

## Literature Review

# Clinical Relevance of Loneliness in Schizophrenia Patients

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### Abstracts

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**Introductions:** Loneliness is a subjective feeling that is described as a sense of isolation, a bad feeling about the quality and quantity of social relationships that has a major impact on mental health, well-being and quality of life. Social isolation is an important predictor of loneliness. Social isolation is often experienced by schizophrenia patients who experience alienation, social disconnection, limited access, and social support for their mental health. This study aimed to describe the relationship and its effect and factors related of loneliness and mental health, especially in Schizophrenia patients. **Methods:** This study is a literature review that collects from various sources of scientific journals related to loneliness and its effect to Schizophrenia patients. **Results:** Lack of social interaction causes low or poor and vulnerable self-concepts experienced by schizophrenia patients, this is suspected of causing maladaptive cognition of oneself and others. Self-esteem that is seen as bad, hallucinations and delusions that are negative and self-critical reinforces negative self-concept. Schizophrenic sufferers tend to experience distortions related to self-confidence and their environment, they often think that they cannot be accepted by their environment and their environment rejects them. These increases feelings of loneliness and is thought to increase the incidence of psychotic symptoms. **Conclusions:** Social isolation and loneliness are important issues for schizophrenia patients because they can increase morbidity and mortality rates. Loneliness increases the incidence of auditory hallucinations with paranoid thinking, as well as negative beliefs about oneself and others in schizophrenia patients.

**Keywords:** Schizophrenia, Mental Health, Loneliness

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## INTRODUCTION

Schizophrenia causes disturbances in several dimensions, including thought processes, perceptions, behavior, emotions, and cognition. Therapeutic goals have expanded from positive and negative symptom reduction to cognitive rehabilitation, to address quality of life, subjective well-being, and recovery. The belief that schizophrenic patients are unable or unwilling to express their emotions and feelings is considered part of the negative symptoms. Recent studies have shown that loneliness in schizophrenia patients is a common phenomenon. Loneliness is also associated with several mental and physical health problems, as well as being a major obstacle to the recovery process [1].

Social exclusion or isolation is a key factor associated with several mental disorders including mood disorders, psychosis, and drug addiction. Social isolation is a growing public health problem and has an impact on morbidity and mortality that can reduce a person's quality of life [2].

Feelings of loneliness are vulnerable to being experienced and become a common problem that is often encountered for those with or without mental disorders who are often stigmatized, ignored, or underestimated. The quality of social interaction mediates between objective and subjective dimensions which can change the direction and strength of the association between social isolation and loneliness which has become a widespread and growing phenomenon in developing countries which has implications for several psychiatric problems including schizophrenia [2, 3].

The purpose of this literature review is to explore the relationship, influencing factors, and interventions that can be carried out between loneliness and schizophrenic patients. Loneliness and Social Isolation Concept  
Social isolation is defined as an objective lack of social interaction, while the impact of social isolation is a subjective feeling of loneliness. Social isolation and loneliness have different concepts, even when a per-

son has abundant social networks and social contacts, feelings of loneliness can still arise. Humans are social beings with one of the fundamental needs in life is the "need to belong" in a group, when this need is not met then humans will feel lonely, defined as a negative emotional response to the desired differences and which is achieved from reciprocal interactions in relationships, which is an important key to human social life [4]. Loneliness is also defined as the distressing experience that a person has when their social relationships are judged to be lacking in quantity and especially quality. Loneliness has two general elements: an emotional component (sadness and distress) and a social component (a feeling that social relationships are not sufficient to meet the individual's needs). Loneliness will arise when a person is ostracized, misunderstood, or rejected by others, or when a person is dissatisfied with his social relationships. Loneliness is also an emotional consequence of unfulfilled cognitive evaluations of social and environmental interactions, giving rise to negative emotional reactions. The duration of loneliness plays an important role in an individual's ability to adapt to loneliness [2, 5–8].

Feelings of loneliness are very impactful for individuals with psychosis because most cases report that loneliness and social isolation are burdensome in the recovery process and are related to well-being, social perception, and psychopathology. What about individuals with psychosis views, processes, and overcomes the experience of loneliness is still being researched and studied [9].

### The relationship between loneliness and schizophrenic patients

The relationship between loneliness and psychotic conditions is stronger when compared to the nonclinical group, loneliness acts as a risk factor for the development of psychotic symptoms and has an effect on treatment plans [10].

Common manifestations of impaired social functioning in schizophrenia include deficits in social skills and motivation, poor social cognition, and difficulty experiencing positive emotions from social interactions. Patients with schizophrenia have levels of loneliness three times greater than those in the nonclinical group. Loneliness is associated with the three core symptom groups of schizophrenia, namely: suspicious thoughts, social anhedonia/a-sociality, and social distancing speech or behavior that leads to social disconnection from the public. Loneliness increases negative beliefs about oneself and others, which in turn exacerbates paranoid thoughts, increases sensitivity to threats, and reduces interpersonal relationships. Social isolation and feelings of loneliness increase stimuli that allow individuals to perceive hearing voices or detecting human presence around them that is not real or so-called 'anthropomorphism'. Psychotic symptoms cause individuals to feel ostracised and stigmatised which contributes to increased feelings of loneliness and the creation of imaginary friends to manage feelings of loneliness. The difficulty of individuals with schizophrenia in anticipating pleasure and social interaction will increase feelings of loneliness [1, 10, 11].

Lack of social interaction causes low or poor and vulnerable self-concepts experienced by schizophrenia patients, this is suspected of causing maladaptive cognition of oneself and others. Self-esteem that is seen as bad, hallucinations, and delusions that are negative and self-critical reinforces negative self-concept. People with schizophrenia tend to experience distortions related to their beliefs and environment, they often think that they are unacceptable to their environment and their environment rejects them. This condition increases feelings of loneliness and is thought to increase the incidence of psychotic symptoms. These maladaptive social cognitive processes are associated with less skilled interactions and hinder the accurate assessment of social situations. As a

result, this cognitive and behavioral confirmation bias appears to reinforce loneliness by communicating to the individual that he or she lacks competence, meaning, and value. Loneliness is a sign of weakening social relationships [11].

The experience of loneliness is socially contagious, so lonely individuals connect with other lonely individuals. Connecting them directly doesn't necessarily reduce their feelings of loneliness. This is due to the existence of Maladaptive Cognition which creates biases in the social world, including interaction and trust in other people. Increased awareness of social threats and other cognitive biases, namely: memory bias and confirmation bias. Lonely individuals will show more suspicious behavior, be very self-protective, and reduce interaction with others. This further isolates them [12].

Individuals with schizophrenia perceive contact with friends and relatives to be inadequate in terms of frequency, connectedness, and depth. They tend to feel alone and disconnected, feeling ignored, unappreciated, and unloved. Relationships with friends and family change significantly over time, often described as complicated for schizophrenic patients. Similar conditions are also frequently encountered in acute psychotic episodes. Unwanted loneliness also triggers feelings of loneliness in individuals with psychosis [9].

The causal role of loneliness in schizophrenia is associated with paranoid delusions and hallucinations that arise from a lack of meaningful social interaction. Schizophrenic patients who tend to experience social isolation and exclusion tend to produce meaningful social contacts in the form of hallucinations and delusions [13].

Loneliness increases the threshold of psychosis-proneness which is associated with increased activation of the Hypothalamic-pituitary-adrenal stress axis (HPA Axis) as the main stress regulator in the body which results in increased blood pressure, heart disease, stroke, obesity, and diabetes due to

increased HBA1C. Feelings of loneliness are also associated with sleep disturbances, ideas of death and suicidal ideation, depression, anxiety, low life satisfaction, and an increased risk of Alzheimer's disease [7, 14, 15].

Loneliness is an important predictor of early onset and a complicating factor for schizophrenia. This is also due to increased levels of inflammatory biomarkers in loneliness, chronic inflammation being a common factor underlying various diseases [7, 16].

### **Factors Associated with Loneliness in Schizophrenic Patients**

Understanding the factors associated with loneliness in schizophrenic patients is a basic step for developing prevention and intervention strategies. An individual's subjective experience is the result of the interaction between the individual and their environment, which provides a holistic picture that can be considered in treatment planning [10].

#### **Personal Illness**

Patients with schizophrenia who have a high hospitalisation rate have greater levels of loneliness, which is related to disrupted social contact during the hospitalisation process making it difficult to establish or maintain good interpersonal relationships.

#### **Cognitive and Neurocognitive**

Self-esteem and stigma are negatively related to loneliness. Stigma discriminates and lowers the social status of people with schizophrenia which is then internalized as self-stigma by them which will increase feelings of loneliness. People with schizophrenia experience neurocognitive decline, including processing speed, visual memory, and direct memory related to their loneliness. Limited social interaction causes loneliness which results in decreased neurocognitive function.

#### **Socioeconomic**

Low income, unemployment, disharmony, and extra-marital partnerships are common among people with schizophrenia, increas-

ing loneliness.

### **Integrated Community**

The concept of integrated communities has four dimensions, namely: assimilation, support, employment, and independent living. These four dimensions are the basis for individuals to connect with the environment and gain a sense of belonging even if the support is remote. Integrated community relationships are negative in schizophrenia sufferers, thus increasing feelings of loneliness.

### **Residence**

People with schizophrenia who are often isolated tend to experience higher levels of loneliness. This is especially prevalent for people who live apart from their families, such as in shelters, or are placed in different houses or rooms with their families. So they don't get social support and social interaction [1].

### **Assessment of Loneliness in Schizophrenics**

Subjective experiences such as loneliness are very difficult to measure. The currently available assessment attempts to evaluate loneliness using self-report scales, or in-depth interviews. Several scales that can be used to help assess loneliness in people with schizophrenia are:

#### **a. The University of California, Los Angeles Loneliness Scale (UCLA-LS)**

The most widely used rating scale for measuring loneliness in the adult population, including schizophrenics with reduced cognitive capacity. The UCLA-LS shows the intensity and frequency of loneliness experienced using 20 statements about subjective experiences of loneliness and isolation that participants rated on a scale ranging from 1 (never) to 4 (often) [7, 17].

#### **b. The De Jong Gierveld Loneliness Scale (DJGLS)**

This scale is used quite often and can be used for psychotic sufferers. This scale is designed to assess general feelings and severity of loneliness. It consists of 3 statement items about social loneliness and 3 statement items about emotional loneliness [7].



**c. The Differential Loneliness Scale (DLS)**

This scale focuses on social relationships to assess loneliness in terms of what individuals believe to be the type of relationship they would like to have and the type of relationship they actually have. There are four relationship subscales assessed, namely: romantic-sexual, friendship, relationship with family, and relationship with community groups. This scale does not directly measure subjective feelings of loneliness [7].

**d. The Emotional/Social Loneliness Inventory (ESLI)**

Consists of 15 pairs of items designed to measure emotional loneliness, social loneliness, social isolation, and emotional isolation. This scale has the limitation that individuals may find it difficult to distinguish between what they feel and what is actually happening in their lives [7].

Empirically measuring loneliness is a difficult thing because it is subjective and characterized by social affiliation, individual attachment to self and surroundings, social ties, and social involvement. These scales are used to assist in an objective assessment which of course must be carried out with in-depth interviews with schizophrenic patients and their families [7, 17].

**Loneliness Intervention in Schizophrenia**

Loneliness is still something that is underestimated even though clinical evidence of its effect on people with schizophrenia has been widely studied and studied. To date, there is no evidence-based loneliness intervention that is explicitly aimed at people with schizophrenia. Current interventions still focus on loneliness in the general population, such as individual or group-based skills training, community activities, and support from family and friends. Other interventions exist in “befriending” individuals with depression but have not focused on individuals with psychosis. The transactional nature of the intervention strongly suggests that to overcome loneliness, a person must be given the opportunity to support and connect reciprocally. A key ingredient in the

design of a clinically effective intervention may involve support from lonely peers with opportunities for reciprocity [7].

The social isolation experienced by schizophrenic patients is also a concern in the context of the interventions that will be given to them. Changes in interaction and social networks that are experienced become a new conceptual review to reduce loneliness which refers to the domains of social activity, social skills, and social judgment. The social activity domain refers to social concerns or activities within a certain period. An increase in social activity alone does not necessarily improve social life or reduce loneliness. The domain of social ability refers to the intensity and frequency with which people meet as part of social networks and foster social relationships. In other words, Individuals will learn to see social influences on their lives and how these behaviors or feelings affect the feelings of loneliness they experience. The social assessment domain is the most important thing in the concept of loneliness and is a concern for clinicians and caregivers to reduce feelings of loneliness experienced by schizophrenic patients [18].

Social Coaching Intervention which focuses on these three domains is one of the interventions currently being researched. This intervention aims to motivate patients to engage in social activities of their choice through meeting with many people (social contacts), increasing social activities so that social skills become better, improving quality of life, and reducing loneliness. This intervention involves caregivers, volunteers/ community, or family in addition to the role of patients with schizophrenia. This intervention is quite complex because it requires support from an integrated community for maximum results [18].

Social Connectedness helps someone to change negative judgments about himself and actively improve relationships to reduce loneliness. This will affect the stigma and discrimination experienced by schizophrenic patients. Internalized stigma can hinder

the recovery process because patients will tend to withdraw from social activities and increase feelings of shame and low self-esteem. Maintaining social connectedness builds self-construction; self-efficacy and self-esteem are directly related to loneliness. Low self-esteem in schizophrenic patients is a consequence of rejection from society [19].

Addressing Maladaptive Cognitions be one of the approaches that can be used to improve the quality of the relationship between schizophrenia patients and their social environment. Identifying social skill deficits that reduce avoidance behavior will develop new relationship potential. Identification of social networks is also carried out in this approach by developing trust relationships with previously known individuals to increase trust. Developing trust in the family is one of the main keys to this approach, this is because patients with schizophrenia talk more about themselves to their families than to other people. Thus, developing trust in social networks is an important factor for returning schizophrenic patients to social life [12].

Positive Affect to Enhance Social Bonds focuses on improving the social skills of Schizophrenic patients in the community. The limited ability of schizophrenic patients to enjoy positive experiences in socializing is the target of this intervention. Teach them to enjoy and increase self-efficacy by finding and telling the family what is being felt or what has just happened. The role of the family is also essential because they must respond positively to what is told by schizophrenic patients so that positive constructions appear in schizophrenic patients. The ability to express oneself such as telling a story and getting a positive response so as to create a positive reciprocal relationship is an intervention modality that can be chosen [12].

Positive Psychology Interventions (PPI) focus on increasing individual power to reduce Schizophrenia symptoms using positive emotions, satisfaction, and goals to achieve

well-being by increasing access to a positive social environment and practicing active constructive responses by listening and responding reciprocally. Individuals who are lonely and do not have social networks will find it increasingly difficult to reduce feelings of loneliness. Individuals with psychosis often have poor social networks and their ability to connect with others is limited by environmental factors and societal stigma. Access to a social environment where one is able to practice positive social interactions and form social bonds is an important factor for schizophrenic patients [12, 20].

## CONCLUSION

People with schizophrenia tend to experience distortions related to their beliefs and environment, they often think that they are unacceptable to their environment and their environment rejects them. These conditions increase feelings of loneliness and increase the incidence of psychotic symptoms. Creating an accessible environment for not only treatment but also social life is key to reducing feelings of loneliness in schizophrenia patients as this increases hope and positive relationships, as well as promotes a positive self-image for schizophrenia patients and their families.

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## CONFLICT OF INTEREST

The authors have no conflict of interest.

## REFERENCES

- [1] H. -Y. Liao, Y. Lee, S.-T. Hsu, and C. -F. Yen, "Loneliness in patients with schizophrenia," *Taiwan. J. Psychiatry*, vol. 35, no. 2, p. 59, 2021, doi: [10.4103/tpsy.tpsy\\_14\\_21](https://doi.org/10.4103/tpsy.tpsy_14_21).
- [2] L. Brandt, S. Liu, C. Heim, and A. Heinz, "The effects of social isolation stress and discrimination on mental health," *transl. Psychiatry*, vol. 12, no. 1, pp. 1–11, 2022, doi: [10.1038/s41398-022-02178-4](https://doi.org/10.1038/s41398-022-02178-4).
- [3] JC Badcock, P. Di Prinzio, A. Waterreus,

- AL Neil, and VA Morgan, "Loneliness and its association with health service utilization in people with a psychotic disorder," *Schizophr. Res.*, vol. 223, no. xxxx, pp. 105–111, 2020, doi: [10.1016/j.schres.2020.05.059](https://doi.org/10.1016/j.schres.2020.05.059).
- [4] GY Reinhardt, D. Vidovic, and C. Hamerton, "Understanding loneliness: a systematic review of the impact of social prescribing initiatives on loneliness," *perspective. Public Health*, vol. 141, no. 4, pp. 204–213, 2021, doi: [10.1177/1757913920967040](https://doi.org/10.1177/1757913920967040).
- [5] F. Trémeau, D. Antonius, D. Malaspina, DC Goff, and DC Javitt, "Loneliness in schizophrenia and its possible correlates. An exploratory study," *Psychiatry Res.*, vol. 246, pp. 211–217, 2016, doi: [10.1016/j.psychres.2016.09.043](https://doi.org/10.1016/j.psychres.2016.09.043).
- [6] A. Andreu-Bernabeu et al., "Unraveling the relationship of loneliness and isolation in schizophrenia: Polygenic dissection and causal inference," *medRxiv*, p. 2020.11.06.20226910, 2020, [Online]. Available: <http://medrxiv.org/content/early/2020/11/07/2020.11.06.20226910.abstract>.
- [7] JC Badcock, LH Adery, and S. Park, "Loneliness in psychosis: A practical review and critique for clinicians," *Clin. Psychol. sci. Pract.*, vol. 27, no. 4, pp. 1–13, 2020, doi: [10.1111/cpsp.12345](https://doi.org/10.1111/cpsp.12345).
- [8] XB Wanget al., "A survey of anxiety and depressive symptoms in pulmonary tuberculosis patients with and without tracheobronchial tuberculosis," *Front. Psychiatry*, vol. 9, no. JUL, pp. 1–10, 2018, doi: [10.3389/fpsyt.2018.00308](https://doi.org/10.3389/fpsyt.2018.00308).
- [9] KA Ludwig, B. Brandrett, MH Lim, P. Mihas, and DL Penn, "Lived experience of loneliness in psychosis: A qualitative approach," *J. Ment. Heal.*, vol. 31, no. 4, pp. 543–550, 2022, doi: [10.1080/09638237.2021.2022622](https://doi.org/10.1080/09638237.2021.2022622).
- [10] GML Eglit, BW Palmer, AS Martin, X. Tu, and DV Jeste, "Loneliness in schizophrenia: Construct clarification, measurement, and clinical relevance," *PLoS One*, vol. 13, no. 3, pp. 1–20, 2018, doi: [10.1371/journal.pone.0194021](https://doi.org/10.1371/journal.pone.0194021).
- [11] B. Michalska Da Rocha, S. Rhodes, E. Vasilopoulou, and P. Hutton, "Loneliness in Psychosis: A Meta-analytical Review," *Schizophr. Bull.*, vol. 44, no. 1, pp. 114–125, 2018, doi: [10.1093/schbul/sbx036](https://doi.org/10.1093/schbul/sbx036).
- [12] MH Lim and JF Gleeson, "Social connectedness across the psychosis spectrum: Current issues and future directions for interventions in loneliness," *Front. Psychiatry*, vol. 5, no. NOV, 2014, doi: [10.3389/fpsyt.2014.00154](https://doi.org/10.3389/fpsyt.2014.00154).
- [13] ES Jaya, TE Hillmann, KM Reininger, A. Gollwitzer, and TM Lincoln, "Loneliness and Psychotic Symptoms: The Mediating Role of Depression," *Cognit. Ther. Res.*, vol. 41, no. 1, pp. 106–116, 2017, doi: [10.1007/s10608-016-9799-4](https://doi.org/10.1007/s10608-016-9799-4).
- [14] T. Stefanidou, J. Wang, N. Morant, B. Lloyd-Evans, and S. Johnson, "Loneliness in early psychosis: a qualitative study exploring the views of mental health practitioners in early intervention services," *BMC Psychiatry*, vol. 21, no. 1, pp. 1–10, 2021, doi: [10.1186/s12888-021-03138-w](https://doi.org/10.1186/s12888-021-03138-w).
- [15] A. Gizdic, T. Baxter, N. Barrantes-vidal, and S. Park, "Since January 2020 Elsevier has created a COVID-19 resource center with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource center is hosted on Elsevier Connect, the company's public news and information," no. January, 2020.
- [16] Á. Andreu-Bernabeu et al., "Polygenic contribution to the relationship of loneliness and social isolation with schizophrenia," *Nat. Commun.*, vol. 13, no. 1, 2022, doi: [10.1038/s41467-021-27598-6](https://doi.org/10.1038/s41467-021-27598-6).
- [17] KA Ludwig et al., "Correlates of loneliness among persons with psychotic disorders," *Soc. Psychiatry Psychiatr. Epidemiol.*, vol. 55, no. 5, pp. 549–559, 2020, doi: [10.1007/s00127-019-01789-5](https://doi.org/10.1007/s00127-019-01789-5).
- [18] D. Giacco, "Tackling social isolation in people with psychosis: promising developments but needing conceptual clarity," *J. Ment. Heal.*, vol. 31, no. 3, pp. 297–301, 2022, doi: [10.1080/09638237.2022.2069725](https://doi.org/10.1080/09638237.2022.2069725).
- [19] MH Lim, DL Penn, N. Thomas, and

JFM Gleeson, "Is loneliness a feasible treatment target in psychosis?," *Soc. Psychiatry Psychiatr. Epidemiol.*, vol. 55, no. 7, pp. 901–906, 2020, doi: [10.1007/s00127-019-01731-9](https://doi.org/10.1007/s00127-019-01731-9).

[20] I. de F. Pina de Almeida, C. de M. Braga, TFR de Oliveira, CN de Santana, RC

Marques, and L. Machado, "Positive psychology interventions to improve well-being and symptoms in people on the schizophrenia spectrum: A systematic review and meta-analysis," *Brazilian J. Psychiatry*, vol. 43, no. 4, pp. 430–437, 2021, doi: [10.1590/1516-4446-2020-1164](https://doi.org/10.1590/1516-4446-2020-1164).