

Original article

Extent and predictors of stigma experienced by patients with schizophrenia

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Abstract

Background: Schizophrenia is regarded as one of the most stigmatized mental illnesses. Relatively few studies have investigated actual stigma experiences among people with schizophrenia and the factors which may contribute to it.

Aims: This cross-sectional study assesses the extent of stigma experienced by patients with schizophrenia and attempts to establish its clinical and sociodemographic predictors.

Methods: A total of 153 subjects with schizophrenia (62 outpatients and 91 inpatients) were evaluated with the use of the Stigma section of the Consumer Experiences of Stigma Questionnaire (CESQ) and several instruments measuring their subjective quality of life, social functioning and severity of psychiatric symptoms.

Results: Stigmatization experiences were common among respondents who most frequently reported having concealed their illness (86%), witnessed others saying offensive things about the mentally ill (69%), worried about being viewed unfavorably (63%) and been treated as less competent (59%). Higher levels of stigma were related to lower subjective quality of life and younger age of illness onset. No significant associations were found between stigma and symptoms or level of social functioning.

Conclusion: Our findings point at the reduced life satisfaction as a key aspect of the subjective experience of the stigma of schizophrenia.

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Keywords: Stigma; Schizophrenia; Mental illness; Quality of life; Social functioning; Symptoms

1. Introduction

Social stigma has been identified as a main barrier to recovery and to social inclusion of people receiving psychiatric treatment [29]. Its deleterious consequences sometimes may be even more severe than the difficulties arising from the symptoms of the disease itself [26]. One of the most highly stigmatized mental disorders is schizophrenia, not only because of the potentially chronic and disabling course of the illness but also due to a variety of negative stereotypes associated with its diagnosis such as poor prognosis, dangerousness, unpredictability or incompetence [3,6]. Research indicates unequivocally that the stigma of schizophrenia is a common,

transcultural phenomenon, present in both western and non-western societies [12].

Although in recent years the issue of mental illness stigma has met with growing interest among researchers, not all aspects of this problem have received the same amount of attention. In comparison to public opinion surveys, studies conducted among people with mental illness until recently have been significantly less frequent. What is more, most previous research on stigma among psychiatric patients has focused on perceived or anticipated stigmatization. These studies have demonstrated that individuals who expect being devalued and discriminated against are more likely to be unemployed and earn less income [13], fail to adhere to treatment [30], have restricted social networks [14], reduced self-esteem [16], compromised quality of life [25] and higher levels of demoralization and depression [13,17].

Much less is known about factors associated with the actual stigmatization experiences reported by people with mental

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illness. Studies concerning this issue are rather scarce and provide inconsistent results. For example, Dickerson et al. [7], in a study of 74 patients with schizophrenia, found that socioeconomic variables (lower perceived adequacy of finances and higher parental occupational status), but not symptoms or social functioning measures, were related to the extent of stigma and discrimination experiences. In contrast, Ertugrul and Uluğ [8] reported that in their study of 60 subjects with schizophrenia, patients who experienced stigmatization had more severe symptoms and were significantly more disabled than the patients who were not stigmatized. Furthermore, Lundberg et al. [19], who interviewed 200 people with different psychiatric diagnoses, found associations between more frequent actual rejection experiences and a lower degree of global functioning, a greater number of admissions to inpatient psychiatric care and with current contact with social services. Finally, in a study including 732 participants with schizophrenia from 27 countries, which was published recently by Thornicroft et al. [33], it was found that higher levels of incidents of negative experienced discrimination were associated with increasing years since first contact with mental health services and having received compulsory treatment.

In the present study, our aims are to assess the extent of actual stigma experiences reported by patients diagnosed with schizophrenia and to examine the relationships between the frequency of stigma experiences reported by our respondents and their clinical and sociodemographic characteristics. Although we consider this research to be largely exploratory, we made some preliminary hypotheses.

As regards clinical characteristics, on the grounds of a review of the literature [2], we first predicted that higher levels of experienced stigma would be associated with lower subjective quality of life. Further, with some exceptions [7], most studies using various methodologies suggest that stigma may be linked to more severe psychopathological symptoms and worse psychosocial functioning [8,10,19,20,23,24]. Rabkin [24] notes that public attitudes towards people labeled mentally ill are affected by characteristics of the treatment situation, such as e.g. site, method or frequency. More frequent contacts with the mental health care system (in particular with inpatient facilities) and more intrusive methods of treatment usually elicit more negative societal attitudes. Hence, in the context of our study, we expected higher levels of stigmatization in patients currently under hospital care and in those who had more previous hospitalizations (especially those with more frequent involuntary admissions). There is also an extensive literature on the stigmatizing effects of antipsychotic medication [27] and therefore stigma experiences were hypothesized to be more frequently reported by patients with more severe drug side effects. Furthermore, patients with an earlier illness onset and those with a longer duration of illness may be intuitively expected to have been more exposed to social rejection.

We also predicted that the frequency of our participants' self-reported stigma experiences might depend on their

sociodemographic characteristics. For example, literature reviews by Farina [10] and Rabkin [24] indicate that males with mental illness are treated less favorably than females. Secondly, it is a common belief that old age may be an important factor contributing to social rejection [9]. Sartorius [28] claims that older psychiatric patients are, in fact, doubly stigmatized – because of their mental health problems and because of their age. Thirdly, since studies of public attitudes suggest that people are usually more ready to reject psychiatric patients with a lower degree of community involvement, lacking social or family ties and having lower social status [24], we assumed that higher stigma levels should be experienced by respondents who are single, less educated, currently unemployed and with shorter duration of past employment. Finally, we supposed that patients who do not live independently in their own homes or apartments would have more opportunities to experience stigmatization from their immediate social environment.

2. Methods

2.1. Subjects

Participants were recruited between 2004 to 2005 from two psychiatric inpatient wards of the Institute of Psychiatry and Neurology (IPiN) and from one of the psychiatric outpatient clinics in Warsaw. Participation in the study was offered to all consecutive patients who attended the outpatient clinic or were admitted to inpatient wards at the IPiN and met the following criteria:

- had been diagnosed with schizophrenia according to ICD-10 criteria;
- aged between 18 and 65;
- were not dependent on drugs or alcohol.

The patients were assessed when they were in a stable mental state according to their attending psychiatrist.

Out of 177 patients screened as eligible for the study 153 (86.4%) agreed to participate and provided informed consent. The final sample consisted of 62 (40.5%) outpatients and 91 (59.5%) inpatients. The participants' mean age was 42.5 years (standard deviation [SD] = 12.6). A total of 79 (51.6%) respondents were women, 90 (58.8%) were single, never married and 81 (52.9%) lived independently. Nearly half of the patients ($n = 75$, 49.0%) were educated to secondary level and less than one fifth ($n = 28$, 18.3%) were employed at the time of the research. The average duration of past employment was 11.1 years (SD = 10.0). The patients' mean age of illness onset was 25.3 years (SD = 8.1) and their mean duration of illness was 17.3 years (SD = 11.2). They had a mean of 8.3 psychiatric inpatient hospitalizations (SD = 10.8). The average number of involuntary hospitalizations was 1.0 (SD = 2.1). The participants' mean score on the seven point CGI-SE scale assessing the side effects of pharmacological treatment (1: not present; 7: extremely severe) was 2.0 (SD = 1.2).

2.2. Instruments

2.2.1. Experiences of stigma

The extent of experienced stigmatization was assessed with the use of the Stigma section of the Consumer Experiences of Stigma Questionnaire (CESQ), which was developed by Wahl, in collaboration with the National Alliance for the Mentally Ill (NAMI) members [34]. This part of the questionnaire includes nine items concerning people's interpersonal experiences as consumers. The Polish version of the CESQ has been slightly modified from the original version for the purpose of this study. The term “consumers” was supplemented with the term “people receiving psychiatric treatment” (or “I receive psychiatric treatment”, where appropriate), as it has a different connotation in the Polish language and could possibly create confusion among participants. The responses to the questionnaire statements are scored on the five points scale that describes the frequency of each experience ranging from 1 for “Never” to 5 for “Very often”. Two questionnaire items referring to positive interpersonal experiences are reversely coded. The mean scores for each item and for the entire scale have been calculated, with higher ratings indicating more frequent stigma experiences. In our sample the questionnaire showed adequate internal consistency (Cronbach's alpha = 0.79).

2.2.2. Subjective quality of life

Subjective quality of life was measured using Corten et al.'s [5] extended version of the Satisfaction with Life Domains Scale (SLDS) [4]. This self-report questionnaire consists of 20 items assessing the degree of satisfaction with various life areas and with life in general. Responses to each question are scored on a seven points scale represented in a graphic format of frowning and smiling faces. In this study, internal consistency of the SLDS was found to be good (Cronbach's alpha = 0.90).

2.2.3. Global functioning

Global functioning of the participants was measured by means of the Global Assessment of Functioning Scale (GAF) [1]. This instrument uses a scale ranging from 1 to 100 to rate the level of psychological, social and occupational functioning. In the present study the best functioning in the past year was assessed. Relevant information was gathered from patients, their attending psychiatrists and medical records.

2.2.4. Patient-rated severity of symptoms

Two self-assessment tools were used to measure the current mental state of the participants. The Frankfurter Befindlichkeits-Skala (FBS) [32] describes the severity of symptoms on a four points scale. For the purpose of this study, an abbreviated version consisting of seven items was chosen. An earlier study showed that this shorter version of the FBS is one-dimensional (signs of disorganization) and has satisfactory psychometric properties [37]. Additionally, the Paranoid-Depresivitäts-Skala (PD-S) [41] has been administered. The PD-S measures the prevalence of symptoms on a four points scale. For the purpose of the present study the abbreviated version that consists of

12 items was used. In a separate study it was found that this modified tool retains the two-dimensional factor structure (depressive symptoms and paranoid symptoms) and has adequate psychometric properties [38]. Cronbach's alpha for both the FBS and the PD-S was found to be 0.87.

2.2.5. Clinician-rated severity of symptoms

The Clinical Assessment of Schizophrenic Syndromes (CASS) was used to measure the severity of psychiatric symptoms of the participants. This is an instrument developed at the IPiN and widely used in Poland. It consists of 31 items scored by the clinician on a seven points scale. The scale has been found to be a valid and reliable assessment tool [35,36]. The CASS shows high correlations with the Positive and Negative Syndrome Scale (PANSS) [11] ($r = 0.89$) and the Brief Psychiatric Rating Scale (BPRS) [22] ($r = 0.87$), but it allows a more comprehensive description of schizophrenic syndromes and includes aspects of psychopathology that were omitted in the PANSS and BPRS (e.g. catatonic symptoms or disturbed sense of self). Interrater reliability of the CASS was found to be good (Kendall's $W = 0.92$ – 0.98). In the current study, we utilized eight psychopathological dimensions of the CASS (positive symptoms, negative symptoms, dysphoria, disorganization, disturbed sense of self, depression, catatonia and lack of insight), which were identified through a factor analysis of a large sample of patients at the IPiN ($n = 513$, article in preparation).

Mean item scores and standard deviations for instruments administered to the study participants are presented in Table 1.

2.3. Procedures

The ethical approval of the present study was granted by the Bioethical Committee at the IPiN. All participants provided their informed consent. The clinical and sociodemographic information was gathered from interviews with patients and

Table 1

Mean item scores and standard deviations for instruments administered to the study participants ($n = 153$).

Instrument	Mean (SD)	Number of items
Consumer Experiences of Stigma Questionnaire (CESQ)	2.7 (0.8) ^a	9
Satisfaction with Life Domains Scale (SLDS)	4.4 (1.1) ^b	20
Global Assessment of Functioning Scale (GAF)	55.6 (11.7) ^c	1
Frankfurter Befindlichkeits-Skala (FBS)	2.1 (0.8) ^d	7
Paranoid-Depresivitäts-Skala (PD-S)	1.9 (0.7) ^d	12
Clinical Assessment of Schizophrenic Syndromes (CASS)	2.4 (0.8) ^e	31

^a Possible scores range from 1 to 5 with higher scores indicating more stigma.

^b Possible scores range from 1 to 7 with higher scores indicating more satisfaction.

^c Possible scores range from 1 to 100 with higher scores indicating better global functioning.

^d Possible scores range from 1 to 4 with higher scores indicating more severe patient-rated symptoms.

^e Possible scores range from 1 to 7 with higher scores indicating more severe clinician-rated symptoms.

their medical records. All measures were administered by a trained clinician.

2.4. Statistics

The data was analyzed by using the Statistical Package for the Social Sciences (SPSS PC version 14.0 PL). ANOVA tests and Spearman correlations were performed to investigate relationships between the stigma experiences reported by the participants and their clinical and sociodemographic characteristics. Variables which in these preliminary analyses showed significant associations with the extent of reported stigmatization were used in a stepwise multiple regression analysis to predict the Stigma score. In all analyses p -values of less than 0.05 were considered to be statistically significant.

3. Results

3.1. Experiences of stigma

Responses of the participants to the CESQ items are presented in Table 2.

Following Wahl [34], we adopted the principle that only experiences which occurred at least sometimes are worth noting in the description of the results. The most often reported experiences of stigma consisted in avoiding telling others outside the immediate family about receiving psychiatric treatment (86%) and witnessing others say offensive comments about people with mental disorders (69%). Most of the respondents were also worried by unfavorable opinions that others might have of them (63%) and thought that others treat them as less competent (59%). A little fewer than half of the interviewed patients reported that they have been at least sometimes a witness to hurtful or offensive presentation of the

mentally ill in the mass media (45%), that others shun or avoid them (41%) and advise them to lower their expectations in life (40%). At the same time, a considerable number of our respondents thought that people who know about their illness often or very often treat them fairly (58%) and that their friends often or very often understand and support them (48%).

3.2. Associations between the frequencies of stigma experiences reported by the study participants and their sociodemographic and clinical characteristics

No statistically significant associations were identified between the level of stigmatization experienced by the participants and their sociodemographic characteristics such as age, sex, education, marital status, housing status, current employment or number of years in employment (all $p > 0.05$).

As far as the clinical variables are concerned, no statistically significant relations between stigma and the type of psychiatric setting have been revealed (acute inpatient ward vs. outpatient clinic) or the duration of illness, number of psychiatric hospitalizations, number of involuntary hospitalizations and intensity of medication side effects (all $p > 0.05$). However, the mean score in the Stigma section of the CESQ was negatively correlated with the age of becoming ill ($\rho = -0.26$, $p < 0.01$).

Correlations between the Stigma score and measures of quality of life, global functioning and symptoms are presented in Table 3.

Stigma total score was correlated negatively with subjective quality of life and positively with patient-rated symptoms (all $p < 0.01$), but no significant associations were found between stigma and social functioning or overall severity of clinician-rated symptoms (both $p > 0.05$).

Table 2
Responses to CESQ Stigma items ($n = 153$).

CESQ Stigma item	n (%)					Mean (SD)
	Never	Seldom	Sometimes	Often	Very often	
I have avoided telling others outside my immediate family that I have received psychiatric treatment ($n = 153$)	13 (8.5)	8 (5.2)	30 (19.6)	50 (32.7)	52 (34.0)	3.8 (1.2)
I have been treated as less competent by others when they learned I had received psychiatric treatment ($n = 152$)	43 (28.1)	19 (12.4)	29 (19.0)	39 (25.5)	22 (14.4)	2.9 (1.4)
Friends who learned I received psychiatric treatment have been supportive and understanding ($n = 142$)	14 (9.2)	16 (10.5)	39 (25.5)	43 (28.1)	30 (19.6)	2.6 (1.2)
I have been shunned or avoided when it was revealed that I received psychiatric treatment ($n = 153$)	67 (43.8)	23 (15.0)	30 (19.6)	15 (9.8)	18 (11.8)	2.3 (1.4)
I have been in situations where I have heard others say unfavorable or offensive things about people receiving psychiatric treatment and their illnesses ($n = 153$)	25 (16.3)	22 (14.4)	34 (22.2)	48 (31.4)	24 (15.7)	3.2 (1.3)
I have been advised to lower my expectations in life because I receive psychiatric treatment ($n = 152$)	69 (45.1)	22 (14.4)	27 (17.6)	16 (10.5)	18 (11.8)	2.3 (1.4)
I have been treated fairly by others who knew I received psychiatric treatment ($n = 151$)	3 (2.0)	17 (11.1)	42 (27.5)	58 (37.9)	31 (20.3)	2.4 (1.0)
I have seen or read things in the mass media about people receiving psychiatric treatment and their illnesses that I find hurtful or offensive ($n = 151$)	47 (30.7)	35 (22.9)	38 (24.8)	19 (12.4)	12 (7.8)	2.4 (1.3)
I have worried that others will view me unfavorably because I received psychiatric treatment ($n = 153$)	38 (24.8)	19 (12.4)	39 (25.5)	36 (23.5)	21 (13.7)	2.9 (1.4)

Possible scores range from 1 to 5 with higher scores indicating more frequent stigma experiences. Not all respondents answered all questions, therefore percentages do not always sum to 100.

Table 3

Spearman correlations between the Stigma score and global scores on the scales measuring quality of life, social functioning and severity of symptoms ($n = 153$).

Measure	Correlation with CESQ Stigma section score
Satisfaction with Life Domains Scale (SLDS)	−0.28**
Global Assessment of Functioning Scale (GAF)	−0.02
Frankfurter Befindlichkeits-Skala (FBS)	0.30**
Paranoid-Depresivitäts-Skala (PD-S)	0.31**
Clinical Assessment of Schizophrenic Syndromes (CASS)	0.11

** $p < 0.01$.

Due to the complex factor structure of the PD-S and CASS scales, an additional analysis of dependencies between the frequency of experiences of stigmatization reported by the participants and the dimensions of these scales has been carried out. The results are presented in Table 4.

As shown in the table, the Stigma score was significantly related to both paranoid and depressive dimensions of the PD-S (both $p < 0.01$). Out of eight psychopathological dimensions of the CASS, the only one which proved to be significantly positively correlated with the CESQ was dysphoria ($p < 0.05$).

In order to identify the predictors of experienced stigma, we have performed a stepwise multiple regression analysis, in which the dependent variable was the Stigma score and the independent variables were the variables which in the preliminary analyses pointed out to statistically significant relations ($p < 0.05$) with the frequency of the experiences of stigmatization according to the CESQ: the paranoid and depressive dimensions of the PD-S, the mean score in the FBS, the dysphoria dimension of the CASS, the evaluation of quality of life according to the SLDS and age of becoming ill. The results of this analysis have been presented in Table 5.

The results of the stepwise multiple regression analysis reveal that the essential predictors of the frequency of stigma experiences reported by the study participants are the quality of

Table 4

Spearman correlations between the Stigma score and symptom dimensions of the Paranoid-Depresivitäts-Skala (PD-S) and the Clinical Assessment of Schizophrenic Syndromes (CASS) ($n = 153$).

Symptom dimensions	Correlation with CESQ Stigma section score
PD-S	
Paranoid symptoms	0.24**
Depressive symptoms	0.27**
CASS	
Negative symptoms	0.05
Lack of insight	0.04
Disturbed sense of self	0.07
Dysphoria	0.19*
Positive symptoms	0.11
Catatonia	−0.03
Depression	0.12
Disorganization	0.10

* $p < 0.05$; ** $p < 0.01$.

Table 5

Relationships between experienced stigma and sociodemographic and clinical characteristics of the study participants. Stepwise multiple regression analysis ($n = 153$).

Independent variables	Beta coefficients	R^2 change	F change	Significance of F change
Quality of life	−0.33	0.117	17.95	$p < 0.001$
Age at onset of illness	−0.21	0.043	6.96	$p < 0.01$
Total explained variance		16%		

Dependent variable: Consumer Experiences of Stigma Questionnaire (CESQ) Stigma section score.

$F = 12.85$, $p < 0.001$.

life and age at the onset of illness, which explained 16% of the observed variance.

4. Discussion

The first objective of this study was to assess the extent of stigmatization experienced by a sample of Polish patients with schizophrenia. A series of surveys carried out on representative samples of the society over the last decade clearly shows that in Poland, similarly to other countries, negative stereotypes of mental illness are still widespread and the level of social distance towards people with mental health problems remains rather high [39,40]. Studies concerning the Polish patients' perspective on stigma and discrimination however only recently began to appear. This issue seems to be of great importance for establishing the goals of antistigmatization programs, which should always be adjusted to specific local conditions and informed by the lived experience of those who are stigmatized because of their mental health problems [29].

The results of the present study seem to confirm that stigmatization is a common experience among patients with schizophrenia in Poland. Significant numbers (from 40 to about 70 percent) of our respondents reported at least sometimes being avoided by others, treated as less competent, advised to lower one's expectations in life, having worried about being viewed unfavorably by others, hearing negative comments about the mentally ill or encountering offensive media representations of mental illness. What is particularly striking is that as many as 86% of the participants indicated that they avoided disclosing their mental health problems outside the immediate family for fear of rejection.

However, in order to give a full picture of our respondents' experiences, it should be noted that a considerable proportion of them seldom or never felt stigmatized in the areas covered by the CESQ. Moreover, many reported positive experiences in interpersonal relations: a majority admitted that they were often or very often treated fairly by people who knew about their mental health problems, while nearly a half believed their friends were often or very often understanding and supportive. Such a pattern of findings seems to correspond well to the results of a study of public attitudes toward people with mental illness in Poland – the societal attitudes were found to be not univocally negative, but rather ambivalent [40].

Another important aim of the present study was to investigate the relationships between the clinical and socio-demographic characteristics of the participants and the frequency of stigma experiences reported by them. We identified few statistically significant associations in the stepwise multiple regression analysis using the Stigma score as the dependent variable. The strongest predictor of the greater frequency of stigmatization experiences reported by our respondents proved to be the lowered level of the subjective quality of life ($\beta = -0.33$, $p < 0.001$). The negative association of stigma with the quality of life is quite well established [2]. Because of the cross-sectional design of our study we cannot make inferences about the direction of this relationship. It seems reasonable to speculate that poor quality of life may be a result of stigma, but it is also possible that persons who are not satisfied with their life can be inclined to perceive their social environment and the way they are treated by others more negatively.

We also found that patients who became ill at a younger age felt more stigmatized ($\beta = -0.21$, $p < 0.01$). It seems that becoming ill at a younger age, when one's personal circumstances are not quite established and one's social network is still underdeveloped, might make it difficult to muster the resources necessary for avoiding negative social responses or facing up to them, which in turn makes mentally ill people more exposed to rejection.

One of the most important issues we undertook was to study the relationships between the experience of stigma and measures of symptoms and social functioning, indicating the degree of psychiatric impairment of our participants. Thus, by using a somewhat different set of instruments, we wanted to replicate the findings of Dickerson et al. [7] in a sample of subjects with schizophrenia twice as large as theirs. Although we used several scales, enabling a comprehensive assessment of both subjective and objective aspects of psychopathology, we did not detect any significant associations between the frequency of stigmatization experiences and symptoms. This finding, although consistent with the results of the study by Dickerson et al., seems counterintuitive, because one could expect patients with more severe symptoms to experience and to perceive more stigma. We did not identify either links between the reports of actual stigma experiences and the level of psychosocial functioning. Thus, our results support the conclusions of Dickerson et al. that patients' perceptions of being stigmatized are not simply a function of the severity of their impairment. One should bear in mind however that the relationships between social function, psychiatric symptoms and stigma may be quite complex and difficult to capture with cross-sectional assessment [20].

Our findings may have some implications for clinical practice. Due to the considerable frequency of self-reported stigma experiences in our sample it seems important to pay closer attention to the strategies of coping with stigmatization utilized by people with mental illness. A large majority of our respondents admitted they tried to avoid social rejection by keeping their illness secret. It should be noted that the CESQ item concerning non-disclosure of mental health problems was

endorsed by our participants even more often than by American samples [7,34]. However, non-disclosure of their psychiatric treatment did not protect our respondents from various forms of stigmatization. There is also evidence from other studies that secrecy as a coping strategy is rather ineffective in reducing negative effects of stigmatization and can even be psychologically harmful [15,31]. Thus, it seems that therapeutic programs should definitely include interventions aimed at helping patients to work out alternative and perhaps sometimes more useful ways of coping with stigma. Particular attention should be paid to those with an early onset of mental illness, since our findings indicate that they are at greatest risk for stigmatization.

It is also worth noting that striving for insight is usually one of the major goals in the treatment of people with schizophrenia. However, there is data indicating that patients who are aware of their illness may be particularly prone to hopelessness and decreased self-esteem if they at the same time endorse stigmatizing beliefs about mental illness [21]. Thus, if methods of training to cope with various aspects of stigmatization are not included among therapeutic interventions, acceptance of their condition may become burdensome for some patients.

The results of the present study may have some implications also for policy makers. Namely, the findings suggest that increasing expenditure on effective antistigma programs may contribute to an improvement in quality of life of persons receiving psychiatric treatment.

Several recommendations for future research emerging from the study should also be considered. We think it would be useful to compare the levels of stigma experienced by patients with schizophrenia and by members of other potentially stigmatized groups. Such a research strategy would enable a more reliable assessment of the relative strength of the stigma associated with a diagnosis of schizophrenia by putting the results in some context. Furthermore, the effectiveness of various strategies of coping with stigma should be carefully tested empirically. It seems particularly interesting to explore the role of the age of illness onset in the development of abilities to deal with stigma. Finally, there is a need for longitudinal studies investigating causal links between subjective quality of life and reported actual stigma experiences.

4.1. Limitations

Our study certainly has some limitations. Being cross-sectional it does not allow us to draw conclusions about the direction of observed relationships. Furthermore, due to non-randomized sampling, our respondents were not representative of the entire population of patients with schizophrenia in Poland. It should also be mentioned that at the time of the study about 60 percent of the participants were hospitalized. However, in our sample, inpatients did not differ from outpatients with respect to the frequency of reported stigma experiences. It seems important to note that much of the data collected during the study was self-reported and hence subject to a number of possible biases. Finally, some reservations

should be expressed with regard to our stigma measure. Although we used the questionnaire which is well known and recommended by prominent researchers in the field [18] it has not so far been fully tested for reliability and validity in Polish patients. The instrument has face validity but it is possible that it does not cover the whole range of manifestations of stigma experienced in daily social interactions by people with schizophrenia in Poland.

5. Conclusion

We believe that, despite of the above mentioned limitations, the present study adds to the knowledge about the nature of stigmatization experienced by people with mental illness. Most importantly, our findings point at the reduced life satisfaction as a key aspect of the subjective experience of the stigma of schizophrenia. The results also suggest that the extent of stigma experienced by patients diagnosed with schizophrenia may be relatively independent of the severity of the disease.

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