

BACKGROUND

- Schizophrenia affects between 0.3% - 0.6% of the U.S. population, represents over \$343 billion in costs¹ and clinical outcomes are difficult to measure with administrative data
- Schizophrenia is characterized by positive symptoms (i.e., hallucinations, delusions, disorganized speech, and disorganized behavior) and negative symptoms (NS) (i.e., blunted affect, anhedonia, avolition, poverty of speech, social withdrawal)^{2,3,4}
- There are currently no FDA approved medications for negative symptoms (e.g., amotivation, asociality; NS) and no diagnosis code
- NS severity is linked to worse functional outcomes including impaired occupational and academic performance, social functioning, and quality of life⁵
- To assess the real-world burden of NS upon patient function and care delivery, a combination of provider and patient surveys were performed

STUDY OBJECTIVES

- Understand the prevalence of NS among individuals with schizophrenia with well-controlled positive symptoms
- Assess the burden of NS on patient function

METHODOLOGY

Study Design

- Cross-sectional surveys of patients and providers were performed

Data Source

- Patient and provider surveys

Population

- Patients with schizophrenia (N=31) with well-controlled positive symptoms (as determined by the professional judgement of the treating behavioral health provider and no psychiatric inpatient admissions within 1 month)
- Behavioral health providers who prescribe treatment for individuals with schizophrenia including psychiatrists, nurse practitioners, and physician assistants

Analysis

- Fischer's Exact

Table 1. Patient Sociodemographic Characteristics (N = 31)

Characteristics	N(M)	%(SD)
Gender		
Male	20	65%
Female	11	35%
Age		
<45	11	35%
45+	20	65%
Race		
Black or African American	26	84%
White	5	16%
Insurance Coverage		
Managed Medicaid	28	90%
Uninsured	3	10%
Relationship Status		
Married	2	6%
Divorced	2	6%
Separated	1	3%
Never married/single	26	84%
Occupational Status		
Unemployed - Seeking employment	3	10%
Part-time or temporary work	2	6%
Disabled, not seeking employment	26	84%
Housing Status		
Alone	8	26%
With spouse or family	7	23%
With friends or acquaintances	6	19%
In a group home	8	26%
I don't have a permanent residence	2	6%

Table 3. Comparison of NS Prevalence by Patient Report and Provider Report (N = 31)

Negative Symptom	Patient-Reported Prevalence	Provider-Reported Prevalence	p-value
Amotivation	51%	68%	n.s.
Asociality	48%	74%	n.s.
Anhedonia	48%	--	--
Apathy	--	68%	--

RESULTS

Table 2. Patient Clinical Characteristics and Treatment (N = 31)

Characteristics	N(M)	%(SD)
Medical Comorbidities		
Hypertension	20	65%
Hyperlipidemia	15	48%
Obesity	11	35%
Diabetes	10	32%
COPD	4	13%
Heart Failure	1	3%
Stroke	1	3%
None of the Above	6	19%
Behavioral Health Comorbidities		
Substance Use Disorder	5	16%
Anxiety	1	3%
Alcohol Use Disorder	1	3%
Depression	1	3%
Other	5	16%
None of the Above	20	65%
Current Schizophrenia Treatments		
Oral Antipsychotic	24	77%
Long-Acting Injectable Antipsychotic	13	42%
Antidepressants	11	35%
Antianxiety Medications	3	10%
Psychotherapy	1	3%
Social Interventions	1	3%
Cognitive Rehabilitation	1	3%
Other	8	26%

- Hypertension was the most common medical comorbidity, present in 65% of participants
- 65% of participants did not have a behavioral health comorbidity

Table 4. IADL Comparisons Between Individuals With and Without NS

Instrumental Activities of Daily Living (IADL) ^a	Odds Ratio ^b	p-value	N
Challenges with using the telephone	9.1	<.05	31
Challenges with taking care of shopping needs	1.5	n.s.	31
Challenges with preparing food	1.2	n.s.	30
Challenges with housekeeping	6.9	<.05	31
Challenges with doing own laundry	1.3	n.s.	31
Challenges with traveling independently	2.6	n.s.	29
Challenges with taking medication in correct dosages at correct time	1.9	n.s.	31
Challenges with handling finances	1	n.s.	28

^aIADLs are patient-reported. ^bOdds ratio when comparing IADLs between individuals without NS and individuals with one or more NS.

CONCLUSIONS

- This study highlights the burden of NS of schizophrenia with 84% of individuals surveyed having one or more NS
- Patient self-reported NS were significantly associated with limitations in functioning
- This study demonstrates the value of collaborative research to collect and analyze data not present in standard administrative datasets

CITATIONS

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