general public.

Another study was performed to assess the attitudes of mental health professionals (n = 1073) and members of the general public (n = 1737) towards mental illness, as well as their specific reactions to people with and without psychiatric symptoms ("non-case" as a reference category). Psychiatrists had more negative stereotypes than the general population. Mental health practitioners accepted restrictions on people with mental illnesses three times less frequently than the general population. Most specialists could identify cases of schizophrenia and depression, however, one in every four psychiatrists and psychologists classified the non-case as mentally ill. The social distance towards serious depression and the non-case was less than that towards schizophrenia. In this way, there was no distinction between professionals and the general public. The study shows that improving mental health workers' understanding and support for individual rights does not result in fewer preconceptions or a greater desire to contact closely with mentally ill persons (Nordt, et. al., 2005).

These studies suggest that there is not just a dire need for deeper and empathetic understanding amongst the general public but also the MHPs to eradicate the demonisation of schizophrenia and many more mental health disorders. This also asks for a change in the education system in the way education is imparted in regards to the psychological sciences as it would help to create an environment where we not only succeed academically but also grow into well-rounded and emotionally healthy individuals.

## 6. Violence, aggression, and schizophrenia

While it is true that most individuals with schizophrenia are not violent, certain aspects of the disorder can induce a certain amount of aggression. There stand many reasons for a person with schizophrenia to turn violent or aggressive; a study reported people with schizophrenia involved in it showcased any signs of violence and aggression only

if they had faced past violent events, violent events in their childhood, disobedience in the past and impulsiveness (Zhu and Wang, 2016). The study also showcased that the aggressive participants were more likely to be antisocial and had scored higher in positive, depressive, and paranoid symptoms in comparison to the non-aggressive participants. Additionally, the overall risk of violence in people with schizophrenia was found to be low and the data suggested less than 1 in 20 when it comes to women and less than 1 in 4 for men over 35 years for violent arrests and crimes (Whiting et al., 2021). Moreover, there are other external factors too such as, drug abuse, income immigration, and marital status that may contribute to the development of violent behaviour in patients with schizophrenia. Due to the constant misunderstanding surrounding patients with schizophrenic spectrum disorders, individuals living with them are frequently victimized. Findings suggest that approximately, 64.5% of 5871 schizophrenic people experienced stigma in a study conducted by Gerlinger et al. (2013).

## 7. Discussion and Conclusion

There could be serious repercussions if people with schizophrenia are stigmatised. Due to their incapacity to integrate into society, mentally handicapped people who are disreputable may have a terrible quality of life and struggle to heal from their pre-existing illnesses. This societal problem may impact how people with schizophrenia are treated, but it may also make it more difficult for certain psychiatrists to diagnose schizophrenia. According to several findings, psychiatrists may have a diagnostic bias because they believe that individuals with schizophrenia are more likely to carry out violent attacks than those with bipolar affective disorder.

This bias in diagnosis may worsen the stigma attached to receiving a schizophrenia diagnosis while also having an impact on the patient's care. For those with schizophrenia, the outcome of pervasive stigma is not only a bad social experience; it is a potentially fatal one. Given the high rate of suicide among individuals with schizophrenia (particularly among those who choose not to seek help out of fear of stigma and discrimination), people with schizophrenia often have a life expectancy that is around 20 years lower than that of the general population. People who commit suicide are frequently regarded as "high-functioning," meaning they are conscious of their illness and can understand the degree of their perceived dysfunction and social isolation. However, we may see better days ahead if we can dedicate ourselves to learning more about the illness, advocating for truthful and nuanced portrayals of schizophrenia, and putting advocacy first.

Therefore, there is an increasing need for the general public and healthcare professionals to address the stigmatization of these people and investigate the extent to which other factors contribute. Public education about the true correlation between schizophrenia and associated variables is crucial. By talking about the existing social environment for SSD patients in interactive television shows, mental health professionals and the media can raise awareness about the detrimental effects of social isolation on schizophrenia patients. Furthermore, creative plans can be put in place to facilitate communication and trust between these people and the broader public. Additionally, more money can be raised and given to the therapy of schizophrenia patients, and they can receive more attentive treatment for underlying mental illnesses.

Addressing stigma at multiple levels through public education, professional training, and media reform is essential for improving the quality of life for individuals with schizophrenia. We can foster a society that promotes inclusion, empathy and effective treatment only through collective efforts.

## References

- Adil et al., (2022). Stigmatization of schizophrenic individuals and its correlation to the fear of violent offence. Should we be concerned? *Annals of Medicine and Surgery*, 82.
- Brown., (2010). The environment and susceptibility to schizophrenia. *Progress in Neurobiology*, 93(1), 23–58.
- Chen, J., and Courtwright, A. (2016). Stigmatization. In *Springer eBooks*, pp. 2706–2712.
- De Jacq et al., (2016). The Variability of Nursing Attitudes Toward Mental Illness: An Integrative Review. *Archives of Psychiatric Nursing*, 30(6), 788–796.
- Ferriman, A. (2000) *The stigma of schizophrenia*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC1127555/>
- Gejman et al., (2010). The Role of Genetics in the Etiology of Schizophrenia. *Psychiatric Clinics of North America*, 33(1), 35–66. <https://doi.org/10.1016/j.psc.2009.12.003>
- Holmberg., (2023). Schizophrenia in Print, Digital, and Audiovisual Media: Trends, Topics, and Results From an Anti-Stigma Intervention Targeting Media Professionals. *Schizophrenia Bulletin Open*, 4(1).
- Kesby et al., (2018). Dopamine, psychosis and schizophrenia: the widening gap between basic and clinical neuroscience. *Translational Psychiatry*, 8(1).
- Luvannyam et al., (2022). Neurobiology of Schizophrenia: A Comprehensive Review. *Cureus*.
- Mannarini et al., (2022). Understanding stigma toward schizophrenia. *Psychiatry Research*, 318, 114970.
- McDonald and Murray, R. M., (2000). Early and late environmental risk factors for schizophrenia. *Brain Research Reviews*, 31(2–3), 130–137.
- Mestdagh and Hansen., (2013b). Stigma in patients with schizophrenia receiving community mental health care: a review of qualitative studies. *Social Psychiatry and Psychiatric Epidemiology*, 49(1), 79–87.
- Nawka et al., (2013). 2442 – How media influence stigma towards psychiatric disorders. *European Psychiatry*, 28, 1.
- Nordt et al., (2005). Attitudes of Mental Health Professionals Toward People With Schizophrenia and Major Depression. *Schizophrenia Bulletin*, 32(4), 709–714.
- Orsolini et al., (2022). Schizophrenia: A Narrative Review of Etiopathogenetic, Diagnostic and Treatment Aspects. *Journal of Clinical Medicine*, 11(17), 5040.
- Sarraf, et al., (2022). The clinical and psychosocial correlates of self-stigma among people with schizophrenia spectrum disorders across cultures: A systematic review and meta-analysis. *Schizophrenia Research*, 248, 64–78.
- Schulze., (2007). Stigma and mental health professionals: A review of the evidence on an intricate relationship. *International Review of Psychiatry*, 19(2), 137–155.
- Stilo and Murray., (2019). Non-Genetic Factors in Schizophrenia. *Current Psychiatry Reports*, 21(10).
- Valery, K. and Prouteau, A. (2020). Schizophrenia stigma in mental health professionals and associated factors: A systematic review. *Psychiatry Research*, 290, 113068.
- Wahl, and Aroesty-Cohen., (2009). Attitudes of mental health professionals about mental illness: a review of the recent literature. *Journal of Community Psychology*, 38(1), 49–62.
- Woo, (2013). Neurobiology of Schizophrenia Onset. *Current Topics in Behavioral Neurosciences*, 267–295.
- Zhan, N., Sham, P. C., So, H., and Lui, S. S. Y. (2023). The genetic basis of onset age in schizophrenia: evidence and models. *Frontiers in Genetics*, 14.