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**THE RELATIONSHIP BETWEEN SOCIAL SUPPORT,
INTERNALIZED STIGMA OF MENTAL ILLNESS AND
RECOVERY ATTITUDE AMONG PATIENTS WITH
SCHIZOPHRENIA IN MAIDUGURI**

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THE RELATIONSHIP BETWEEN SOCIAL SUPPORT, INTERNALIZED STIGMA OF MENTAL ILLNESS AND RECOVERY ATTITUDE AMONG PATIENTS WITH SCHIZOPHRENIA IN MAIDUGURI

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ABSTRACT

Purpose: Social support strengthening and hope inspiration about recovery may mitigate stigma of mental illness. The study explored on the level of social support as well as the relationship of social support with internalized stigma and recovery attitude among patients with schizophrenia.

Methodology: Through a cross-sectional design and a convenience sampling method, 282 participants with a diagnosis of schizophrenia completed the study. They were interviewed with the Internalized stigma of Mental illness (ISMI) Scale, Oslo-3 Social Support Scale and Recovery Attitude Questionnaire (RAQ-16). The Statistical Package for Social Sciences (SPSS) version 18 was used for data entry and analysis and Pearson's correlation analysis was used to assess for the relationship of social support with internalized stigma and recovery attitude.

Findings: Perceived social support was moderate to low in majority of the participants (87.5%). The mean scores for social support, internalized stigma and recovery attitude were 3.111 (\pm 0.748), 2.580 (\pm 0.245) and 3.561 (\pm 0.355) respectively. Social support significantly and negatively correlated with internalized stigma on the domains of stereotype endorsement ($r=-0.270$; $p=0.000$), positively correlated with the stigma resistance subscale ($r=0.568$; $p=0.000$) and recovery attitude ($r=0.428$; $p=0.000$). A negative correlation between recovery attitude and internalized stigma was observed on the domains of stereotype endorsement ($r=-0.249$; $p=0.000$) and stigma resistance ($r=0.299$; $p=0.000$).

Conclusion: The study showed a high level of perceived low to moderate social support and perceived social support both correlated to internalized stigma and recovery attitude.

Recommendations: The outcome of this study indicates that strengthening the social support network may enhance positive recovery attitude and mitigate internalized stigma of mental illness. Therefore, there is need to design and adopt mental health intervention that simultaneously targets stigma, promotes recovery attitude and strengthens social support in the overall treatment plan of individuals living with severe mental illness.

Keywords: *Internalized stigma, social support, recovery attitude, schizophrenia*

1.0 INTRODUCTION

Lots of stigma reduction strategies including anti-stigma campaign, awareness raising, and psycho-education have been put in place in recent times across the globe (Waqas et al. 2020), however its impacts are still not encouraging as stigma of mental illness remains a global health problem that continues to hinder the recovery process (Morgan, Reavley, Rose, Too, & Jorm, 2018; Waqas et al. 2020). The impact of stigma tends to be even worse in developing countries like Nigeria, where there are no well-established stigma combating programmes and mental health promotional activities (Abdulmalik, Kola, & Gureje, 2016). Stigma of mental illness could hamper on health seeking behavior, the course of treatment, as well as the outcome of treatment thereby impeding on the recovery process (Corrigan, Druss, & Perlick, 2014). More attention was paid in the past to public stigma, a situation where the general population endorses unfavourable opinions and attitudes in the form of stereotypes, prejudice and discrimination (Corrigan & Shairo, 2010). However as public stigma invariably leads to self-stigma, a recognizable body of research are gaining grounds on self-stigma or internalized stigma; a process whereby an individual with certain attribute conforms to societal beliefs (Evans-Lacko, Brohan, Mojtabai, & Thornicroft, 2012).

Self-stigma has been shown to be mitigated by psycho-educational interventions and life skill empowerment activities of boosting self-esteem, improving coping strategies, building resilience and promoting self-efficacy (Jahn et al. 2020, Hassan & Musleh, 2017; Tsang et al. 2016; Lucksted et al. 2011). Recent studies have shown that combating stigma alone without recovery oriented programmes may not sufficiently improve the wellbeing of a mentally ill person and a paradigm shift from treatment directed to a person-centered and recovery approach was recommended (Cullen et al. 2017) and has led to the integration and implementation in the treatment plan in some parts of the world. Recovery is a vital goal integrated in mental health services in Denmark, Finland, Norway, and Canada with recovery oriented services (ROS) laying emphasis on building individual strength and resilience (Jenkin, 2019). There is no universal definition for personal recovery, however one of the most widely cited definition is recovery is “a deeply personal, unique process of changing one’s attitude, values, feelings, goals, skills and/or roles”. It is a way of living a satisfying, hopeful and contributing life even within the limitations caused by the illness (Anthony, 1993). Recovery involves “the development of new meaning and purpose in one’s life as one grows the catastrophic effect of mental illness”. Thus personal Recovery is an ongoing non-linear and personal process of finding ways to live a meaningful life, develop valued social roles in the community even when symptoms are present. This differs from clinical recovery which dwells on symptoms reduction, gaining of insight and treatment compliance.

Recovery and self-stigmatization are two related concept but yield different views in relation to the experiences of an individual with mental illness, with recovery dealing with positive attributes and strength in terms of a positive sense of identity and feeling of optimism and self-stigmatization with negative self-appraisal of a pessimistic thought of a mentally ill person cannot get better or recover leading to diminished self-esteem and self-efficacy. In contrast to the social cognitive model of internalized stigma consisting of a four step progressive process in which a person with mental illness is aware of societal stigma, accepts those stigmatizing beliefs, applies to him/herself and suffers a stigma related decrement in self-esteem (Corrigan, Rafacz,

Rusch, 2011), the recovery model underlined four processes involved with personal recovery and this include finding and maintaining hope, re-establishing of positive identity, building a meaningful life and taking responsibilities and control (Mental Health Commission of Canada, 2009). Self-stigmatization plays a key role in hindering the recovery process through restriction of participation, poor health seeking behaviour, feeling of respect and dignity loss and limited employment seeking behaviours (Corrigan et al. 2014). Other barriers to recovery include inaccessible mental health services, poverty and poor medication adherence (Abdulmalik et al. 2016; Perese, 2007).

Both the recovery process and internalized stigma have been shown to be linked with strong social network and social support. Close social ties with family and connectedness were identified as important in the recovery process (Soundy et al. 2015; Leamy, Bird, Le Boutillier, Williams, & Slade, 2011). A strong supportive social network has been shown to improve the mental health wellbeing of an individual (Kondrat, Sullivan, Wilkins, Barrette, & Beerbower, 2018) and has helped individuals cope with negative life events (Ozdemir & Tas Arslan, 2018), stigma (Chronister, Chou, & Liao, 2013), improve medication adherence (Stentzel et al. 2018), enhance self-efficacy (Ginja et al. 2018), improve quality of life (Prabhakaran, Nagarajan, Varadharajan, & Menon, 2021), improve health seeking behaviour (Jung, von Sternberg, & Davis, 2017) and job seeking behaviour (Lim, Lee, Jeon, Yoo, & Jung, 2018).

Although links between, social support, stigma and recovery have been documented among persons with severe mental illness (SMI) in the western countries (Cullen et al. 2017; Chronister et al. 2013), such relationships have not in explored in Nigeria. Prior study on the relationship of social support, internalized stigma and recovery attitude in the western countries was carried out among inpatients which cannot be generalized to individuals seen as outpatients or those living in the community (Cullen et al. 2017, Chronister et al. 2013). In spite of the fact that links have been made with socio-clinical factors of being unmarried, uneducated, unemployed and greater severity of illness with poor social network and support (Eklund & Hansson, 2007; Müller, Nordt, Lauber, & Rössler, 2007), however, negative attitudes towards illness recovery and perceived stigma may influence an individual's social interaction leading to social exclusion in the form of secrecy and social withdrawal to cope with societal stigma. Although a significant number of research have explored on the level of social support as well as its relationship with stigma and recovery among persons with SMI, such study have not been carried out in northeastern Nigeria. Thus, the study aims to explore on the level of social support and its relationship with recovery attitude and internalized stigma among persons with schizophrenia. The outcome of this study will help inform on anti-stigma interventions that best suit patients with schizophrenia in Maiduguri northeastern Nigeria.

2.0 MATERIALS AND METHODS

2.1 Subjects

Three hundred respondents with a diagnosis of schizophrenia were recruited through convenience sampling to participate in the study with 282 completing the study at the General Out-patient Department of Federal Neuropsychiatric Hospital Maiduguri. The inclusion criteria were consenting patient with ICD-10 diagnosis of schizophrenia between 18-65 years of age and

the exclusion criteria were presence of co-morbid medical illness and presence of psychotic symptoms that interferes with the ability to understand the questions.

2.2 Measures

2.2.1 Socio-demographic and Clinical Data

A predesigned questionnaire was used to collect data on the socio-demographic variables (age, gender, educational level, marital status, religion, ethnicity and employment status) and clinical variables (duration of illness, number of hospital admission, number of relapse and severity of symptoms).

2.2.2 Oslo-3 Social Support Scale

Oslo 3-item social support scale measures the level of social support (Dalgard et al. 2006). It consist of three items that ask questions about the ease of getting help from neighbours, the number of people the subject can count on when there are serious problems and the level of concern people show in what the subject is doing. The instrument is valid and reliable (Dalgard et al. 2006) with scores ranging from 3-14 which is obtained by adding the raw scores of the three items. Score of 3-8 indicates poor social support, 9-11 moderate social support and 12-14 strong social support.

2.2.3 Internalized Stigma of Mental Illness Scale (ISMI)

The ISMI scale measures the person's negative view of mental illness and of themselves as a result of having a mental illness. The scale (Ritsher, Otilingam, & Grajales, 2003) is a widely used instrument consisting of 29 items, grouped into five domains: *alienation*, *stereotype endorsement*, *social withdrawal*, *perceived discrimination* and *stigma-resistance*. Four of the five domains, have good levels of internal consistency and test-retest reliability. However, the fifth subscale (stigma-resistance subscale) is conceptually different from the other parts of the scale and has lower internal consistency (Sibitz, Unger, Woppmann, Zidek, & Amering 2011). It has an internal consistency reliability coefficient of $\alpha = 0.90$ and test-retest reliability $r = 0.92$. Each item is rated on a 4 point Likert scale (1= strongly disagree, 2= disagree, 3= agree, and 4= strongly agree. Higher scores indicative higher levels of internalized stigma. Previous research (Ritsher et al. 2003), defined a high level of self-stigma as an average score above a midpoint of 2.5.

2.2.4 Recovery attitude Questionnaire (RAQ-16)

Recovery attitude Questionnaire is a 16 item scale reflecting positive beliefs about one's ability to take responsibility for recovery, make decisions and overcome challenges to lead a fulfilling life despite symptoms of mental illness (Borkin et al. 2000). It is a self-administered questionnaire that is rated on a 5-point scale of 1 to 5. It measures attitudes about recovery within four respondent groups – consumers, family members, mental health professionals and the general public. The measure has good internal consistency and test-retest reliability (Steffen, Borkin, Krzton, Wishnick, & Wilder, 1998).

2.3 Statistical Analysis

The statistical package for social sciences version 18 was used for data entry and analysis. For univariate analysis, frequencies and percentages were used for categorical variables while mean

and standard deviation were used for continuous variable. Association of social support with internalized stigma and recovery attitude were analyzed using Pearson’s correlation analysis with p-value set at 0.05.

2.4 Ethical Approval

Ethical approval was sought from the Ethics review Committee of the institution with only consenting patients after due explanation on the study procedure completed the study.

3.0 RESULTS

3.1 The Study Participants

The sample consisted of 141 men (50%) and majority is within the age groups of 26-35 years and 36-45 years. About two-third are unemployed with Quranic education accounting for about one-third of the study population and one-quarter of the population are single. About half of the populations have illness duration between 1-5 years, one hospital admission and no history of relapse and perceived low, moderate and high social support was seen in 30.1%, 57.4% and 12.5% of the population respectively. Other findings are shown in table 1. Table 2 shows the mean scores of perceived social support (3.111 ± 0.748), internalized stigma (2.580 ± 0.245) and recovery attitude (3.561 ± 0.355). A statistically significant difference in recovery attitude was observed with males having a higher mean score than females (3.623 vs 3.497 ; $p=0.003$).

Table 1: Socio-demographic and Clinical Characteristics of the Respondents

Socio-demographic characteristics			Clinical characteristics		
Variables	N	%	Variables	N	%
Age (in years)	32	11.3	Duration of Illness	40	14.2
18-25	96	34.0	<1 year	139	49.3
26-35	86	30.5	1-5 years	37	13.1
36-45	58	20.6	6-10 years	66	23.4
46-55	10	3.5	>10 years		
56-65					
Gender					
Male	141	50.0			
Female	141	50.0			
Educational Status			Number of Hospital Admission		
No education	22	7.8	Nil	66	23.4
Quranic	100	35.5	1	137	48.6
Primary	31	11.0	2-5	71	25.2
Secondary	79	28.0	6-10	8	2.8
Tertiary	50	17.7			
Ethnicity			Number of Relapse		
Kanuri	119	42.2	Nil	138	48.9
Hausa	52	18.4	1	86	30.5
Babur	28	9.9	2-5	51	18.1
Shuwa	83	29.4	6-10	7	2.5

Marital Status	70	24.8	BPRS	70	24.8
Single	116	41.1	24-30	96	34.0
Married	71	25.2	31-40	92	32.6
Divorced	13	4.6	41-52	24	8.6
Widowed	12	4.3	≥53		
Separated					
Employment Status			Social support		
Employed	88	31.2	Low	85	30.1
Unemployed	194	68.8	Moderate	162	57.4
			High	35	12.5

Table 2: Mean Social Support, Recovery Attitude and Internalized Stigma Score by Gender

Variable	Total		Male		Female		t	p-value
	Mean	SD	Mean	SD	Mean	SD		
Recovery attitude	3.561	0.355	3.623	0.338	3.497	0.360	3.029	0.003*
Self-stigma	2.580	0.245	2.561	0.240	2.597	0.247	-1.228	0.220
Social support	3.111	0.748	3.144	0.808	3.077	0.681	0.751	0.453

3.2 Relationship of Social Support, Internalized Stigma and Recovery Attitude

Table 3 shows that perceived social support significantly and positively correlated with stigma resistance subscale ($p=0.000$) and the discrimination subscale ($p=0.011$) and negatively with the stereotypy endorsement scale ($p=0.000$), while table 4 shows a significant positive correlation between social support and recovery attitude ($p=0.000$). Table 4 also shows that the higher the recovery attitude the lower the stereotypy endorsement ($p=0.000$) and the higher the stigma resistance ($p=0.000$).

Table 3: Relationship between Social Support and Internalized Stigma among Patients with Schizophrenia

Variable	Alienation	Stereotype endorsement	Discrimination	Social withdrawal	Stigma resistance	Self-stigma
Social support	r -0.003	-0.270	0.152	0.072	0.568	0.034
	p 0.963	0.000*	0.011*	0.277	0.000	0.573

Table 4: Relationship between Recovery Attitude and Internalized Stigma among Patients with Schizophrenia

Variable	Alienation	Stereotype endorsement	Discrimination	Social withdrawal	Stigma resistance	Self-stigma	Social support
Recovery attitude	r -0.019	-0.249	0.070	-0.014	0.299	0.016	0.428
	p 0.755	0.000*	0.244	0.809	0.00*	0.790	0.000*

4.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

4.1 Discussion

The study showed a high level of perceived low social support as well as a connection between social support, recovery attitude and internalized stigma among patients with schizophrenia. To the best of the authors' knowledge, this is the first study to evaluate such association in Nigeria. The high level of the perceived low to moderate social support is in accordance with previous reports in Nigeria (Adewuya, Owoeye, Erinfolami, & Ola, 2011) and is contrary to a study by Adelufosi et al. (2012) who reported that the perceived social support among Nigerian patients with schizophrenia for low, moderate and high were 7.3%, 24.6% and 68.1% respectively. The differences could result from the lack of use of a standardized scale for measurement of social support in their study. Similarly, a prior study in Ethiopia (Mekonnen, Boru, Yohannis, Abebaw, & Birhanu, 2019) reported low, moderate and high level of perceived stigma in 21.5%, 58.5% and 20% respectively among patients with schizophrenia. The finding of perceived social support of 30.1%, 57.4% and 12.5% respectively of low, moderate and high social support in this study is also highly in disparity with a prior study in Egypt (Harfush, 2018). He reported that 74.3%, 20.8% and 4.9% of patients with severe mental illness had low, moderate and high perceived social support. The discrepancies observed may be as a result of the methodological differences in type of mental illness, patient selection, sample size, study setting and study instrument.

This study showed that perceived social support positively correlated with stigma resistance and negatively correlated with the stereotype endorsement subscale of the ISMI scale. As stigma resistance reflects a sense of positive identity through an individual's ability to resist, counteract or remain unaffected by the stigma of mental illness with resilience being widely cited in building stigma resistance (Hofer et al. 2019) and social support in strengthening resilience (Lok & Bademli, 2021), resilience may possibly mediate the relationship between social support and stigma resistance. Therefore, intervention focusing at strengthening of social network and social support may be effective in promoting high stigma resistance. The stereotype endorsement subscale measures an individual's agreement with common public stereotype of mentally ill person of being weak, incompetent or violent. The possible inverse relationship between social support and stereotype endorsement found in this study could be explained by the mediating effect of empowerment that boost their self-esteem and self-efficacy (Sibitz et al., 2011).

In line with previous literature this study showed positive correlation between social support and recovery attitude. Cullen et al. (2017) reported that the number of relatives and friends and support from relatives significantly related to internalized stigma and recovery attitudes on the domains of goal and success orientation while Chronister et al. (2013) reported that low social support was linked to higher levels of societal and internalized stigma and lower levels of recovery and quality of life among people with SMI.

This study also showed a negative correlation between stereotype endorsement and recovery attitude and a positive correlation between stigma resistance and recovery attitude. In line with previous literature, Grover et al. (2016) reported that the recovery process negatively correlation with stereotype endorsement, discrimination and alienation subscale and positively correlated with the Global assessment of Functioning (GAF). They reported that the recovery process

correlated with stereotype endorsement on the goal and success orientation subscale of the recovery assessment scale (RAS) while discrimination experience subscale correlated with almost all the domains of RAS and concluded that the discrimination experience and stereotype endorsement subscale had the maximum influence on scores of the various domains of the RAS as well as the total score. Internalization of stigma can lead to a sense of hopelessness about the possibility of recovery and other negative self-evaluation. Similarly, Drapalski et al. (2013) reported that recovery orientation positively correlated with stigma resistance and negatively with the alienation, stereotype endorsement, discrimination and social withdrawal subscales of ISMI and concluded that internalized stigma can be experienced through multiple pathways.

4.2 Strength and Limitations

To the best of the authors' knowledge, this is the first study to demonstrate on the relationship of social support with internalized stigma and recovery attitude in Nigeria. It is also the first study to explore on the association of social support with internalized stigma using the individual component of the ISMI Scale. Despite the implications of our findings, the study is limited by the cross-sectional design, which does not allow determination of the direction of causality. Secondly, other clinical and psychosocial factors relevant in the assessment of recovery orientation and internalized stigma such as medication compliance, medication side effects, resilience, coping strategies, self-efficacy and quality of life have not been explored in this study. Additionally, it is a hospital based study limiting generalizability of the result to individuals living in the community. Therefore, future research should be carried out in a broader context that incorporates other significant variables and using a longitudinal study design to explore on such relationships.

4.3 Conclusion

Majority of the participants had low to moderate perceived level of social support and the outcome of this study suggests that there is a relationship between social support, internalized stigma and recovery attitude among patients with schizophrenia. Perceived high social support was associated with positive attitudes towards recovery and low stigma.

4.4 Recommendations

As the outcome of this study suggests that perceived strengthened social support is associated with positive attitudes towards recovery and low internalized stigma, there is the need to design an intervention that simultaneously targets multiple pathways to tackle self-stigma, strengthen social support and promote positive attitudes towards recovery in order for stigma reduction strategy to be effective.

REFERENCES

- Abdulmalik, J., Kola, L., & Gureje, O. (2016). Mental health system governance in Nigeria: challenges, opportunities and strategies for improvement. *Global Mental Health*, 3.
- Adelufosi, A. O., Adebowale, T. O., Abayomi, O., & Mosanya, J. T. (2012). Medication adherence and quality of life among Nigerian outpatients with schizophrenia. *General hospital psychiatry*, 34(1), 72-79.

Adewuya, A. O., Owoeye, A. O., Erinfolami, A. O., & Ola, B. A. (2011). Correlates of self-stigma among outpatients with mental illness in Lagos, Nigeria. *International Journal of Social Psychiatry*, 57(4), 418-427.

Anthony, W. A. (1993). Recovery from mental illness: the guiding vision of the mental health service system in the 1990s. *Psychosocial rehabilitation journal*, 16(4), 11.

Borkin JR, Steffen JJ, Ensfield LB, Krzton K, Wishnick H, Wilder K, Yangarber N. Recovery attitudes questionnaire: Development and evaluation. *Psychiatric Rehabilitation Journal*. 2000;24(2):95.

Chronister, J., Chou, C. C., & Liao, H. Y. (2013). The role of stigma coping and social support in mediating the effect of societal stigma on internalized stigma, mental health recovery, and quality of life among people with serious mental illness. *Journal of Community Psychology*, 41(5), 582-600.

Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest*, 15(2), 37-70.

Corrigan, P. W., Rafacz, J., & Rüsç, N. (2011). Examining a progressive model of self-stigma and its impact on people with serious mental illness. *Psychiatry research*, 189(3), 339-343.

Corrigan, P. W., & Shapiro, J. R. (2010). Measuring the impact of programs that challenge the public stigma of mental illness. *Clinical psychology review*, 30(8), 907-922.

Cullen, B. A., Mojtabai, R., Bordbar, E., Everett, A., Nugent, K. L., & Eaton, W. W. (2017). Social network, recovery attitudes and internal stigma among those with serious mental illness. *International Journal of Social Psychiatry*, 63(5), 448-458.

Dalgard, O. S., Dowrick, C., Lehtinen, V., Vazquez-Barquero, J. L., Casey, P., Wilkinson, G., ... & Dunn, G. (2006). Negative life events, social support and gender difference in depression. *Social psychiatry and psychiatric epidemiology*, 41(6), 444-451.

Drapalski, A. L., Lucksted, A., Perrin, P. B., Aakre, J. M., Brown, C. H., DeForge, B. R., & Boyd, J. E. (2013). A model of internalized stigma and its effects on people with mental illness. *Psychiatric Services*, 64(3), 264-269. (Stigma, self-efficacy, self-esteem and recovery)

Eklund, M., & Hansson, L. (2007). Social network among people with persistent mental illness: associations with sociodemographic, clinical and health-related factors. *International Journal of Social Psychiatry*, 53(4), 293-305.

Evans-Lacko, S., Brohan, E., Mojtabai, R., & Thornicroft, G. (2012). Association between public views of mental illness and self-stigma among individuals with mental illness in 14 European countries. *Psychological medicine*, 42(8), 1741-1752.

Ginja, S., Coad, J., Bailey, E., Kendall, S., Goodenough, T., Nightingale, S., ... & Lingam, R. (2018). Associations between social support, mental wellbeing, self-efficacy and technology use in first-time antenatal women: data from the BaBBLeS cohort study. *BMC pregnancy and childbirth*, 18(1), 1-11.

- Grover, S., Hazari, N., Aneja, J., Chakrabarti, S., Sharma, S., & Avasthi, A. (2016). Recovery and its correlates among patients with bipolar disorder: A study from a tertiary care centre in North India. *International Journal of Social Psychiatry*, 62(8), 726-736.
- Harfush, S. (2018, March). Perceived social support and medication compliance among patients with psychiatric disorders. In *EUROPEAN PSYCHIATRY* (Vol. 48, pp. S101-S101). 65 RUE CAMILLE DESMOULINS, CS50083, 92442 ISSY-LES-MOULINEAUX, FRANCE: ELSEVIER FRANCE-EDITIONS SCIENTIFIQUES MEDICALES ELSEVIER.
- Hasan, A., & Musleh, M. (2017). The impact of an empowerment intervention on people with schizophrenia: Results of a randomized controlled trial. *International Journal of Social Psychiatry*, 63(3), 212-223.
- Hofer, A., Post, F., Pardeller, S., Frajo-Apor, B., Hoertnagl, C. M., Kemmler, G., & Fleischhacker, W. W. (2019). Self-stigma versus stigma resistance in schizophrenia: Associations with resilience, premorbid adjustment, and clinical symptoms. *Psychiatry research*, 271, 396-401.
- Jahn DR, Leith J, Muralidharan A, Brown CH, Drapalski AL, Hack S, Lucksted A. The influence of experiences of stigma on recovery: Mediating roles of internalized stigma, self-esteem, and self-efficacy. *Psychiatric rehabilitation journal*. 2020 Jun;43 (2):97.
- Jenkins, R. (2019). Implementing mental health promotion approaches in mental health services. In *Implementing mental health promotion* (pp. 533-562). Springer, Cham.
- Jung, H., von Sternberg, K., & Davis, K. (2017). The impact of mental health literacy, stigma, and social support on attitudes toward mental health help-seeking. *International Journal of Mental Health Promotion*, 19(5), 252-267.
- Kondrat, D. C., Sullivan, W. P., Wilkins, B., Barrett, B. J., & Beerbower, E. (2018). The mediating effect of social support on the relationship between the impact of experienced stigma and mental health. *Stigma and Health*, 3(4), 305.
- Leamy, M., Bird, V., Le Boutillier, C., Williams, J., & Slade, M. (2011). Conceptual framework for personal recovery in mental health: systematic review and narrative synthesis. *The British Journal of Psychiatry*, 199(6), 445-452.
- Lim, A. Y., Lee, S. H., Jeon, Y., Yoo, R., & Jung, H. Y. (2018). Job-seeking stress, mental health problems, and the role of perceived social support in university graduates in Korea. *Journal of Korean Medical Science*, 33(19).
- Lök, N., & Bademli, K. (2021). The relationship between the perceived social support and psychological resilience in caregivers of patients with schizophrenia. *Community mental health journal*, 57(2), 387-391.
- Lucksted, A., Drapalski, A., Calmes, C., Forbes, C., DeForge, B., & Boyd, J. (2011). Ending self-stigma: pilot evaluation of a new intervention to reduce internalized stigma among people with mental illnesses. *Psychiatric rehabilitation journal*, 35(1), 51.

- Mekonnen, M., Boru, B., Yohannis, Z., Abebaw, D., & Birhanu, A. (2019). Level of Perceived Social Support and Associated Factors Among People With Schizophrenia Attending Out Patient Department At Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia 2017. *Journal of Psychiatry*, 22, 461.
- Mental Health Commission of Canada. (2009). Toward recovery and wellbeing: A framework for a mental health strategy for Canada. *Mental Health Commission for Canada*.
- Morgan, A. J., Reavley, N. J., Ross, A., San Too, L., & Jorm, A. F. (2018). Interventions to reduce stigma towards people with severe mental illness: Systematic review and meta-analysis. *Journal of psychiatric research*, 103, 120-133.
- Müller, B., Nordt, C., Lauber, C., & Rössler, W. (2007). Changes in social network diversity and perceived social support after psychiatric hospitalization: results from a longitudinal study. *International Journal of Social Psychiatry*, 53(6), 564-575.
- Ozdemir, D., & Tas Arslan, F. (2018). An investigation of the relationship between social support and coping with stress in women with breast cancer. *Psycho-oncology*, 27(9), 2214-2219.
- Perese, E. F. (2007). Stigma, poverty, and victimization: Roadblocks to recovery for individuals with severe mental illness. *Journal of the American Psychiatric Nurses Association*, 13(5), 285-295.
- Prabhakaran, S., Nagarajan, P., Varadharajan, N., & Menon, V. (2021). Relationship between quality of life and social support among patients with schizophrenia and bipolar disorder: A cross-sectional study. *Journal of Psychosocial Rehabilitation and Mental Health*, 8(2), 137-145.
- Ritsher, J. B., Otilingam, P. G., & Grajales, M. (2003). Internalized stigma of mental illness: psychometric properties of a new measure. *Psychiatry research*, 121(1), 31-49.
- Roosenschoon, B. J., Kamperman, A. M., Deen, M. L., Weeghel, J. V., & Mulder, C. L. (2019). Determinants of clinical, functional and personal recovery for people with schizophrenia and other severe mental illnesses: a cross-sectional analysis. *PloS one*, 14(9), e0222378.
- Sibitz I, Unger A, Woppmann A, Zidek T, Amering M: Stigma Resistance in Patients with Schizophrenia. *Schizophr Bull* 2011; 37(2):316–323.
- Slade M, Bird V, Clarke E, Le Boutillier C, McCrone P, Macpherson R, et al. Supporting recovery in patients with psychosis through care by community-based adult mental health teams (REFOCUS): a multisite, cluster, randomised, controlled trial. *Lancet Psychiatry*. (2015) 2:503–14. doi: 10.1016/S2215-0366(15)00086-3.
- Soundy, A., Stubbs, B., Roskell, C., Williams, S. E., Fox, A., & Vancampfort, D. (2015). Identifying the facilitators and processes which influence recovery in individuals with schizophrenia: a systematic review and thematic synthesis. *Journal of Mental Health*, 24(2), 103-110.
- Steffen, J. J., Borkin, J. R., Krzton, K., Wishnick, H., & Wilder, K. E. (1998). Consumer, family member, mental health professional, and student versions of the Recovery Attitudes Questionnaire. *Manuscript in preparation*. Van Eck, R. M., Burger, T. J.,

- Stentzel, U., van den Berg, N., Schulze, L. N., Schwaneberg, T., Radicke, F., Langosch, J. M., ... & Grabe, H. J. (2018). Predictors of medication adherence among patients with severe psychiatric disorders: findings from the baseline assessment of a randomized controlled trial (Tecla). *BMC psychiatry*, *18*(1), 1-8.
- Tsang, H. W., Ching, S. C., Tang, K. H., Lam, H. T., Law, P. Y., & Wan, C. N. (2016). Therapeutic intervention for internalized stigma of severe mental illness: A systematic review and meta-analysis. *Schizophrenia Research*, *173*(1-2), 45-53.
- Waqas, A., Malik, S., Fida, A., Abbas, N., Mian, N., Miryala, S., ... & Naveed, S. (2020). Interventions to reduce stigma related to mental illnesses in educational institutes: a systematic review. *Psychiatric Quarterly*, *91*(3), 887-903.
- Yeung, N. C., Kan, K. K., Wong, A. L., & Lau, J. T. (2021). Self-stigma, resilience, perceived quality of social relationships, and psychological distress among Filipina domestic helpers in Hong Kong: A mediation model. *Stigma and Health*, *6*(1), 90.