Insight and Internalized Stigma in Patients with Psychotic Disorders in Prolonged Psychiatric Care Unit

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Article

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Abstract: In the global context of mental health, a concerning reality persists stigma and discrimination towards individuals with chronic mental disorders pose significant challenges affecting their quality of life and social integration. This study focuses on schizophrenia, one of the most stigmatized disorders, specifically exploring the phenomenon of insight and its interaction with internalized stigma. Previous findings are replicated and extended, involving a sample of 83 men diagnosed with psychotic spectrum disorders. K-means cluster analysis and ANOVA were used to identify subgroups based on levels of insight and stigma. This revealed significant differences between subgroups in psychosocial variables such as depression, quality of life, and global patient functioning. The results confirm an "insight paradox," where greater insight may be associated with poorer psychosocial outcomes in the presence of significant internalized stigma. These findings underscore the need for clinical interventions aimed at reducing stigma and enhancing the psychosocial well-being of individuals with psychotic spectrum disorders.

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1. Introduction

Concerning chronic mental disorders, stigma and discrimination remain significant challenges that directly affect individuals' quality of life and social integration [1–3]. This stigma, rooted in a combination of stereotypes, prejudices and discrimination, not only exacerbates the suffering of those experiencing these conditions but also hinders their access to employment opportunities, social relationships, and appropriate healthcare services [4,5]. Schizophrenia, as one of the most stigmatized mental disorders, faces not only the inherent challenges of its condition but also the additional burden of social rejection and lack of understanding.

Moreover, this reality is closely linked to the concept of insight, which is associated with schizophrenia and has garnered increasing interest from the scientific community over the past three decades due to its relevance in understanding the illness and its clinical management [6]. Insight is defined as a lack of awareness regarding the symptoms associated with the disorder, its consequences, the need for treatment, and cognitive impairments [7]. In the context of schizophrenia, insight is particularly relevant, as it is estimated that between 50 and 80 percent of diagnosed patients have little to no awareness of their illness [8].

A low level of insight is associated with various negative consequences, such as low treatment adherence, poorer psychosocial functioning, worsening disorder course, and increased symptom

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severity [7–10]. Additionally, a high level of insight is also linked to negative outcomes such as lower quality of life, increased depressive symptoms, and higher suicide risk [7,11,12]. These findings highlight the complexity of the relationship between insight level and clinical manifestations of schizophrenia.

On the other hand, while insight refers to awareness of the illness and its implications, it can also lead to internalized stigma, which arises from how individuals interpret and respond to this insight [13,14]. In 2007, Lysaker et al. [15] proposed an explanation for the "insight paradox." They suggested that the effects of insight vary depending on the meaning individuals with schizophrenia attribute to the disorder. Individuals perceiving schizophrenia as profoundly negative (those with high levels of internalized stigma) experience negative effects on psychosocial variables such as self-esteem, hope, and functioning when high insight is combined with internalized stigma. Conversely, individuals viewing the disorder as less negative - those with low internalized stigma - do not experience these negative effects with high insight. Initially, a K-means cluster analysis was conducted using scores on insight and internalized stigma, resulting in the identification of three groups: (a) participants with low levels of insight and mild stigma; (b) participants with high insight and very mild stigma; and (c) participants with high insight and moderate stigma. Subsequently, it was observed that participants with high insight and moderate stigma exhibited significantly lower levels of self-esteem and hope, demonstrating fewer interpersonal relationships than those with high insight and very mild stigma. Participants with low insight and low stigma also showed better levels of self-esteem and hope than the group with high insight and moderate stigma, although they did not differ in the level of social functioning. The authors concluded that individuals with mental disorders who possess good awareness of their condition yet internalize stigmatizing beliefs are at a heightened risk of low self-esteem and hopelessness, which could negatively impact their motivation toward achieving personal and/or rehabilitation goals.

Furthermore, other studies have yielded similar results, providing empirical support for the interaction between stigma and insight to explain the insight paradox [12,16–18]. For example, Chio et al. [16] conducted a study with 181 participants diagnosed with schizophrenia spectrum disorders, measuring various variables over a year. Their results revealed that higher levels of insight were associated with lower life satisfaction, with stigma mediating this relationship: greater stigma intensified the negative effect of insight on life satisfaction.

This research aims to explore the complexities of insight and internalized stigma in individuals diagnosed with psychotic spectrum disorders, replicating and extending the studies of Lysaker et al. [15] and Chio et al. [16] on internalized stigma and the "insight paradox." The study examines the interaction between these two variables and their impact on psychosocial aspects such as quality of life, depression levels, vitality, adjustment, and optimization. The objective is to understand the dynamics that shape patients' experiences. Additionally, the study evaluates how the relationship between illness perception and internalized stigma influences the manifestation of negative psychosocial outcomes in this population.

2. Materials and Methods

To explore the complex relationship between insight and internalized stigma among individuals with psychotic spectrum disorders, the overarching aim of this study was to investigate these dynamics and assess their impact on various psychosocial outcomes. The specific objectives were: (1) to measure the relationship between internalized stigma and various aspects of quality of life and psychological health; (2) to identify distinct clusters within the sample based on levels of illness perception and internalized stigma using K-Means cluster analysis; and (3) to assess significant differences between clusters in terms of psychotic symptoms, stigma, quality of life, depression, vitality, adjustment, and optimization to gain a better understanding of the distribution of effects among patients.

The K-Means clustering technique was chosen due to its effectiveness in identifying distinctive patterns within data, particularly when dealing with psychological and behavioral variables. This technique allowed for the grouping of participants based on their levels of insight and internalized

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stigma, providing a more nuanced understanding of the variation within the sample. The decision to select three groups was based on both theoretical considerations and empirical evidence, ensuring that the clusters were statistically significant and clinically relevant.

2.1. Participants

Eighty-three males diagnosed with psychotic spectrum disorders according to the International Classification of Mental Disorders, tenth revision [19], participated in the study. Diagnoses of psychotic spectrum disorders, specifically paranoid schizophrenia (n = 56), residual schizophrenia (n = 23), and schizoaffective disorder (n = 4), were confirmed using the Composite International Diagnostic Interview [20]. Participants were recruited from the Prolonged Psychiatric Care Unit at the Centro San Juan de Dios in Ciempozuelos. All participants were receiving their usual treatment under prolonged hospitalization and were in a stable phase of their psychopathological condition, defined by the absence of acute symptoms that could interfere with their understanding of participation in the study, as well as no changes in medication in the last month. Participants diagnosed with intellectual disability were excluded. The sample had a mean age of 47.22 years (SD = 9.75), a mean educational level of 13.37 years (SD = 3.14), and a mean of 10.85 hospital admissions for exacerbations of their condition (SD = 10.62), with a mean age of first hospitalization of 21.12 years (SD = 4.81), and a mean stay in the extended care facility of 8.25 years (SD = 9.01).

Participants were recruited by their referring clinical psychologist at the Center, who was not involved in the study. All participants completed the assessment. Sampling was intentional, and voluntary participation in the study was informed to individuals within the Prolonged Psychiatric Care Unit. Out of a total of 413 admitted users, 112 agreed to participate, with 29 being excluded due to not having a diagnosis of psychotic spectrum disorder.

2.2. Materials Design and Selection Procedure

Several questionnaires, administered in their Spanish versions, have been used to assess different aspects related to schizophrenia and quality of life in patients. For this analysis and subsequent ones, IBM SPSS Statistics (Version 27) for Windows [21] was utilized. Additionally, other questionnaires were administered to evaluate various factors such as perception of discrimination, stigmatizing attitudes, global functioning, depression, and quality of life across various dimensions, to capture a wide range of variables relevant to psychiatric research:

- Sociodemographic Data: data related to various sociodemographic variables of the participants were collected. Information was requested regarding age, gender, marital status, level of education attained, current occupation, and any civil incapacitation and degree of disability.
- Positive and Negative Syndrome Scale (PANSS) [22]: this scale was administered to measure patients' positive, negative, and insight symptoms. The assessment was conducted through a semi-structured interview with 30 items. Additionally, the insight item was included to assess awareness of symptoms and the need for treatment. Assessment of interrater reliability for this study was found to be high to excellent with intraclass correlation coefficients for blind raters observing the same interview ranging from 0.84 to 0.93. The PANSS is divided into several subscales that allow for a detailed assessment of different psychopathological symptoms. The PANSS Positive measures positive symptoms such as delusions, hallucinations, and disorganized thoughts, while the PANSS Negative evaluates negative symptoms such as affective flattening, alogia, and social withdrawal. The PANSS General Psychopathology focuses on general psychopathology, assessing aspects such as anxiety, depression, and cognitive difficulties. The PANSS Composite is calculated by subtracting the total score of the Negative from the Positive, providing a measure of the balance between positive and negative symptoms. Finally, the PANSS 26 is a shortened version of the original scale that includes 26 key items from

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the previous subscales, allowing for a quicker and more concise evaluation of psychopathological symptoms.

- Internalized Stigma of Mental Illness Inventory (ISMI) [23]: ISMI was applied to evaluate the subjective experience of stigma in patients. This questionnaire consists of 29 items exploring dimensions such as alienation, stereotype endorsement, perceived discrimination, and social isolation. The subscale of resistance to stigma was not used. The adapted version achieved strong internal consistency and test-retest reliability levels, with respective scores of 0.91 and 0.95 for the total scale.
- WHO Quality of Life-BREF (WHOQOL-BREF) [24]: this instrument consists of 26 items grouped into four dimensions that assess the quality of life in different cultural contexts. Internal consistency varied between domains, ranging from a Cronbach's alpha of 0.69 (physical) to 0.90 (spirituality/religion/personal beliefs). Similarly, Cronbach's alpha ranged from 0.74 (psychological) to 0.80 (physical).
- Calgary Depression Scale for Schizophrenia [25]: is a tool specifically designed to assess depression levels in individuals with schizophrenia, both during acute phases and deficit states, while distinguishing from positive, negative, and extrapyramidal symptoms. It demonstrates high internal consistency, Cronbach's alpha between 0.70 and 0.90.
- MOLDES [26]: the MOLDES questionnaire consists of 87 items that assess the habitual way individuals face reality, cognitively and affectively. Participants indicate their degree of agreement or disagreement with each description on a 5-point Likert scale, where 1 represents "totally disagree" and 5 represents "totally agree". The total reliability of the scale is Cronbach's alpha = 0.90.

All procedures were approved by the Ethics and Research Committee of Hospital Universitario 12 de Octubre. At the onset of the recruitment period, clinical psychologists verified the eligibility of patients and provided them with a detailed explanation of the study. If patients agreed to participate, they were given an informed consent form to sign, and any queries they had were addressed. Additionally, participants were informed that their involvement was entirely voluntary and that they could withdraw consent at any time. Patients did not receive any financial incentives for participating in the study. Once informed consent was provided and agreement to participate confirmed, participants received the questionnaires to complete.

3. Results

Table 1 provides an overview of descriptive statistics for various variables assessed for the participants. These statistics are crucial for contextualizing and analyzing subsequent study results, enabling a more precise interpretation of the relationships among the examined variables.

Table 1. Descriptive statistics.

	Mean	Standard Deviation	Min.	Max.
Alienation	2,23	,71	1	4
Assumption of Stigma	2,01	,56	1	3
Perceived Discrimination	2,21	,73	1	4
Social isolation	2,11	,70	1	3
Stigma Resistance	-2,24	,50	-3	-1
PANSS Positive	22,16	6,28	8	36
PANSS Negative	25,07	5,32	13	38
PANSS General Psychopathology	46,92	8,30	28	64
PANSS Composite	-2,90	7,09	-19	10

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PANSS 26	3,46	,80	2	5
WHOQOL Physical Health	24,40	3,89	14	35
WHOQOL Psychological Health	20,25	4,04	12	30
WHOQOL Social Relationships	9,46	2,94	3	15
WHOQOL Environment	28,77	5,36	15	40
WHOQOL Total	89,51	14,32	56	130
Depression Level	4,16	5,10	0	21
Vital spontaneity	58,21	11,20	34	86
Adjustment	61,31	10,39	27	96
Optimization	68,98	12,43	39	96

Firstly, internal consistency analysis of the ISMI internalized stigma scale item set was conducted. The Cronbach's Alpha coefficient obtained was .904, indicating high reliability of the instrument used. Additionally, Pearson correlations were performed among the five ISMI subscales: Alienation, Stereotype Endorsement, Perceived Discrimination, Social Isolation, and Stigma Resistance. These correlation coefficients were used to measure the strength and direction of linear relationships between each pair of variables. The results reveal significant correlations among the first four subscales (p = .00), though not with the last subscale, Stigma Resistance, which was subsequently excluded from the total score.

Additionally, correlations were conducted between insight and stigma scores with various psychological and quality of life measures, including depression level, vitality, adjustment, and optimization. Significant negative correlations ($p < .05$) were found between internalized stigma and several factors, such as PANSS Composite ($r = -0.294$), WHOQOL Psychological Health ($r = -0.236$), WHOQOL Environment ($r = -0.301$), and WHOQOL Total ($r = -0.307$). Furthermore, significant positive correlations ($p < .01$) were observed between depression level and PANSS General Psychopathology ($r = 0.410$) as well as PANSS Composite ($r = 0.363$). The correlation analysis also revealed significant relationships between internalized stigma and WHOQOL Psychological Health ($r = -0.294$, $p < .05$), as well as WHOQOL Total ($r = -0.236$, $p < .05$). Similarly, internalized stigma was negatively correlated with personal adjustment ($r = -0.254$, $p < .05$) and vitality ($r = -0.295$, $p < .05$). In contrast, depression showed significant negative correlations with psychological health ($r = -0.294$, $p < .01$) and PANSS Composite ($r = -0.671$, $p < .01$).

Continuing with the study objectives, K-Means clustering method was applied to perform cluster analysis on the dataset, focusing on PANSS26 and Internalized Stigma - ISMI variables. This procedure identified three distinct groups among participants. Scores were standardized into Z-scores, and participants were clustered into 3 distinct groups based on insight and internalized stigma: Cluster 1. Good insight and minimal stigma (n=27); Cluster 2. Poor insight and mild stigma (n=26); Cluster 3. Good insight and severe stigma (n=30). ANOVA results (Table 2) showed significant differences between clusters for both, Internalized Stigma (ISMI) scores ($F_{(2, 80)} = 56.57$, $p < .001$) and PANSS scores ($F_{(2, 80)} = 62.36$, $p < .001$).

Finally, similar analyses were conducted for quality of life, depression, vitality, adjustment, and optimization scale results. ANOVA results indicated significant differences between clusters for all assessed variables, including Physical Health ($F_{(2, 80)} = 20.37$, $p < .001$), Psychological Health ($F_{(2, 80)} = 40.16$, $p < .001$), Social Relationships ($F_{(2, 80)} = 36.73$, $p < .001$), Environment ($F_{(2, 80)} = 30.1$, $p < .001$), WHOQOL Total ($F_{(2, 80)} = 78.18$, $p < .001$), Depression Level ($F_{(2, 80)} = 5.93$, $p = .004$), Vitality ($F_{(2, 80)} = 16.25$, $p < .001$), Adjustment ($F_{(2, 80)} = 10.76$, $p < .001$), and Optimization ($F_{(2, 80)} = 14.63$, $p < .001$) (Table 2).

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Table 2. K-means cluster analysis and ANOVA of PANSS, ISMI, WHOQOL, Depression Level, and MOLDES.

	Cluster 1	Cluster 2	Cluster 3	ANOVA	Comparison Group, *p*<.05
ISMI	-.52	1.13	-.51	56.57	2>1,3**
PANSS	1.03	-,11	-.83	62.36	1>2,3**
WHOQOL Physical Health	.97	-.50	.31	20.37	1>3>2**
WHOQOL Psychological Health	1	-.65	.56	40.16	1>3>2**
WHOQOL Social Relationships	.81	-.65	.68	36.73	1>3>2**
WHOQOL Environment	1.06	-.57	.39	30.1	1>3>2**
WHOQOL Total	1.23	-.73	.57	78.18	1>3>2**
Depression Level	-.26	.33	-.44	5.93	2>1,3*
Vital spontaneity	-.79	-.14	.75	16.25	3>2>1**
Adjustment	-.66	-.12	.64	10.76	3>2>1**
Optimization	1,09	-.19	-.32	14.63	1>2,3**

Note: NS, not significant; *$P < .01$; **$P < .001$.

4. Discussion

The study investigated the interaction between insight and internalized stigma among individuals diagnosed with psychotic spectrum disorders. Consistent with previous literature [7], the findings underscore a significant relationship between these variables. Specifically, clusters characterized by good insight and varying levels of internalized stigma exhibited distinct outcomes across psychosocial variables. Cluster 1, characterized by good insight and minimal stigma, demonstrated comparatively higher levels of self-esteem, hope, and overall quality of life. Conversely, Cluster 3, marked by good insight and severe stigma, showed pronounced impairments in these domains, echoing the findings of Lysaker et al. [15,17].

In addition, the study highlighted the mediating role of stigma in the relationship between insight and life satisfaction. Consistent with Chio et al. [16], higher insight was associated with lower life satisfaction, with stigma serving as a significant facilitator in this relationship. This underscores the detrimental impact of internalized stigma on psychosocial outcomes, suggesting that interventions targeting stigma reduction could potentially ameliorate these effects.

Furthermore, the correlation analysis provided additional insights into how internalized stigma and insight interact with psychosocial variables. The significant negative correlations found between internalized stigma and psychological health, overall quality of life, and other measures such as PANSS Composite and WHOQOL Environment reinforce the notion that stigma plays a pivotal role in deteriorating the quality of life in individuals with psychotic spectrum disorders. These findings are consistent with previous studies, which have demonstrated the detrimental impact of stigma on both psychological well-being and social functioning. Notably, the study also revealed negative correlations between internalized stigma and more specific psychosocial variables, such as personal adjustment and vitality. These findings suggest that individuals with higher levels of stigma tend to experience lower vitality and struggle with personal adjustment, further amplifying the negative consequences of stigma on daily functioning.

The positive correlations between depression and PANSS General Psychopathology and PANSS Composite indicate that depression is strongly linked to the severity of psychopathology in this population. These results highlight the need to consider the role of both depression and stigma in shaping the overall psychological and social outcomes of individuals with psychosis. Moreover, the negative correlation between depression and psychological health underscores the complex relationship between mental health symptoms, stigma, and quality of life, suggesting that managing depression is critical for improving psychosocial outcomes.

In this context, the interrelationship between insight, depression, and stigma becomes particularly relevant. While replicating Lysaker et al. [15] findings within a new cohort of individuals

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with psychotic spectrum disorders, the current study extends this understanding by incorporating additional psychosocial variables such as depression, vitality, and social functioning. These findings corroborate the notion of an "insight paradox," wherein individuals with heightened awareness of their condition may experience exacerbated psychosocial impairments if accompanied by significant internalized stigma.

Moreover, the current research provides novel insights into the nuanced dynamics of illness perception and stigma. By employing a robust methodological approach, including K-means clustering and ANOVA, the study identified distinct subgroups based on insight and stigma levels, offering a comprehensive view of how these factors interact to shape diverse outcomes in individuals with psychotic spectrum disorders.

In conclusion, the present study contributes to the growing body of literature on insight, stigma, and psychosocial outcomes in psychotic spectrum disorders. By replicating and extending seminal findings, the study underscores the detrimental effects of internalized stigma on individuals' well-being, highlighting the need for targeted interventions to mitigate these effects and improve overall quality of life.

The findings hold critical implications for clinical practice, emphasizing the importance of integrating stigma-reduction strategies into therapeutic interventions for individuals with psychotic disorders. Addressing internalized stigma may not only enhance treatment adherence and psychosocial functioning but also promote a more positive illness experience and overall quality of life.

Methodologically, the study benefited from a comprehensive assessment battery and rigorous statistical analyses. However, significant limitations, such as the cross-sectional design and reliance on self-reported measures, must be considered. The cross-sectional nature of the study restricts the ability to draw causal inferences, and self-reported measures may introduce response biases, particularly in the context of stigmatized conditions like psychosis. Future research could address these limitations through longitudinal designs that track changes in insight, stigma, and psychosocial outcomes over time. Additionally, incorporating objective measures, such as clinician-rated assessments or neurocognitive tests, could provide a more thorough understanding of the factors at play. Exploring the efficacy of stigma reduction interventions tailored to individuals with varying levels of insight, as well as investigating the impact of cultural factors on stigma perception and coping strategies, may further illuminate the complexity of these relationships across diverse populations. Addressing these aspects will be crucial for advancing the understanding of the intricate dynamics between insight, stigma, and patient well-being.

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Institutional Review Board Statement: The study was conducted by the Declaration of Helsinki and approved by the Ethics Committee of Hospital Universitario 12 de Octubre (protocol code 18/101 and approved on 10 April 2018) for studies involving humans.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.
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