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Self-stigma in Patients with Schizophrenia in a **Psychiatry Hospital in Lagos, Nigeria**

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Aims: Schizophrenia is a devastating and disabling disorder associated with long term negative consequences and may require lifelong treatment. It is often complicated with self-stigma which makes treatment difficult and may be a source of complications. Ensuring good outcome will therefore, involve taking cognizance of self-stigma in the treatment plan. Studies examining selfstigma in patients with schizophrenia is scanty in Nigeria. The aim of the study was to determine the prevalence of self-stigma in patients with schizophrenia as well as identifying some of the correlates of self-stigma in the patients.

Study Design: Cross-sectional survey

Place and Duration of Study: Outpatient clinic of a Neuropsychiatry hospital in Lagos state, Nigeria.

Methodology: 320 adult patients with schizophrenia were recruited using a consecutive sampling technique. MINI international Neuropsychiatric interview (Psychotic disorder module) was used to confirm the diagnosis, after which socio-demographic questionnaire and the Internalized Stigma of

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Mental illness Inventory (ISMI), were administered to the patients. The data was analyzed with SPSS version 16 and the result presented in frequency tables, percentages, mean and standard deviation where necessary.

Conclusion: Self-stigma is common in schizophrenia and its consideration in management is necessary for a good treatment outcome.

Keywords: Schizophrenia; self-stigma; correlates; MINI; ISMI; Nigeria.

1. INTRODUCTION

Schizophrenia is an enigma and devastating illness [1]. Labeled variously as "gravevard" and "Heartland" of psychiatry, it has generated much controversy with plethora of theories and to answer hypotheses attempting questions [2,3]. Schizophrenia is considered one of the most highly stigmatized psychiatric disorders [4]. This social stigma of mental illness is not new to the human race as there are references to discrimination on the basis of mental illness in almost all the ancient books of law [5]. This stigma has persisted till this modern day and is often extended to the family members [6].

According to Corrigan, the categorization or diagnosis of mental illness leads to sense of "groupness" and "differentness", it creates a sense of "us" normal people and "them" the mentally ill [7]. People with mental illness are thus labeled and perceived as being mentally ill instead of being perceived as having mental illness. A labelling theory by a sociologist TJ Scheff, explains that an individual with mental illness internalizes the stereotypes of mental illness labeling and this dominates their self-concept [8].

The high level of discrimination against individuals with schizophrenia lead to the development of self-stigma, an internalized psychological reaction to the public stigma [9]. Self-stigma, also referred to as Perceived or Internalized stigma is therefore, a process by which persons with mental illness internalize mental illness stigma and the individuals experience diminished self-esteem and self-efficacy [10]. Studies have shown that self-stigma in patients with schizophrenia is associated with an increase in positive, negative

and depressive symptoms as well as increased overall symptoms severity and limited prospect for recovery [11,12,13]. It is also shown to predict deterioration in morale and self-esteem four months later [14]. Also, a meta-analysis revealed that a higher level of internalized stigma is associated with lower levels of hope, empowerment, self-esteem, self-efficacy, quality of life, and social support [15].

Increased self-stigma is also associated with reduced willingness or ability to seek help and thus lead to psychiatric hospitalization as a last resort [16,17]. Self-stigma has also been shown to affect all the aspects of the social life of individuals with schizophrenia, it constricts their social networks and opportunities in anticipation of rejection due to stigma, which leads to isolation, unemployment and lowered income [11].

Studies on the prevalence of self-stigma in patients with schizophrenia in Nigeria, other parts of Africa and other parts of the world have revealed a prevalence between 18.8% to 47.3% depending on the instrument used and the study population [12,18-23]. This study, aim at determining the prevalence of self-stigma in patients with schizophrenia as well as the correlates of self-stigma in the patients. Carrying out a study on self-stigma in patients with schizophrenia will help provide awareness about the co-morbidity in psychiatric practice and thereby improving diagnosis. It will also provide data that could inform intervention strategies, thereby improving treatment outcome in affected individuals.

2. MATERIALS AND METHODS

The study was carried out at the outpatient clinic of the Federal Neuropsychiatric Hospital, Yaba. 320 consecutive patients who have been

diagnosed as suffering from schizophrenia and presenting for follow-up management at the outpatient clinic were recruited into the study. The purpose of the study was explained to them, they were assured of utmost confidentiality and written Informed consent was obtained from them. Their diagnosis was then confirmed using the Mini International Neuropsychiatric Interview (MINI) psychotic disorder module which was administered by the researcher. Thereafter, the socio-demographic and clinical questionnaire were administered to the participants and this is followed by the administration of the Internalized Stigma of Mental Illness Inventory (ISMI) to assess the presence of Self-stigma in the participants.

The data collected was collated and analyzed using the Statistical Package for Social Sciences (SPSS) version 16. The result was presented using frequency tables, percentages, mean and standard deviation where necessary. prevalence of self-stigma was determined using the frequency table, association between variables and self-stigma categorical determined using chi square and logistic regression was used to determine the correlates of self-stigma in the participants. The confidence interval was set at 95% and level of significance at 0.05 for statistical association.

3. RESULTS

Table 1 shows the socio-demographic variables of the respondents in the study. A total of three hundred and twenty out-patients who were receiving treatment for schizophrenia participated in the study. The age of the participants ranged from 19-68 years (mean = 37.7 years; sd±11.38), majority (61.5%), being less than 40 years. One-third of the participants were in the 30-39 years age.

More than half (57.2%) of them were females while 46.5% were never married. Out of 122 (38.1%) that were married, over three-quarter (79.5%) were living with their spouses. Half of the participants (50.6%) were employed and 67.5% had no family history of psychiatry disorder while 72.2% of them either had no financial income or earned less than №18,000 monthly income. Over four-fifth of them (86.2%), had good social support. Most of the participants (80.9%) had secondary education and above while 15.0% had primary education and 4.1% had no formal education.

3.1 Prevalence of Self-Stigma

Using the 2-category method of scoring the International Stigma of Mental Illness Inventory (ISMI) which uses a score of 2.5 as cut-off²⁶, Table 2 showed that 81 (25.3%) had high self-stigma while 239 (74.7%) had low self-stigma.

Thus, the prevalence of self-stigma is 25.3%.

3.1.1 Correlates and predictors of self-stigma in patients with schizophrenia

Table 3 revealed that number of episodes and educational status are associated with self-stigma in patients with schizophrenia and binomial regression (Table 4) showed that multiple illness episodes (OR= 2.900, 95%Cl= 1.313- 6.405, p= 0.008) and educational level below secondary school (OR= 2.078, 95%Cl= 1.137- 3.797, p= 0.017) predict self-stigma in patients with schizophrenia.

The odds of developing self-stigma in patients with schizophrenia is 3 times higher in patients with multiple episodes and 2 times higher in patients with educational level below secondary schools.

4. DISCUSSION

The present study found a prevalence of 25.3% self-stigma among patients schizophrenia. Similar studies conducted in Nigeria have also found a significant level of selfstigma among schizophrenic patients. A study carried out in a Nigerian psychiatric hospital in Aro. Abeokuta. Ogun state, reported prevalence of 18.8% [18]. Another, study conducted in Lagos, by Oduguwa et al. reported a prevalence of 47.3% for self-stigma among patients with schizophrenia [19]. The variations found in these previous studies can be attributed to difference in study design. While both studies used smaller sample size compared to the present study, the study by Oduguwa et al used a modified version of the Internalized Stigma of Mental Illness Inventory (ISMI).

A study conducted in Israel by Werner *et al*, reported a prevalence of between 20 and 30% [20] which is comparable to the finding of this study. The result of this study is however at variance with findings from a hospital based cross-sectional study in Ethiopia that reported a prevalence of 46.7% [21] and also a European survey which reported a prevalence of 40% for self-stigma among patients with schizophrenia

Table 1. Socio-demographic/ clinical characteristic of subjects (N=320)

Variable	Frequency (n)	Percentage (%)	Mean (sd)	Range
Age				
<20	2	0.6	377.70 (11.3775) yrs	19-68 years
20-29	89	27.8	` , , , ,	•
30-39	106	33.1		
40-49	70	21.9		
50-59	35	11.0		
>60	18	5.6		
Sex				
Male	137	42.8		
Female	183	57.8		
Educational status	177			
No formal education	13	4.1		
Primary	48	15.0		
Secondary	138	43.1		
Tertiary	121	37.8		
Employment status				
Employed	162	50.6		
Unemployed	158	49.4		
Income (₦)				
0-17,000	231	72.2	20,958 (66,188)	0.1,000,000
18,000-50,000	61	19.0		
51,000-100,000	16	5.0		
>100,000	12	3.8		
Marital status				
Never Married	149	46.5		
Married	122	38.1		
Divorced	28	8.8		
Widowed	21	6.6		
Living with spouse (if married)				
Yes	97	79.5		
No	25	20.5		

Variable	Frequency (n)	Percentage (%)	Mean (sd)	Range
Social support			• •	
Yes	276	86.2		
No	44	13.8		
Family history				
Yes	104	32.5		
No	216	67.5		
Duration of illness (months)				
0-120	218	68.1	92.23 (95.43)	6-540
121-240	88	27.5	,	
>240	14	4.4		
No of episodes				
1	66	20.6	3.55 (2.57)	
2-5	199	62.2	(=:0.7)	
>5	55	17.2		
No of admissions				
0	145	45.3	1.02 (1.34)	0-8
1-2	137	42.8	,	
>2	38	11.9		

Social support*: Financial and emotional support

Table 2. Distribution of respondents by their scores on ISMI

Self-stigma	Frequency (n)	Percentage (%)	
Low self-stigma	239	74.7	
High self-stigma	81	25.3	
Total	320	100	

Table 3. Association between self-stigma and socio-demographic / clinical variables

Variable	Frequency	High Self-stigma (%)	Low self-stigma (%)	X ²	df	P value	OR	95% CI
Age (yrs)	-							
<40	1977	51 (25.9%)	146 (74.1%)	0.090	1	0.435	1.083	0.848-1.253
≥ 40	123	30 (24.4%)	93 (75.6%)					
Gender		,	,					
Male	137	38 (27.7%)	99 (72.3%)	0.745	1	0.231	1.250	0.859-1.493
Female	183	43 (23.5%)	140 (76.5%)					
Education								
<secondary< td=""><td>81</td><td>23 (37.7%)</td><td>38 (62.3%)</td><td>6.122</td><td>1</td><td>0.012</td><td>2.098</td><td>1.136-2.807</td></secondary<>	81	23 (37.7%)	38 (62.3%)	6.122	1	0.012	2.098	1.136-2.807
≥Secondary	259	58 (22.4%)	201 (77.6%)					
Employment		, ,						
Employed	162	45 (27.8%)	117 (72.2%)	1.055	1	0.185	1.303	0.898-1.434
Unemployed	158	36 (22.8%)	122 (77.2%)					
Income (N)		,	,					
<18,000 ´	218	54 (24.8%)	164 (75.2%)	0.106	1	0.422	0.915	0.741-1.523
≥18,000	102	27 (26.5%)	75 (73.5%)					
Social support		,	,					
Good	276	68 (24.6%)	208 (75.4%)	0.484	1	0.300	0.780	0.681-2.2247
Poor	44	13 (29.5%)	31 (70.5%)					
Family history		,	,					
Yes	104	29 (27.9%)	75 (72.1%)	0.539	1	0.274	1.219	0.807-1.614
No	216	52 (24.1%)	164 (75.9%)					
Illness duration								
<12 months	79	10 (20.4%)	39 (79.6%)	0.736	1	0.252	0.722	0.949-1.157
>12 months	271	71 (26.2%)	200 (73.8%)					
No of episodes			, ,					
1 .	66	8 (12.1%)	58 (87.9%)	7.653	1	0.003	0.342	1.075-1.317
Above 1	254	73 (28.7%)	181 (̀71.3%)́					
No of admission			, ,					
No admission	143	36 (25.4%)	107 (74.8%)	0.003	1	0.532	0.987	0.803-1.261
≥ 1 admission	177	45 (25.4%)	132 (74.6%)					

Social support*: Financial and emotional support

Table 4. The predictors of self-stigma in patients with schizophrenia

В	S>E	df	p value	OR	95% CI Lo	ower Higher
1.065	0.404	1	0.008	2.900	1.313	6.405
0.731	0.308	1	0.017	2.078	1.137	3.797
		1.065 0.404	1.065 0.404 1	1.065 0.404 1 0.008	1.065 0.404 1 0.008 2.900	1.065 0.404 1 0.008 2.900 1.313

[12]. It is also at variance with the GAMAIN-European study that reported a prevalence of 41.7% [22]. The disparity between these studies and the present study can be explained based on methodological differences. For example, in the GAMAIN-EUROPEAN study was conducted by mailing questionnaire to participants who sent response through the same mean thus, creating potential for bias. The difference could also be due to the fact that the studies were conducted in different socio-cultural settings

Socio-demographic and clinical factors found to be associated with self-stigma in the subjects include educational level below secondary school and multiple episodes of the illness. A higher educational level in individuals with mental illness has been found to be associated with more positive attitude towards the illness [23] and therefore can reduce the occurrence of self-stigma. The finding in this study that poor educational attainment is associated with self-stigma has been reported by several studies. Studies conducted in Abeokuta and Ilorin similarly reported this association [18,23] as well as studies of Oduguwa et al [19] and Girma et al [24].

This study revealed that multiple illness episodes and educational level below secondary school are predictors of self-stigma in patients with schizophrenia. Low education was also found to predict self-stigma in patients with schizophrenia in an Ethiopian study [25], study by Girma et al also reported that a higher educational level is associated with low self-stigma and identified educational level as the most powerful predictor of self-stigma [24].

5. LIMITATIONS

The study population was drawn from a hospital setting which may not truly reflect the characteristics of the general population and finally, the interviewer is not blinded to the hypothesis and this may be a source of bias.

6. CONCLUSION AND RECOMMENDA TIONS

The findings from this study have clearly shown that self-stigma is common in patients with

schizophrenia with attendant consequences. It also showed that multiple illness episodes and educational level below secondary school are predictors of self-stigma in patients with schizophrenia. Effort should therefore be made to ensure adequate evaluation of patients being managed for schizophrenia so that adequate treatment can be given to these patients.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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APPENDIX

Research Title: Self-Stigma in Patients with Schizophrenia in a Psychiatry Hospital in Lagos, Nigeria.

APPENDIX I

INFORMED CONSENT FORM FOR PARTICIPANTS

Dear Respondent,

You are being requested to participate in a study titled "SELF-STIGMA IN PATIENTS WITH SCHIZOPHRENIA IN A PSYCHIATRY HOSPITAL IN LAGOS, NIGERIA". The purpose of the study is to find out how commonly self-stigma occur in patients with Schizophrenia and also to find out the correlates of self-stigma in patients with Schizophrenia disease with a hope of showing the implication of such co-occurrence and developing better evaluation and management options for patients suffering from Schizophrenia.

All information obtained from you will be treated with strict confidentiality. Your name will not be used on any report that will come out of the study, but the data may be shared with other researchers for the purpose of promoting the course of medical knowledge.

Your participation in the study is voluntary and you may withdraw at any time. Your decision not to participate in the study will not affect your treatment.

If the explanations are clearer to you and you decide to participate in the study, please sign below.

Signature/Thumbprint of participant	Date
Signature of witness	Date

APPENDIX II

QUESTIONNAIRES

The information in this questionnaire is strictly for educational purposes. Absolute anonymity and confidentiality is guaranteed. Please read the questions carefully and answer them with all honesty as your sincere response will be of great benefit to the success of the study. I will be assisting you with the process. Thank you.

SOCIO-DEMOGRAPHY

1.	Age
2.	Sex (i). Male [] (ii). Female []
3.	Religion (i). Christianity [] (ii). Islam [] (iii). Others (specify)
4.	Ethnicity (Specify)
5.	Educational level (i). No formal education [] (ii). Primary school [] (iii). Secondary
	school [] (iv). Tertiary institution []
6.	Religion (i) Christianity [] (ii) Islam [] (iii) Others []
7.	Employment status (i). Employed [] (ii). Unemployed []
	If employed, what is average level of income per month?
a.	Below 18,000
b.	18,000- 50,000
c.	51,000-100,000
d.	Above 100,000
9.	Marital status (i). Never married [] (ii). Married [] (iii). Divorced [] (iv). Widow(er)
	[].
10.	If married, are you living with your spouse? (i). Yes []. (ii). No []

APPENDIX III

MINI INTERNATIONAL NEUROPSYCHIATRY INVENTORY (PSYCHOTIC DISORDER MODULE)

	COLUI Patient R		е	COLUMN B Clinician Jud (if necessar	_	
		В	IZARRE	Е	BIZARRE	
M1 a Have you ever believed that people were spying on you, or against you, or trying to hurt you?	NO	YES	YES	YES	YES	that someone was plotting
b IF YES / YES BIZARRE: Do you currently believe these things? NOTE: ASK FOR EXAMPLES, TO RULE OUT ACTUAL STALKING.	NO	YES	YES °M6	YES	YES °M6	
M2 a Have you ever believed that someone was reading your mind or could hear your thoughts or that you could actually read someone's mind or hear what another person was thinking?	NO	YES	YES	YES	YES	
b IF YES / YES BIZARRE: Do you currently believe these things?	NO	YES	YES _{M6}	YES	YES _{M6}	
M3 a Have you ever believed that someone or some force outside of yourself put thoughts in your mind that were not your own, or made you act in a way that was not your usual self? Have you ever felt that you were possessed? CLINICIAN: ASK FOR EXAMPLES AND DISCOUNT ANY THAT ARE N	NO NOT PSYCI	YES HOTIC.	YES	YES	YES	
b IF YES / YES BIZARRE: Do you currently believe these things?	NO	YES	YES °M6	YES	YES °M6	
M4 a Have you ever believed that you were being sent special messages through the TV, radio, or newspaper, or that a person you did not personally know was particularly interested in you?	NO	YES	YES	YES	YES	
b IF YES / YES BIZARRE: Do you currently believe these things?	NO	YES	YES	YES	YES	

			°M6		°M6	
M5 a Have your relatives or friends ever considered any of your beliefs strange or unusual? INTERVIEWER: ASK FOR EXAMPLES. CODE YES ONLY IF THE EXAMP ARE CLEARLY DELUSIONAL IDEAS (FOR EXAMPLE, SOMATIC OR REL DELUSIONS OR DELUSIONS OF GRANDIOSITY, JEALOUSY, GUILT, RUDESTITUTION OR OTHERS NOT EXPLORED IN M1 TO M4).	.IGIOU		YES	YES	YES	
b IF YES / YES BIZARRE: Do they currently consider your beliefs strange?	NO	YES	YES	YES	YES	
M6 a Have you ever heard things other people couldn't hear, such as voices? HALLUCINATIONS ARE SCORED "BIZARRE" ONLY IF PATIENT ANSWEYES TO THE FOLLOWING:	NO ERS	YES		YES		
IF YES OR YES BIZARRE: Did you hear a voice commenting on your thoughts or behavior, or did you hear two or more voices talking to each other?		NO		YES	NO	YES
b IF YES OR YES OR YES BIZARRE: Have you heard these things in the past month? SCORE AS "YES BIZARRE" IF PATIENT HEARD A VOICE COMMENTING ON THEIR THOUGHTS OR BEHAVIOR OR HEARD TWO OR MORE VOICES TALKING TO EACH OTHER.	NO	YES	YES	YES °M8	YES	°M8
M7 a Have you ever had visions when you were awake or have you ever seen things other people couldn't see? CLINICIAN: CHECK TO SEE IF THESE ARE CULTURALLY INAPPROPRIA	NO ATE.	YES		YES		
b IF YES: Have you seen these things in the past month?	NO	YES		YES		
CLINICIAN'S JUDGMENT						
M8 b IS THE PATIENT CURRENTLY EXHIBITING INCOHERENCE, DISOR	RGANIZ	ZED SP	EECH,	NO	YES	

YES

OR MARKED LOOSENING OF ASSOCIATIONS?

M9 b IS THE PATIENT CURRENTLY EXHIBITING DISORGANIZED OR CATATONIC BEHAVIOR? NO YES

M10 b ARE NEGATIVE SYMPTOMS OF SCHIZOPHRENIA, FOR EXAMPLE, SIGNIFICANT AFFECTIVE YES FLATTENING, POVERTY OF SPEECH (ALOGIA) OR AN INABILITY TO INITIATE OR PERSIST IN GOAL- DIRECTED ACTIVITIES (AVOLITION) PROMINENT DURING THE INTERVIEW?

M11 a IS THERE AT LEAST ONE "YES" FROM M1 TO M10b?

M11 b

ARE THE ONLY SYMPTOMS PRESENT THOSE IDENTIFIED BY THE CLINICIAN FROM M1 TO M7 (COLUMN B) AND FROM M8b OR M9b OR M10b?

IF YES, SPECIFY IF THE LAST EPISODE IS CURRENT (AT LEAST ONE "b" QUESTION IS CODED "YES" FROM M1b TO M10b) AND/OR LIFETIME (ANY "a" OR "b" QUESTION CODED YES FROM M1a TO M10b) AND PASS TO THE NEXT DIAGNOSTIC SECTION.

IF NO, CONTINUE NO

PSYCHOTIC DISORDER NOT OTHERWISE SPECIFIED*

NO

Current R Lifetime R *

Provisional diagnosis due to insufficient information available at this time.

WARNING: IF AT LEAST ONE "b" QUESTION IS CODED YES, CODE M11c AND M11d. IF ALL "b" QUESTIONS ARE CODED NO, CODE ONLY M11d.

M11c FROM M1b TO M6b: ARE ONE OR MORE "b" ITEMS CODED "YES BIZARRE"?

OR

ARE TWO OR MORE "b" ITEMS FROM M1b TO M10b CODED "YES" BUT NOT "YES BIZARRE"?

AND DID AT LEAST TWO OF THE PSYCHOTIC SYMPTOMS OCCUR DURING THE SAME 1 MONTH PERIOD

NO

Then Criterion "A" of Schizophrenia is not currently met

YES

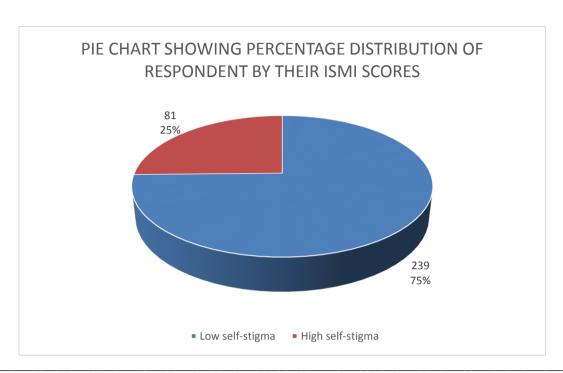
Then Criterion "A" of Schizophrenia is currently met

APPENDIX IV

Internalized stigma of mental illness inventory

NO		Strongly disagree	Disagree	Agree	Strongly agree
1	I feel out of place in the world because I have schizophrenia.				
2	I am embarrassed or ashamed that I have schizophrenia.				
3	I feel inferior to others who don't have schizophrenia.				
4	I am disappointed in myself for having schizophrenia.				
5	Having schizophrenia has spoiled my life				
6	People without schizophrenia could not possibly understand me				
7	People with schizophrenia tend to be violent				
8	People with schizophrenia shouldn't get married.				
9	People with schizophrenia cannot live a good, rewarding life.				
10	People can tell that I have schizophrenia the way I look.				
11	Because I have schizophrenia, I need others to make most decisions for me.				
12	I can't contribute anything to society because I have schizophrenia.				
13	Stereotypes about people with schizophrenia apply to me				
14	People discriminate against me because I have schizophrenia.				
15	People often patronize me, or treat me like a child, just because I have schizophrenia.				
16	People ignore me or take me less seriously just because I have schizophrenia				
17	Nobody would be interested in getting close to me because I have schizophrenia.				
18	Others think that I can't achieve much in life because I have schizophrenia.				
19	I avoid getting close to people who don't have schizophrenia to avoid rejection.				
20	I don't socialize as much as I used to because my schizophrenia might make me look or behave				
	"weird".				
21	I don't talk about myself much because I don't want to burden others with my schizophrenia.				
22	Negative stereotypes about schizophrenia keep me isolated from the "normal" world.				
23	Being around people who don't have schizophrenia makes me feel out of place or inadequate.				
24	I stay away from social situations in order to protect my family or friends from embarrassment.				
25	People with schizophrenia make important contributions to society.				
26	I feel comfortable being seen in public with an obviously mentally ill person.				
27	Living with schizophrenia has made me a tough survivor.				
28	In general, I am able to live my life the way I want to.				
_29	I can have a good, fulfilling life, despite my schizophrenia.				

APPENDIX V



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