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REVIEW ARTICLE

Self-stigma in patients with schizophrenia: Impact and management

Marie Ociskova[1,2], Jan Prasko[1,2,3,4], Michaela Holubova[5,6], Klara Latalova[1], Tomas Sollar[3], Marta Zatkova[3], Milos Slepecky[3], Jonas Bocek[1]

1 Department of Psychiatry, Faculty of Medicine and Dentistry, Palacky University Olomouc, Olomouc, Czech Republic.
2 Jessenia Inc. Rehabilitation Hospital Beroun, Akeso Holding, MINDWALK, s.r.o., Czech Republic.
3 Department of Psychological Sciences, Faculty of Social Sciences and Health Care, Constantine the Philosopher University in Nitra, Slovak Republic.
4 Institute for Postgraduate Education in Health Care, Prague, Czech Republic.
5 Department of Psychiatry, Hospital Liberec, Liberec, Czech Republic.
6 Department of Pedagogy and Psychology, Faculty of Science, Humanities and Education, Technical University of Liberec, Czech Republic.

Correspondence to: Jan Prasko
Department of Psychiatry, Faculty of Medicine and Dentistry, Palacky University in Olomouc, Hněvotínská 3, 775 15 Olomouc, Czech Republic
E-MAIL: praskojan@seznam.cz

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Abstract

BACKGROUND: Prejudices against individuals with schizophrenia can interfere with diagnostic and treatment processes, particularly with the patient's further adaptation and reintegration. Self-stigma could have significant detrimental consequences for patients suffering from psychotic disorders, including schizophrenia.
METHOD: This paper reviews findings about self-stigma connected to schizophrenia. The PubMed database used the keywords to find the papers published from January 1997 to March 2023, and 189 articles were included in the review process.
RESULTS: The schizophrenia-related stigma decreases patients' self-confidence, worsens their social functioning, and impedes daily functioning. Feelings of embarrassment are prominent in many patients with schizophrenia. Self-stigma predicts many unfavourable outcomes – more severe social anxiety and depressive symptoms, lower self-confidence, hopelessness, worse social functioning, lower quality of life, worse treatment cooperation, and lower adherence to medication adherence. Addressing self-stigma in psychoeducation or psychotherapy may increase the patient's stigma resistance and well-being. Self-help groups present an underutilised but potentially effective strategy.
CONCLUSION: Stigma presents a common issue in patients with schizophrenia. Targeting the issue in clinical management or psychotherapy may be beneficial. Still, more high-quality intervention studies are needed.

INTRODUCTION

Schizophrenia is a major psychotic disorder characterised by significant disturbances in thought processes, perception, emotions, behaviour, and cognitive functions *(APA 2013)*. A persistent and chronic decrease in daily functioning and quality of life is common among suffering patients *(Vrbova et al. 2018a)*. Apart from being a highly debilitating condition, schizophrenia is one of the most stigmatised mental disorders (*Weiss et al. 2001; Thornicroft et al. 2007; Watson et al. 2007; Caqueo-Urízar et al. 2022a*). Most individuals diagnosed with schizophrenia deal with harmful stereotypes about schizophrenia and its stigma *(Dickerson et al. 2002; Lee et al. 2006; Caqueo-Urízar et al. 2022a; Lucksted et al. 2011; Angermeyer et al. 2017)*. The public's view of schizophrenia is shaped by a lack of knowledge, prejudices, and discriminatory behaviour *(Angermeyer & Matschinger 2005; Thornicroft et al. 2007; Schulze 2007; Lincoln et al. 2008; Angermeyer et al. 2017)*. Prejudices related to psychotic disorders may interfere with diagnostics and treatment, particularly with the reintegration of the patient into society *(Angermeyer et al. 2017; Pallanti et al. 2004; Beldie et al. 2012; Sum et al. 2022)*. These can also reflect in patients' relations with themselves in a process called self-stigma or internalised stigma *(Ritsher & Phelan 2004)*. In contrast, stigmatisation is usually discussed as a problem in teaching texts and recommended practices, and possible interventions for its change have not been adequately reported *(Royal ANZ Clinical Practice Guideline 2005)*.

Individuals exhibiting prodromal symptoms can also experience discrimination, which may increase their frustration and risk of developing psychosis *(Welham et al. 2009; Caqueo-Urízar et al. 2022a)*. Janssen ***et al.*** *(2003)* explored whether the perception of discrimination based on ethnic origin, sexual orientation, skin colour, age, gender, appearance or disability is linked to the onset of psychotic symptoms. The results showed that perceptions of discrimination predicted initial misconceptions and the number of psychotic symptoms. It is also possible that small changes in the behaviour of individuals vulnerable to the development of a psychotic disorder sometimes trigger negative social interactions and lead to discrimination, increasing the risk of a paranoid attributional style *(Garety et al. 2001)*. An alternative explanation is biological and lies in the sensitisation of the mesolimbic dopaminergic system (increase in baseline activity) during experiences of frustration *(Selten & Cantor-Graae 2007)*. The schizophrenia-related stigma thus seems to present a multifaceted phenomenon.

Cohort follow-up studies have not yet studied the effect of stigma or self-stigma as a disorder modifier. Still, several theories suggest a significant relationship between stigma and the course of the disorder. According to one theory, stigmatisation can trigger hurtful discrimination resulting in many disadvantages in accessing health care, poorer care, and more life-threatening events *(Sartorius 2006)*. Stigmatisation might act as a long-lasting stressor, and there is much evidence that stress is a factor that can trigger an episode of schizophrenia and modify the course of the disorder *(Norman & Malla 1993; van Winkel et al. 2008; Pattyn et al. 2014)*.

Stigma can lead to delays in seeking help and treatment to avoid the process of labelling. The threat of social discord or the deterioration of self-esteem accompanying this labelling is related to insufficient use of health and social services *(Corrigan 2004)*. In addition, prejudice and discrimination may result in poor treatment adherence *(Villares & Sartorius 2003)*.

As a related phenomenon, self-stigma also distresses many psychiatric patients *(Livingston & Boyd 2010; Fung et al. 2011; Gerlinger et al. 2013)*. Self-stigma is present by accepting the social prejudgments about people with mental disorders and being convinced of the untreatability of their mental health problems *(Corrigan et al. 2011; Tsang et al. 2013; Holubova et al. 2021)*. Patients then feel ashamed and embarrassed of having these issues, which, in turn, can lead to social isolation and deterioration in their job-related functioning *(Armijo et al. 2013; Caqueo-Urízar et al. 2022b)*.

This paper reviews findings concerning self-stigma connected to schizophrenia. Specifically, it aims to examine several topics reflected in the following research questions.

(1) How do individuals with schizophrenia develop self-stigma?
(2) Which social and clinical factors influence self-stigma in patients with schizophrenia?
(3) Which personality traits connect to self-stigma in patients with schizophrenia?
(4) What are the consequences of self-stigma in patients with schizophrenia?
(5) Does self-stigma influence the treatment of patients with schizophrenia?
(6) What are the possibilities for fighting self-stigma in patients with schizophrenia?

METHOD

The PubMed database was used to find the papers published from January 1997 to March 2023 using the following keywords(Fig. 1): (self-stigma) and (schizophrenia) and (therapy or quality of life or personality or comorbidity or psychotherapy or adherence or pharmacotherapy or outcome or course or severity or psychopathology). Furthermore, the selected papers had to meet the following inclusion criteria: (1) published in peer-reviewed journals; (2) studies in humans; or (3) reviews on the related topic; (4) accessible in English. The criteria for exclusion were: (1) abstracts from conferences; (2) commentaries; (3) samples with patients younger than 18 years. The filter selected the articles identified and screened for retrieval in PubMed.

The primary search selected 179 reports using keywords in different combinations. After analysing their titles and abstracts, ninety-seven articles were chosen according to the eligibility criteria. A following comprehensive examination of the full texts selected

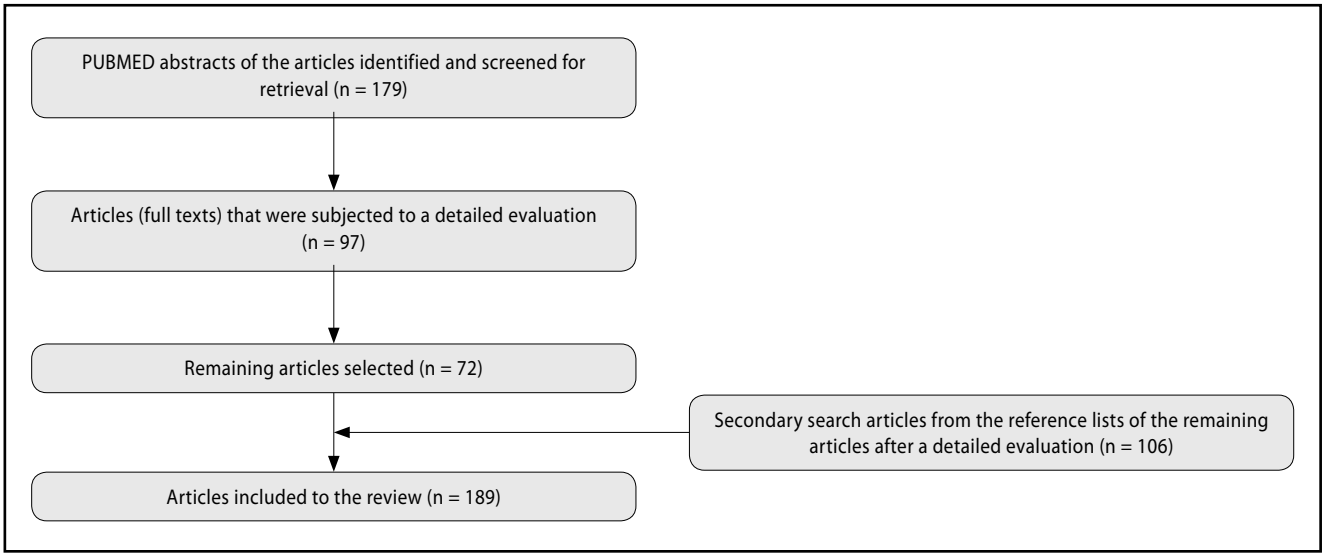

Fig. 1. Summary of the selection process
Keywords: (self-stigma) and (schizophrenia) and (therapy or quality of life or personality or comorbidity or psychotherapy or adherence or pharmacotherapy or outcome or course or severity or psychopathology)
Filters: clinical trials or reviews, and humans and adults 19 + years

seventy-two articles. Secondary papers from the references of the primary articles were then assessed for relevance and added to the first list of records (n = 106). This way, 189 articles were included in the review (Figure 1).

RESULTS

The results are arranged according to the research questions.

(1) How the individuals with schizophrenia develop self-stigma?

Several authors depict stigmatisation as a social adversity that can lead to social failure and forming specific negative beliefs about oneself and others *(Collip et al. 2008; Caqueo-Urízar et al. 2022b)*. The presence of negative interactions enhanced by the susceptibility to the disorder and their impact on its onset and progression can help focus attention on these issues and lead to further research on risk reduction strategies *(Perlick et al. 2011; Mittal et al. 2012).* The general experience with stigma may be divided into three areas *(Brohan et al. 2010)*:

(a) Perceived stigma encompassing what an individual thinks about what society thinks of a stigmatised group to which they belong;
(b) Experienced stigma, including experiences of discrimination associated with the stigma;
(c) Self-stigma resulting from the internalisation of the public stigma.

Self-stigma is a gradual process of psychological assimilation of social stereotypes into the experienced mental disorder in which the individuals may gradually lose what they previously thought gave them meaning and value and gradually give up their wishes and ambitions for the future *(Brohan et al. 2010; Karakaş et al. 2016; Lien et al. 2018a; Styła & Świtaj 2023; Bradstreet et al. 2018)*. In principle, an individual not only believes that others think they have no value, but they also think that of themselves. Thus, they may believe others will lose interest in being partners, friends, co-workers, or employers. This altered perspective generally leads to behavioural changes such as avoiding others, isolation, resignation from new relationships, passivity, dropping out of school or leaving a job *(Lien et al. 2018b)*. The internalisation of the stigma begins when a specific notice that others are behaving differently and when the patient is aware of the prejudices that lead to such behaviour. The patient believes that the views and attitudes of society towards people with mental disorders are well-founded. In the final stage, they apply the stereotypes to themselves and act according to them (Figure 3), *(Watson et al. 2007; Corrigan et al. 2011)*. In recent European studies, the prevalence of self-stigmatising attitudes in individuals with severe mental disorders ranged from 36 % to 42 % *(West et al. 2011; Brohan et al. 2010; Fond et al. 2023)*. A systematic review suggests that approximately one-third to one-half of patients with schizophrenia feel ashamed of their condition and experience alienation as the most common aspect of self-stigmatization *(Gerlinger et al. 2013)*.

An extensive review by Gerlinger *et al. (2013)* shows that perceived and experienced stigma relates to many patients with schizophrenia spectrum disorders. Sixty-five per cent of the patients perceived stigma, and fifty-six per cent experienced it. According to this study, perceived or experienced stigma predicted more severe social anxiety and depressive symptoms,

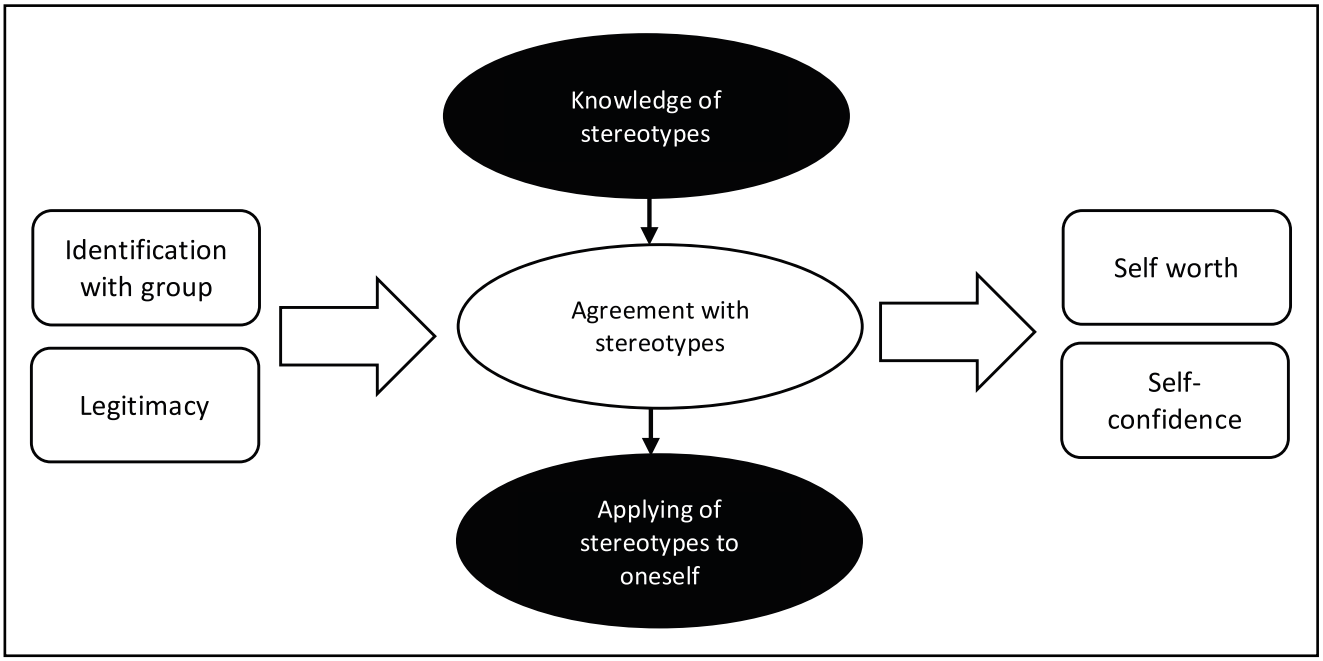

Fig. 2. Process of self-stigmatization (adapted from Watson *et al.* 2007)

avoidant behaviour as a coping strategy, less social support, worse social functioning, lower quality of life, lower self-confidence and self-acceptance, and worse coping.

Two studies indicated a significant relationship between personal stigma and first-episode schizophrenia *(Tarrier et al. 2007; Birchwood et al. 2005)*. Patients experiencing a first episode were more likely to experience self-stigma if they also suffered social anxiety *(Birchwood et al. 2007)*. That was also found in patients with chronic schizophrenia *(Vrbova et al. 2018b)*. Ritsher & Phelan *(2004)* found that alienation (a part of the self-stigma) predicts depressive symptoms and low self-esteem – a vicious cycle in which alienation and low self-esteem mutually reinforce each other. Disorder awareness and understanding can generally lead to better functional outcomes. However, when insight accompanies the adoption of self-stigmatizing attitudes, it is more likely to affect social functioning and reduce hope and self-esteem *(Lysaker & Salyers 2007; Vrbova et al. 2017b)*. Self-stigma is also associated with adverse outcomes in patients with chronic psychosis *(Firmin et al. 2019)* (Figure 2).

(2) Which social and clinical data influence self-stigma in patients with schizophrenia?

Current research displays that sex, heredity, and education do not relate to the severity of self-stigma in patients with schizophrenia *(Gerlinger et al. 2013; Vrbova et al. 2016, Holubova et al. 2016a)*. The role of romantic relationships as a potential buffer against self-stigma is unclear *(Gerlinger et al. 2013)*. The quality of the romantic relationship seems more important than its mere presence. However, stable employment has been associated with lower self-stigma *(Kamaradova et al. 2015; Holubova et al. 2016b)*.

Regarding early adverse experiences, childhood sexual trauma has been linked to more severe distress in victims and feelings of isolation, discrimination and social withdrawal due to self-stigma *(Lysaker et al. 2005; Lysaker & Salyers 2007; Outcalt & Lysaker 2012)*.

Self-stigma has been positively correlated with the number of previous hospitalisations, the length of the disorder, and the subjective assessment of the severity of the disorder, and negatively with the age of disorder onset *(Holubova et al. 2018; Vrbova et al. 2016; Vrbova et al. 2018a)*. A significant relationship was also found between the severity of positive, negative, and general symptoms of schizophrenia and the severity of the disorder *(Holubova et al. 2016a, Vrbova et al. 2016, Vrbova et al. 2018a; Charles et al. 2007; Margetić et al. 2010; Lysaker et al. 2010)*. Most studies on self-stigma in schizophrenia spectrum disorder display a significant correlation between self-stigma and the severity of psychopathology or the intensity of symptoms of anxiety, depression, and experiences of shame *(Vrbova et al. 2016; Charles et al. 2007; Margetić et al. 2010)*.

Individuals with a comorbid social phobia show higher self-stigma than non-comorbid patients (Vrbova *et al.* 2018b). According to the social status theory, one possible way of developing social anxiety in schizophrenia is anticipating a catastrophic loss of social status associated with the disorder's stigma. Birchwood *(et al. 2007)* detected prominent social anxiety in 79 patients with the first episode of psychosis. Twenty-three socially anxious and 56 non-anxious patients were evaluated to assess the stigma of psychosis and perceived social status while controlling for the influences of depression, psychotic symptoms, and general psychopathology.

Patients with social anxiety experienced greater shame associated with their diagnosis. The authors suggest that the development of social anxiety increases the level of experienced self-stigma. Our study with patients with chronic schizophrenia spectrum disorders showed the same results *(Vrbova et al. 2018a)*.

Lysaker *et al. (2010)* explored the relationship between self-stigma, self-esteem, positive and negative symptoms, emotional problems, and adequate recognition from others with the prospective assessment of social anxiety using the Multidimensional Anxiety Assessment Questionnaire in patients with schizophrenia or schizoaffective disorder. The self-esteem, self-confidence, negative symptoms, and emotional problems were significantly associated with social anxiety assessed currently and five months later. Multiple regression found that negative symptoms and discrimination experiences prospectively predicted social anxiety. Thus, self-stigma and negative symptoms may be consistently associated with social anxiety over time.

(3) Which personality traits connect to self-stigma in patients with schizophrenia?

Lysaker *et al. (2008)* examined different dimensions of self-esteem in patients with schizophrenia, including self-acceptance, lovability, personal strength, competence, and four areas of self-stigma – concurrence with stereotypes, experiences of discrimination, social withdrawal, and stigma rejection. A stepwise multiple regression showed that self-esteem and friendliness were closely connected with lower feelings of alienation from others due to the disorder. Aspects of self-esteem related to managing one's affairs were more closely associated with rejecting mental illness stereotypes. Feelings of influence on others were related to a lack of experience with discrimination and the ability to reject stigma.

Lysaker *et al. (2008)* also studied meta-cognition and its relation to self-stigma as potential barriers to gaining more experience about themselves. Utilising a semi-structured interview, 51 patients with schizophrenia were interviewed about themselves and their illnesses before entering the rehabilitation research program. The quality of their own stories and experience has been assessed using the Scale to Assess Narrative Development (STAND). These scores were then correlated with concurrent assessments of stigma using the ISMI and metacognition using the Metacognition Assessment Scale. A stepwise multiple regression controlling for social desirability, age and illness awareness discovered that higher STAND scores were significantly connected with higher metacognitive capacity ratings and reduced stereotype endorsement ratings. Outcomes show that qualities of self-experience expressed within personal narratives of schizophrenia may be affected by self-stigma and deficits in the capacity to think about one's own thinking and the thinking of others.

Regarding coping, patients with schizophrenia in the study of Holubova *et al. (2016a)* overused negative coping strategies compared to the general population, especially the strategy of *Escape tendency* and *Resignation*. Even after adjusting for sex and gender, self-stigma has been negatively correlated with positive coping strategies and positively with negative coping strategies *(Holubova et al. 2016b)*. Regarding the measure, Internalized Mental Stigma Scale subscales (ISMI) were significantly connected with both positive and negative coping *(Holubova et al. 2018)*.

(4) What are the consequences of self-stigma in patients with schizophrenia?

Negative stereotypes and prejudices are internalised in a person's intrapsychic system concerning themselves, the world, and others *(Ocisková & Praško, 2015)*. On one side of the self-stigma continuum are individuals for whom stigma enhances self-confidence and self-esteem and who are not negatively affected by prejudices. At the other end of the continuum are individuals with

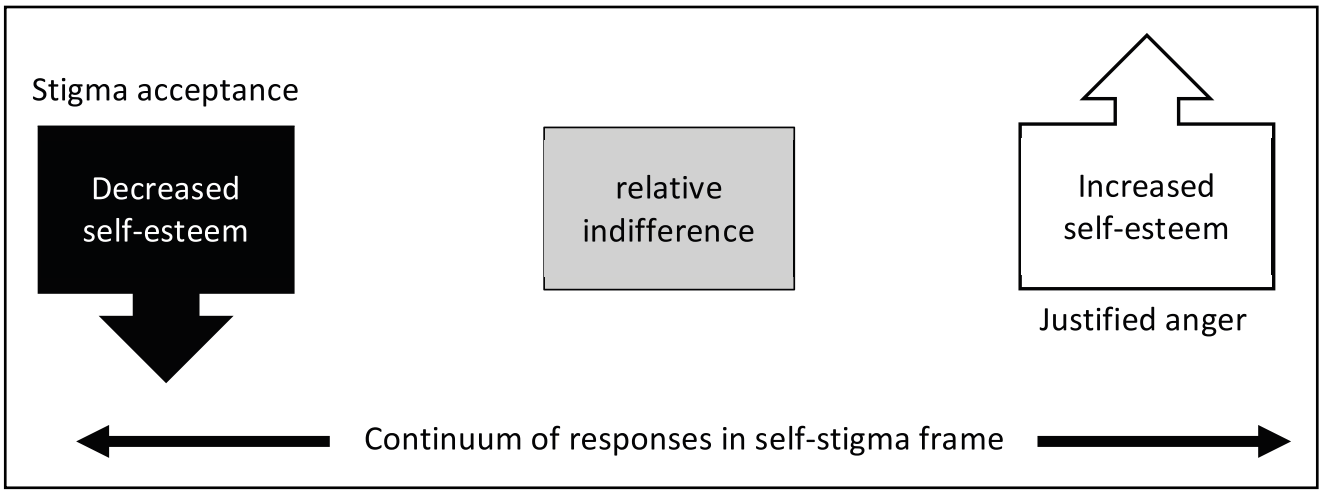

Fig. 3. Continuum of responses in the self-stigma

pessimistic ideas about mental disorders, low self-esteem, and low self-confidence (Figure 3) *(Zimmerman & Rappaport 1988; Corrigan et al. 1999)*.

Self-stigma has many adverse effects on individuals with mental disorders. It can reduce self-esteem *(Corrigan et al. 2009)*, limit the ability to function and manage daily demands *(Yanos et al. 2012)*, increase the severity of anxiety or depressive symptoms *(Ocisková et al. 2016; Dinos et al. 2004)*, worsen treatment results *(Prasko et al. 2016; Kamaradova et al. 2016)*, affect help-seeking *(Vogel et al. 2006)*, trigger dissociation *(Praško et al. 2016)*, lead to avoidance of the face-to-face contact *(Corrigan et al. 2009; Sirey et al. 2001; Mestdagh & Hansen 2014)*, increase risk of suicide *(Vrbova et al. 2018b)*, lower treatment adherence *(Carrara & Venturac 2018)*, and reduce the quality of life *(Sirey et al. 2001; Gaebel et al. 2008; Yanos et al. 2009; Yen et al. 2009; Cavelti et al. 2012; Kamaradova et al. 2016)*. In social functioning, it reinforces avoidance and social withdrawal *(Schulze & Angermeyer 2003)* and affects the feeling of desirability for a potential romantic partner *(Wright et al. 2007)*.

Internalising stereotypes lowers self-esteem and increases beliefs about the futility of trying something (the Why try effect) *(Corrigan et al. 2016; Karakaş et al. 2016; Link et al. 1989)*. Low self-esteem has been associated with feelings of failure and reduced achievement of life goals *(Carpinello et al. 2000; Rüsch et al. 2006)*. Such reduced self-actualisation efforts may be related to stigmatising beliefs about incompetence and failure *(Corrigan et al. 2009)*. For example, a person might then think that "There is no point in looking for a job; why would they give it to someone like me? I have mental problems, I am completely incapacitated, and cannot meet the job's demands as I did before." *(Corrigan et al. 2009)*.

Some investigations presented that self-stigma and its expressions in behaviour have harmful consequences, including loss of self-confidence, loss of position, demoralisation, and reduced income *(Link et al. 1997; Dubreucq et al. 2021)*. Self-stigma has been connected with more severe depressive symptomatology, increased suicide rates, and worse medication adherence *(Ritsher & Phelan 2004; Hsieh et al. 2023; Rüsch et al. 2014; Vrbova et al. 2018a; Vrbova et al. 2018b; Lien et al. 2018b; Jian et al. 2022)*. Other consequences of self-stigma are the deterioration of work functioning and quality of life *(Perlick et al. 2001; Link et al. 2001; Ritsher & Phelan 2004; Vauth 2007; Wu & Tang 2012; Moriarty et al. 2012; Holubova et al. 2016c; Vrbova et al. 2018a)*. Therefore, reducing or eliminating self-stigma can significantly improve the treatment of patients with schizophrenia *(Ghosh et al. 2022)*.

The quality of life does not automatically reflect the severity of the psychotic disorder, although these are usually interrelated *(Sidlova et al. 2011; Holubova et al. 2016b)*. Some studies point to a significant connection between self-stigma and quality of life, showing that the former leads to a decrease in the latter *(Tang et al. 2012; Vrbova et al. 2017c; Holubova et al. 2018)*. Quality of life also inversely relates to the perceived/experienced stigma *(Gerlinger et al. 2013; Holubova et al. 2016a; Karakaş et al. 2016; Vrbova et al. 2018a)*. Self-stigma inversely relates to social and working functioning *(Sirey et al. 2001; Kleim et al. 2008; Yanos et al. 2008; Yanos et al. 2010; Cavelti et al. 2011; Watson et al. 2007; Holubova et al. 2016b; Vrbova et al. 2018b)*.

The patient's return from treatment to their original place in the family and society is an especially sensitive period. The patients need support and encouragement but tend to be criticised and sometimes rejected *(Vrbova et al. 2017a)*. The tolerance of others to various marginal variations of the former patient's behaviour is often low. There is a tendency to label each unusual behaviour as a sign of a mental disorder instead of trying to understand its meaning *(Wahl 1999)*. Even mildly dysfunctional behaviour can become a reason for a rejection of the patient. This then complicates their reintegration *(Yamaguchi et al. 2017)*.

As a rule, an individual chooses relationships with people who share their values, life goals, and program. Patients with psychosis often have limited options regarding their activities and relationships. Therefore, the choice of social relations is usually not free but restricted by the mental disorder and its consequences *(Thornicroft et al. 2007; Lien et al. 2018a)*. The choice of relationships may have a compensatory or handicapped character. The patient's social network can be reduced to hanging out in a pub where they are accepted or finding their place in an accepting group of people with a substance use disorder *(Pescosolido et al. 2010)*. While feeling accepted, there is a risk of developing a comorbid substance use disorder.

Finally, the stigma might lead patients to avoid and be cautious in communication, reduces their confidence in the neighbourhood, and sometimes encourages suspiciousness and persecutory beliefs *(Moriarty et al. 2012)*. It worsens establishing an alliance between the patient and the healthcare professional *(Link et al. 2001)*. Also, it increases the threshold for a relationship based on mutual trust in which the patient can freely talk about all their experiences and concerns *(Vrbova et al. 2017b)*.

(5) Does self-stigma influence the treatment of patients with schizophrenia?

Stigma has appeared as an essential difficulty in treating schizophrenia *(Schulze & Angermeyer 2003; Kamaradova et al. 2015)*. The consequences of self-stigmatization can occur in various areas – dysphoric emotions can increase, self-confidence and self-confidence can decrease, the quality of life can deteriorate, and anticipatory anxiety can increase in anticipation of the negative behaviours of others *(Muñoz et al. 2011)*. The identity changes *(Livingston & Boyd 2010; Camp et al. 2002)*.

Fung *et al.* *(2010)* studied the relationship between self-stigma, psychopathology, insight, treatment adherence, and readiness to change. They point to a direct effect of self-stigma and psychopathology on psychosocial treatment failure and an indirect effect on readiness to change and overall adherence to treatment. Tsang *et al.* *(2010)* then studied the relationship between self-stigmatization, readiness to change, and

commitment to a psychosocial program. The results show that patients with overall better functioning and lower self-stigma are better prepared for change, show higher self-esteem and cooperate better in treatment.

The stereotype of the mentally ill often influences the attitudes of people patients meet after discharge from psychiatric care (especially after hospitalisation). The media often reinforces negative attitudes that people with mental disorders are aggressive, malicious, abusive, incompetent, and unreasonable individuals who are dangerous or ridiculous individuals. Stigmatisation is further related to the environment in which the affected person is treated. Hospitalisation in a large hospital is associated with more explicit negative labelling than in psychiatric wards or clinics *(Janík 1987)*.

(6) What are the possibilities for fighting self-stigma in patients with schizophrenia?

Self-stigma can have a substantial adverse effect on the achievement of remission or recovery in patients with schizophrenia. The self-stigma may vary over time depending on external factors such as employment, societal attitudes, attitudes of loved ones, and geographic location, as well as internal factors such as the severity of the psychotic symptoms, mood or response to treatment *(Ben-Zeev et al. 2012; Krupchanka et al. 2016; Nishida et al. 2018)*. As external factors influence the degree of social stigmatisation, perceived stigma, and self-stigma, it is to some extent that external changes affect all of these factors *(Moritz et al. 2019)*.

Stigma can also be viewed as a modifiable factor in the development, process and maintenance of the psychotic disorder. In particular, it is crucial to change self-esteem-related attitudes *(Dubreucq et al. 2020; Moritz et al. 2021)*. Ignoring the problem of stigma and self-stigma in treatment programs for individuals with schizophrenia can present an obstacle to achieving remission or recovery *(Yanos et al. 2010; Yanos et al. 2019). Yanos et al. (2010)* report that individuals with severe mental illness with high levels of self-stigma may also believe that they are incapable and unable to recover, which then blocks further rehabilitation, return to work or relationships and closes off other options in life *(Lucksted et al. 2011; Fung et al. 2011)*.

Interventions to reduce self-stigma include psychoeducation, cognitive behavioural therapy (CBT), support programs and specific programs (Coming out, NECT). Intervention strategies against self-stigma can be divided according to the area of targeting:

- Treatment-related strategies (e.g., recovery of mental health, adherence to treatment, quality of life);
- Influencing the social sphere (e.g., professional or educational activities);
- Strategies aimed at personal (psychological) factors (increase in self-confidence, self-worth, self-esteem, development of a positive identity);
- Strategies for success in life (in employment, education, interpersonal relationships).

Intervention strategies can also be divided according to the duration of action into short-term (<3 months), medium-term (3-6 months) and long-term (>6 months) *(Büchter & Messer 2017)*.

Psychoeducation

Psychoeducational interventions are the most common strategy to reduce self-stigma. They aim to provide truthful information about mental disorders to individuals, their families, and the environment. Education is complemented by sharing experiences with prejudice among participants *(Alvidrez et al. 2009; Hammer & Vogel 2010)*. They aim at changing self-stigma can increase the patient's resistance to stigma and the ability to accept psychotic disorder with its limitations *(Pijnenborg et al. 2019; Konsztowicz et al. 2021)*. Although therapeutic procedures still evolve, some simple recommendations may help *(Yamaguchi et al. 2017; Yanos et al. 2019; Moritz et al. 2021)*. First, it is helpful to distinguish between negative symptoms, depression, anxiety, and the consequences of self-stigma. Social isolation can be a result of all of the above. To understand what interventions can be used, it is necessary to know the stress management strategies of individuals with a psychotic disorder:

- The negative impact of stigma is higher when individuals use avoidant coping and isolate themselves from others *(Ertugrul et al. 2004; Yanos et al. 2008)*. Thus, inducing more active styles and sharing experiences, possibly in a group of similarly affected and supportive individuals, can have a significant therapeutic effect *(Davidson et al. 2006)*.
- Another critical way to reduce self-stigma is by integrating patients into society and returning to work *(Perkins et al. 2009)*.

A randomised controlled trial investigated the effect of 10 weeks of group psychoeducation on stigma perception in 48 patients with schizophrenia. This study found a significant decrease in perceived discrimination and increased self-control *(Shin & Lukens 2002)*. Perlick *et al. (2011)* published preliminary data on interventions to reduce self-stigma in family members of persons with severe mental disorders. Those who reported at least average severity of mental illness (n = 122) were randomised to two separate interventions: the first was a group discussion of videos showing how self-stigma affects individuals and how to combat it, and the second was family psychoeducational sessions in a structured didactic format. Both approaches reduced self-stigma, but the first was more active with video tutorials and discussions about own experiences.

Self-help groups

Self-help groups have a clear purpose: to provide psychological support to people with mental disorders

and their families. Self-help groups can comprise patients with schizophrenia or family members, or patients and their families can also meet. Self-help groups help cope with psychological problems and a stigmatised societal position *(Díaz-Mandado & Periáñez 2021)*. A self-help group can use various therapeutic factors of group psychotherapy - especially altruism, universality, hope, cohesion, imitation and catharsis. There are more empathetic responses in a self-help group than in group psychotherapy alone because there is almost no interpretation or confrontation *(Yalom 1999, Dyck et al. 2000; Rosenbaum et al. 2012; Ivezić et al. 2017; Aivalioti et al. 2022)*.

Individuals who self-stigmatize and apply prejudice to their self-worth may benefit from support groups aimed at reducing self-stigma. Open conversations about mental illness, concerns, fear, and low self-esteem can strengthen psychological defences against irrational stigmatising statements *(Corrigan & Rao 2012)*. Destigmatisation interventions may indirectly improve a greater willingness to seek care and cooperate in mental health recovery *(Büchter & Messer 2017)*.

Self-empowerment

Individuals who do not develop self-stigma in contact with stigma tend to have an "antibody" in the form of self-enhancement *(Corrigan & Watson 2002)*. Self-enhancement is a compelling concept for reducing self-stigma. The goal is to strengthen hope and confidence in achieving goals. That is on the opposite side of the self-stigma continuum, asserting control, activation, and optimism instead of powerlessness. Empowerment increases self-esteem, quality of life, use of social support and satisfaction with health care programs *(Hansson & Björkman 2005; Rogers et al. 2010)*. Self-enhancement includes five factors that enable coping with stigma (power and powerlessness; activity; justified anger at discrimination; optimism and control over the future; self-esteem and confidence) *(Corrigan et al. 2004)*.

Disclosure

Individuals with a psychotic disorder undergo a process of accepting the fact of suffering from the disorder. Some individuals adapt easily, while others may reject or ignore the mental disorder. The willingness to share the experiences of the disorder with others reflects internal compliance with this fact. Feelings of shame and guilt can cause withdrawal from social contacts and a life of seclusion and concealment. Successfully dealing with stigma goes hand in hand with accepting the mental disorder. Open and honest sharing reduces the negative impact of concealment on self-esteem and quality of life, promotes a sense of personal power and control over one's life, reduces feelings of shame and embarrassment, and increases self-confidence *(Corrigan et al. 2010; Corrigan et al. 2011)*.

Concealment of a mental disorder leads to internal tension, and isolation prevents sharing and seeking social support (from family, friends, and institutions). Openness towards mental disorders promotes a sense of personal power and control over one's life and, to a large extent, the illness *(Corrigan et al. 2011)*. However, sharing the presence of a mental disorder has its caveats. It can have negative consequences and cause discrimination from the environment. The environment may pay increased attention to the disorder's relapses, psychological state deterioration, or even normal behavioural manifestations. Sometimes, self-disclosure can exacerbate discrimination, rejection, misunderstanding, and social isolation and cause emotional and material harm *(Corrigan et al. 2011)*.

Table 1 lists the possible benefits or losses of disclosing a mental disorder. Disclosure might boost self-esteem and self-confidence and positively impact physical and psychological health *(Morrow 1996)*. The balance between negative consequences and benefits depends on the individual and the situation's circumstances (disclosure at work will have different implications and benefits than disclosure among friends). Motivational interviewing and coaching methods can be beneficial in deciding whom, when, and how to disclose *(Miller & Rollnick 2002; Arowitz et al. 2008)*.

The decision to self-disclose is personal, and weighing the benefits and potential risks is essential in the sharing process. Self-disclosure requires emotional readiness, a conciliatory attitude and a kind understanding of oneself and the psychological disorder *(Thara et al. 2003)*. Selective disclosure is often the best option. This strategy involves sharing with selected people (co-workers, neighbours, friends). It requires sorting out who will be shared with and from whom the mental disorder will remain a secret. The advantage lies in greater access to social support; the disadvantage is the existence of secrecy associated with tension and caution *(Corrigan & Rao 2012)*. Another option is a non-discriminatory disclosure. In this case, the individual makes no active effort to conceal the mental problems *(Corrigan et al. 2013)*.

Cognitive-behavioural therapy

Another approach is cognitive behavioural therapy (CBT). CBT methods include education about psychological disorders, treatment options, myths, learning strategies for coping with stigma and self-stigmatization, practising communication strategies in a family environment and supporting assertive behaviour. The methods are supplemented with training techniques, role-playing, and skills training *(Fung et al. 2011; Lucksted et al. 2011)*.

There have been few studies of self-stigma interventions in schizophrenia. One of the first studies showed no effect on perceived discrimination after six weeks of group cognitive behavioural therapy with 21 pacients with schizophrenia. However, 18 weeks after treatment, it found a significant improvement in self-esteem *(Knight et al. 2006)*.

Tab 1. Example of the pros and cons of disclosing one's mental disorder

BENEFITS OF DISCLOSURE	BENEFITS OF NON-DISCLOSURE
I do not have to worry about it being revealed. I do not have to hide my appointments with my psychiatrist from my employer and co-workers. I do not have to keep trying to watch and control I do not have to try to mask my difficulties from family or co-workers. I can be more open in my daily experience. I can confide more about what I am experiencing. I can get interested and support from people who like me. I can learn from other people who have mental problems. I can provide experiences to those who experience something similar and do not understand what is happening to them.	The fact that I suffer from a mental disorder will remain a secret from others. People will not slander me for being a psychiatric patient. I will not have to think about whether someone is slandering me because of a mental disorder.
DISADVANTAGES OF DISCLOSURE	**DISADVANTAGES OF NON-DISCLOSURE**
I may worry more about how other people perceive me and their thoughts. I may be subject to criticism, misunderstanding or non-acceptance after revealing psychological problems. I can face gossip and rejection. In case of personnel changes, they can fire me in the first place. Co-workers may stop inviting me to parties or informal gatherings. My superiors may exclude me from more complex projects because they will doubt my ability to work together.	I will have to make excuses and lie about where I am going when I need to see a doctor. I will still be in suspense when it is revealed. I will always tensely counter and behave in a controlled manner so that no one can tell I have a mental problem. People will find out what happened to me during the hospitalisation.

Morrison *et al.* *(2013)* investigated whether cognitive therapy aimed at preventing the development of psychosis in high-risk young individuals leads to change in self-stigma. Participants were assessed before the intervention and after 6, 12, 18 and 24 months. Self-stigma was significantly reduced in the cognitive therapy group versus the control group. At the same time, the degree of social acceptability of psychotic experiences has not changed.

Narrative Enhancement and Cognitive Therapy (NECT)
Other CBT interventions work with narrative telling and sharing personal stories. Telling a life story promotes meaning and hope and increases resistance to self-stigma *(Yanos et al. 2012; Roe et al. 2010)*. NECT (Narrative Enhancement and Cognitive Therapy) was developed to address the underlying impact of stigma on identity *(Yanos et al. 2012)*. This concept is based on reduced self-confidence and self-worth due to psychological disorders and stigma. NECT contains 20 structured group interventions lasting 60 minutes, divided into five stages. First, participants describe themselves, their experiences with a mental disorder or treatment, and their interactions with the disorder over time. Flexible reflection, defining one's experiences and transforming oneself during the disorder's duration strengthen the upcoming interventions' constructiveness. The second phase includes more structured psychoeducation focusing on stigmatisation and self-stigmatization. Discussions take place on the topic of myths, false stereotypes and prejudices. In this section, it is possible to share personal experiences with stigma with the emphasis that self-stigma arises as a consequence of public stigma *(Yanos et al. 2012)*. The third part of NECT focuses on learning and practising cognitive restructuring techniques that suppress self-stigmatization. Learning practical tools to manage and reduce the impact of self-stigma promotes self-reliance, greater control over life, and hope. The fourth phase of NECT is the core of the whole program and focuses on improving the story. In this part, participants tell and reflect on personal accounts. The purpose is to discover the meaning of one's own experiences, including experiences with a psychological disorder, and to create a meaningful and understandable personal narrative for oneself and others without self-stigmatization. Constructive feedback from group members develops new perspectives on lived experiences. The NECT concludes by asking participants to describe their experiences with a mental disorder, including newly acquired coping methods *(Yanos et al. 2012)*.

Yanos *et al.* *(2011)* created a narrative enhancement/cognitive therapy intervention to reduce self-stigma in severe mental disorders. The authors examined 144 patients with the program and their self-stigmatisation level *(Yanos et al. 2012)*. They randomised 39 patients with high self-stigmatization to the group treated with the program mentioned above and the group treated in the usual way. Patients were evaluated before treatment, after treatment and three months after treatment. Comparing the results of patients treated with the program to a control group showed reduced self-stigma and improved insight.

Support programs

Personal contact with people with a mental disorder is integral to the support. Mental health institutions run outreach programs. Programs include inpatient care, resocialisation, rehabilitation, sheltered workshops, and sheltered housing *(Kates et al. 2001)*. Supportive programs enable group sharing, hope for recovery, inclusion, self-empowerment, sharing experiences, establishing friendships and a sense of belonging (Clay *et al.* 2005). Active contact improves self-esteem, confidence, and engagement in life and reduces self-stigma through understanding *(Kates et al. 2001; Corrigan et al. 2013; Conner et al. 2015)*. Support programs provide a range of services, assisting in the disclosure of a mental disorder completely or selectively *(Van Tosh & del Vecchio 2000; Lee 2002; Rüsch et al. 2009)*. Increases in hope and self-confidence strengthen resistance to self-stigma *(Cook et al. 2009)*.

Healthy Self-Concept model

McCay *et al. (2006)* described the Healthy Self-Concept model. The program is targeted at individuals with psychotic episodes. It lasts 12 weeks and takes place in the form of group meetings lasting 90 minutes. The group includes five members and two professional therapists. Meetings are standardised in which clients receive information material and discuss together. Groups with psychoeducational elements fulfil the rules of group psychotherapy and include sharing and understanding. Education consists of five topics (acceptance of mental disorders, reduction of self-stigmatizing attitudes, development of plans for the future, strengthening of hope and support in achieving life goals *(McCay et al. 2007)*. Each topic is discussed for two weeks. In the first week, the clients introduce themselves, and the last week is devoted to a summary. The Healthy Self-Concept Model does not involve training specific skills. Nevertheless, it is a promising approach to addressing the consequences of self-stigma among people with a first psychotic episode *(Yanos et al. 2014)*.

Self-Stigma Reduction Programme

Fung *et al. (2011)* created the Self-Stigma Reduction Program. The program lasts 16 weeks in a group (12 meetings) and individual (4 sessions) forms. It is based on the low awareness of people with mental disorders about the benefits of psychosocial interventions. The program includes a variety of strategies, including psychoeducation, cognitive behavioural therapy (CBT), motivational interviewing (MI), social skills training, goal setting, and action planning in group meetings. The first two sessions are educational and related to mental health recovery and stigma reduction; the subsequent five sessions work with CBT and MI methods, discussing self-stigma, social barriers and strategies to combat self-stigma. The following two sessions focus on deficits in social skills, assertiveness and coping with stigmatisation in social situations. The other two meetings focus on achieving goals. The final session serves to summarise, review the information and conclude. Four individual sessions follow group sessions to monitor progress and use of skills in practical functioning *(Fung et al. 2011)*. Fung *et al. (2011)* reported that program participants self-stigmatized significantly less during and after the program. However, significant changes in insight, confidence, and endorsement of stigmatising beliefs were not reported.

Ending Self-Stigma (ESS)

Promising approaches to reducing self-stigma include the Ending Self-Stigma program implemented through group meetings *(Lucksted et al. 2011)*. Psychoeducational groups have nine meetings once a week lasting 75-90 minutes, and participants receive educational materials about mental health and psychological disorders. A closed group comprises 5-8 people with a mental illness and two trained professionals. These professionals can be people with or without experience of a mental disorder, usually staff who work in the mental health field. At group meetings, cognitive-behavioural strategies are used to reduce the internalisation of stigma, methods of strengthening self-concept and family cooperation, and techniques for responding to discrimination in society. Strategies for changing cognitive beliefs help to defend against self-doubting thoughts and irrational beliefs: "Just because I had to be repeatedly hospitalised with depression does not mean I am stupid and unable to work again" *(Beck 1975)*.

Each meeting follows a basic format (welcome, discussion of home exercises, a summary of the previous session, introducing of a new strategy, sharing personal experience, discussion and practical exercises, including preparation for home training). The group is flexible and interactive, allowing participants to adapt acquired skills to personal experiences. Strategies include, for example, debunking myths and stereotypes (Meeting 1), using cognitive-behavioural principles to change one's stigmatising thinking (Meetings 2 and 3), strengthening positive aspects of oneself (Meeting 4), increasing belonging and reducing alienation from society (Meeting 5), family and friends (Meeting 6), mastering reactions in the fight against social prejudices and discrimination (Meeting 7). Meeting 8 includes practically including what has been learned in life, including integrating all strategies. Session 9 guides participants to plan and reflect on the following steps to reduce self-stigma after the program *(Lucksted et al. 2011)*.

The pilot project results showed a significantly reduced internalised stigma. They increased their orientation to mental health recovery, including the perception of greater social support from the environment and greater self-empowerment *(Lucksted et al. 2011)*.

Coming out Proud (COP)

Coming Out Proud is another approach Corrigan *et al.* *(2013)* described. It differs from the other approaches in encouraging people with a mental disorder to disclose (completely or selectively). The effectiveness and relief of disclosure are well documented for other stigmatised groups (e.g., Gay, Lesbian, Bisexual, and Transgender GLBT members). Coming Out Proud includes 3 group sessions led exclusively by someone who has experienced a mental disorder. Each meeting lasts two hours once a week for three weeks. The group consists of 6-10 people and 1-2 leaders. This intervention considers concealing a mental disorder a harmful coping strategy for social stigma. It aims to support people with mental illness by sharing this fact with the environment *(Rüsch et al. 2014)*. The program helps participants to reflect on personal stories and mental disorders, gain information, and strengthen personal decisions with disclosure. Corrigan *et al.* *(2013)* state that the program effectively reduces self-stigma because it focuses on the issue of disclosure.

Coming Out Proud is not a psychoeducational or therapeutic method but a supportive intervention to raise awareness. It has some elements in common with both motivational interviewing and narrative storytelling. The first three COP sessions focus on "Considering the pros and cons of detecting" a mental disorder in different settings. Participants discuss their experiences, how mental illness affects their identity, and the risks and benefits of disclosure in different situations. The second session is called "Different Ways of Disclosure." Participants discuss five levels of disclosure, from not disclosing to anyone (complete confidentiality) to publicly sharing one's experiences, along with the pros and cons of each in different circumstances.

Another part of the second meeting discusses whether information should be disclosed to a specific person, including their possible reactions. The final session, "Telling Your Story," focuses on different ways to effectively tell a story about mental illness in different contexts and how to find important support for disclosure *(Corrigan et al. 2013)*. Although the study by Rüsch *et al.* *(2014)* did not find that the program reduces self-stigma or increases self-empowerment, an essential benefit of this intervention strategy is reducing stress from stigma, concealment and awareness of the benefits of disclosure.

Anti-Stigma Photovoice Intervention

The Anti-Stigma Photovoice program developed by Russin *et al.* *(2014)* is a new approach similar to other interventions described above. Among other things, it includes the unique element of documenting personal stories through photos and videos. The program lasts ten days and consists of a group session with a duration of 90 minutes. At the intervention meetings, psychoeducation about stigma takes place, which is integrated into experiential exercises designed to reduce agreement with stereotypes about mental disorders. Participants are introduced to the photovoice methodology (using a camera and photography to document events in everyday life). The photovoice method strengthens the ability of people with mental disorders to interact using dialogue *(Catalani & Minkler 2010)*. Photos documenting everyday events are presented to group members and accompanied by a personal narrative. The story of each photograph has a predetermined structure of questions according to the abbreviation "SHOWED": a) What do you see here? b) What is happening here? c) How does this relate to our lives? d) Why does this problem, concern, or strength exist? e) How could this image educate others? and f) What can we do about it? *(Russin et al. 2014)*. Russin *et al.* *(2014)* state that each participant creates at least one photovoice that combines photography and a narrative related to the mental health stigma. The reports are complemented by psychoeducation that confronts stereotypes about mental disorders. The intervention was studied on 82 individuals with various mental disorders. The effectiveness in reducing self-stigma was significant compared to the waiting list *(Russin et al. 2014)*.

DISCUSSION

This article aimed to examine self-stigma in patients with schizophrenia from different perspectives. The answers to the questions asked at the beginning of the search are:

(1) How the individuals with schizophrenia develop self-stigma?

The theory hypotheses that the development of self-stigma is connected with genetic vulnerability and the stigmatisation of unusual individual behaviour, reinforcing each other. Data directly supporting the theories are missing. However, the hypotheses are indirectly supported by the effectiveness of destigmatisation after changing the environmental factors (van Zelst 2009).

(2) Which social and clinical data influence self-stigma in patients with schizophrenia?

Only a few studies *(Gerlinger et al. 2013, Vrbova et al. 2016, Holubova et al. 2016a)* examine the influence of demographic factors and self-stigma. Several studies *(Holubova et al. 2018; Ben-Zeev et al. 2012)* showed elements connected to more severe self-stigma. These were the longer the disorder, earlier onset, more hospitalisations, and being single or unemployed. Several reports *(Holubova et al. 2016a; Vrbova et al. 2016; Vrbova et al. 2018a; Ben-Zeev et al. 2012)* found a connection between self-stigma and the severity of the disorder. The comorbidity with social phobia seems to increase self-stigma, as does the comorbid major depression *(Gumley et al. 2004; Birchwood et al. 2007; Lysaker et al. 2008; et Lien et al. 2018a)*. Still, the causality is unclear and remains a topic for future research. It is difficult to say whether patients with schizophrenia and more severe self-stigma are more likely to develop a social phobia or depression

due to isolation or whether patients with these comorbidities are more prone to self-stigma. Studies examining connections between the clinical picture, type of psychopathology, progress of the disorder, and self-stigma are lacking.

(3) Which personality traits connect to self-stigma in patients with schizophrenia?

The self-stigma relates to higher harm avoidance, less persistence, and less cooperativeness (Vrbova *et al.* 2018a). Also, childhood trauma may be a factor that is associated with increased self-stigma in adulthood in patients with schizophrenia *(Lysaker et al. 2005; Bennouna-Greene et al. 2011; Lysaker 2012; Larsson et al. 2013; Matheson et al. 2013; Karaytuğ et al. 2023)*.

(4) What are the consequences of self-stigma in patients with schizophrenia?

In most studies *(Sidlova et al. 2011; Tang et al. 2012; Gerlinger et al. 2013; Holubova et al. 2016b; Vrbova et al. 2017a)*, self-stigma has been negatively associated with the quality of life. Still, the causality of the findings presents an unresolved issue.

(5) Does self-stigma influence the treatment of patients with schizophrenia?

Treatment adherence negatively correlates with self-stigma *(Villares & Sartorius 2003; Fung et al. 2010; Tsang et al. 2010; Kamaradova et al. 2015)*. Few investigations inspected the association between self-stigma and treatment efficacy *(Sirey et al. 2001; Vrbova et al. 2018b; Pijnenborg et al. 2019; Yanos et al. 2019)*. Preliminary results suggest that self-stigma decreased the effectiveness of the treatment in patients with schizophrenia. The prognosis of patients with higher self-stigma seems poorer than those with lower self-stigma.

(6) What are the possibilities for fighting self-stigma in patients with schizophrenia?

Few studies examined the changes in self-stigma during treatment in patients with schizophrenia *(Kamaradova et al. 2015; Holubova et al. 2016a)*. The treatment of the disorder decreased self-stigma; however, the treatment aimed solely at reducing symptoms, not self-stigma. Treatment strategies that directly address the stigma might reach even more promising results.

CONCLUSION

Overlooking self-stigma in treating individuals with schizophrenia may present an essential complication in reaching improvement or recovery in many patients. Therapeutic management, psychoeducation and psychotherapy targeting self-stigma may enhance the patients' stigma resistance and well-being. Furthermore, more studies are needed to explore the causal relationships between self-stigma and its consequences.

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