

Mental Health Service Utilization by US College Students Diagnosed with Psychosis

Godoy-Henderson, C₁ ; Denner, S₁; Flesaker, M₁; Dalhoe, M₂; Lipson, S₁

1. Boston University, School of Public Health, Boston, MA 2. University of Minnesota Medical School, Department of Psychiatry, Minneapolis MN

Introduction

- In the United States, the median duration of untreated psychosis to initiation of first-episode psychosis programs is 74 weeks (nearly 1.5 years) (Addington et al., 2015).
- Early intervention services and continued service provision reduce the risk of treatment discontinuation and psychiatric hospitalization while improving outcomes related to overall quality of life, including school/work involvement, symptom severity, employment and relapse rates (Correll et al., 2018; Salazar de Pablo et al., 2024).
- With the onset of psychosis typically emerging in young adulthood and evidence showing that early intervention leads to better health outcomes, understanding help-seeking behaviors and mental health service use among young adults is a key priority (Correll et al., 2018; Salazar de Pablo et al., 2024; Solmi et al., 2022).

Objective

The current study investigates:

- 1) The utilization of formal mental health and informal support engagement in college students with a diagnosis of psychosis
- 2) Student's perceptions, beliefs, attitudes that inhibit or facilitate formal/informal service use in students diagnosed with psychosis?

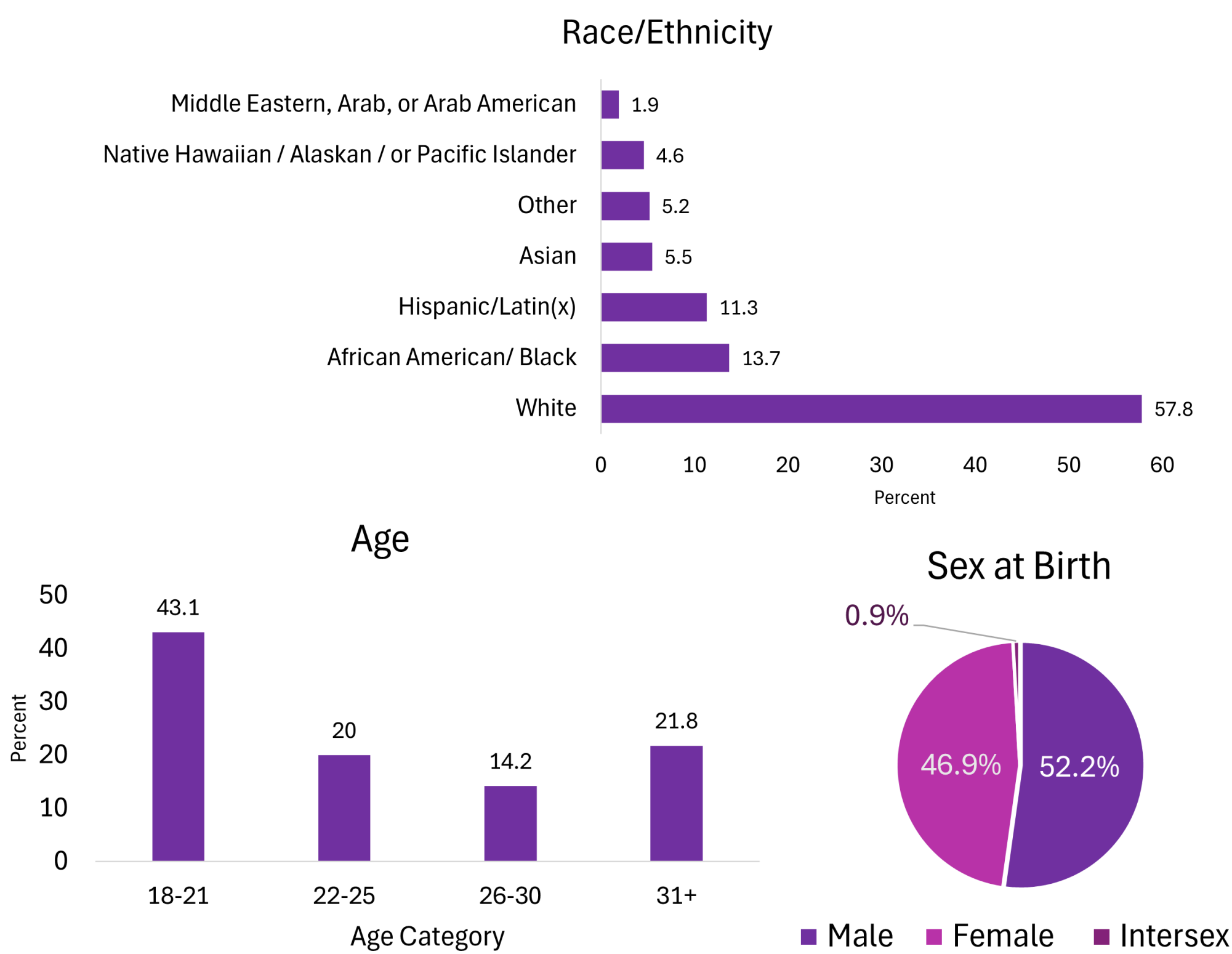
Methods

Data source: Healthy Minds survey data from 2015–2024
Analysis: Logistic regression models with coefficients exponentiated to adjusted odds ratios (aOR) were used to assess the probability of formal service use and informal engagement (outcomes) in students with a diagnosis of psychosis. All models adjusted for race (Asian, Latin(x)/Hispanic, African American/ Black, Other), Sex at birth (Male and Female), and age categories (18-21, 22-25, 26-30, 31+). Survey non-response weights were applied to all analyses to account for the higher female response rate than males.

Conceptualization of outcomes: Formal service use was defined as engagement either medication and or therapy. Informal service use was defined as receiving help from non-clinical sources, such as roommates, friends, significant others, family members, religious counselors, support groups.

Sample

N = 2,819 students with a diagnosis of psychosis



Results

	All Students with Psychosis	Students with Formal service use engagement	Students with Informal service use engagement	Students with no formal and informal engagement
Unweighted Sample Size	N = 2819	N = 2,310	N = 2,163	N = 171

Treatment Utilization

- 44.3% of students took antipsychotic medication in the past 12 months
- 82.4% of students engaged in therapy/counseling in the past 12 months
- 39.6% of students engaged in BOTH antipsychotic medication and therapy/counseling in the past 12 months

Treatment Perceptions

- Most students (62.2%) believed that medication would be very helpful (34.0%) or helpful (28.2%), compared to somewhat helpful (19.4.%) or not helpful (18.4%) for their mental health
- Most students strongly agreed (50.7%) or agreed (26.6%) that therapy or counseling would be very helpful for them if they were having mental or emotional health problems, while a minority (15.1%) disagreed or (7.6%) strongly disagreed.

Table 1. Adjusted logistic regression models assessing the associations between participant beliefs and use of formal and informal services among participants with self-reported psychosis diagnoses

	Unweighted n in the total sample	OR Formal Service Use	95% CI	p value	OR Informal Service Use	95% CI	p value
Perceived Need for Help ^{a,d}							
Strongly Agree	2,795	ref			ref		
Agree	499	0.53	(0.32, 0.86)	0.011	0.66	(0.41, 1.04)	0.073
Somewhat Agree	242	0.37	(0.22, 0.63)	< 0.001	0.59	(0.35, 0.99)	0.049
Somewhat Disagree	77	0.14	(0.07, 0.29)	< 0.001	0.43	(0.22, 0.87)	0.018
Disagree	119	0.14	(0.07, 0.28)	< 0.001	0.83	(0.43, 1.6)	0.581
Strongly Disagree	128	0.3	(0.15, 0.60)	0.001	0.59	(0.31, 1.1)	0.101
Perceptions of How Helpful Medication is ^{b,e}							
Very Helpful	488	ref			ref		
Helpful	368	0.67	(0.37, 1.26)	0.215	0.74	(0.41, 1.32)	0.307
Somewhat Helpful	263	0.73	(0.39, 1.4)	0.337	0.9	(0.50, 1.63)	0.733
Not Helpful	226	0.17	(0.09, 0.31)	< 0.001	0.89	(0.47, 1.70)	0.725
Perception of How Helpful Therapy is ^{c,f}							
Very Helpful	657	ref			ref		
Helpful	372	0.9	(0.47, 1.72)	0.758	0.75	(0.41, 1.36)	0.834
Somewhat Helpful	202	0.76	(0.39, 1.47)	0.412	0.711	(0.39, 1.27)	0.25
Not Helpful	113	0.31	(0.15, 0.62)	0.001	0.51	(0.26, 1.01)	0.052

Footnotes:
^aModel a assessed the association between the perceived need for help and formal service use engagement, adjusting for the same covariates (n = 1,325)
^bModel b assessed the association between the perceived helpfulness of medication and formal service use engagement (n = 1,324)
^cModel c assessed the association between the perceived helpfulness of therapy and formal service use engagement (n = 1,463)
^dModel d assessed the association between the perceived need for help and informal support engagement (n = 2,756)
^eModel e assessed the association between the perceived helpfulness of medication and informal support engagement (n = 1,325)
^fModel f assessed the association between the perceived helpfulness of therapy and informal support engagement (n = 1,324)

Table 2. Adjusted logistic regression models assessing the associations between reasons for seeking help and antipsychotic and or therapy/counseling use in the past 12 months among students engaged in formal services

	Unweighted n in the total sample	OR Antipsychotic Use	95% CI	p value	OR Therapy/ Counseling	95% CI	p value
Reasons for Seeking Help ^{g,h}							
Decided to seek help on own	1,276	0.79	(0.52, 1.20)	0.268	1.81	(0.77, 4.27)	0.17
A friend encouraged me to seek help	319	0.96	(0.61, 1.50)	0.855	4.89	(1.03, 23.1)	0.045
A friend pressured me to seek help	126	1	(0.48, 2.08)	0.991	0.65	(0.16, 3.1)	0.634
A family member encouraged me to seek help	557	1.05	(0.72, 1.54)	0.803	1.23	(0.53, 2.86)	0.637
A family member pressured me to seek help	296	1.12	(0.70, 1.78)	0.635	0.84	(0.34, 2.03)	0.693
Someone other than a friend or family member encouraged me to seek help, such as a health professional	429	1.49	(1.01, 2.20)	0.044	1.26	(0.45, 3.51)	0.659
Campus advisor mandated or referred me to seek help	115	1.11	(0.61, 2.01)	0.732	0.4	(1.07, 1.48)	0.659
I inquired more information about my options	25	0.62	(0.18, 2.11)	0.442	-	-	-
Other	104	0.8	(0.43, 1.51)	0.493	0.71	(0.17, 2.89)	0.632

Footnotes:
^gModel g assessed the association between reasons for seeking help and antipsychotic use in the past 12 months (n = 1,724)
^hModel h assessed the association between the reasons for seeking help and therapy/counseling in the past 12 months (n = 1,691)

Discussion

- This study contributes to the limited literature on help seeking behaviors and informal service use in college students diagnosed with psychosis.
- Approximately eight-in-ten students with a diagnosis of psychosis reported utilizing formal services, eight-in-ten reported engaging in informal supports, and one-in-ten did not engage in either. A total of four-in-ten students engaged in both antipsychotic medication and therapy/counseling in the past 12 months. This means—six-in-ten students are not meeting the recommended combination of both pharmacological and psychosocial treatment standard of care guidelines established by the American Psychiatric Association (APA).
- More than three-in-four students with psychosis strongly agreed or agreed that therapy or counseling would be very helpful for them if they were having mental or emotional health problems. Universities and clinicians alike can continue to capitalize on this population's acceptability and strong engagement towards therapeutic interventions, which have been shown to reduce relapse, improve quality of life, and psychotic symptoms (Lutgens et al., 2017)
- Negative perceptions of how helpful medication and or therapy/counseling would be for mental health was associated with significantly lower odds of engagement in formal service use.
- We found that lack of perceived need for help was associated with significantly lower odds of formal service use in this sample.
- We found that those who are encouraged by friends or health professionals versus pressured or mandated as primary reasons for seeking help have higher odds of antipsychotic and or therapy/counseling use. This is an important implication given the institutionalization of mental illness that can result in mandated treatment (Plahouras et al., 2020).

Conclusions

- This is the largest known study of formal service and informal support engagement in students with a diagnosis of psychosis. Therapy and/or counseling in this population is highly utilized and viewed favorably. However, a majority of students do not meet the current standard of care guidelines, a combination of both therapy/counseling and antipsychotic medication. Therapeutic resources available on college campuses may play an important role in supporting students diagnosed with psychosis. Encouragement from friends or healthcare professionals to seek help for mental health may promote or encourage help-seeking behaviors. Lastly, psychoeducation on the effectiveness of treatment could facilitate formal service use and informal support engagement, thereby shifting students' perceptions of treatment, but needs to be further explored.

References

1. Addington, J., Heinssen, R. K., Robinson, D. G., Schooler, N. R., Marcy, P., Brunette, M. F., Correll, C. U., Estroff, S., Mueser, K. T., Penn, D., Robinson, J. A., Rosenheck, R. A., Azrin, S. T., Goldstein, A. B., Severe, J., & Kane, J. M. (2015). Duration of Untreated Psychosis in Community Treatment Settings in the United States. *Psychiatric Services*, 66(7), 753–756. <https://doi.org/10.1176/appi.ps.201400124>
2. Correll, C. U., Galling, B., Pawar, A., Krivko, A., Bonetto, C., Ruggeri, M., Craig, T. J., Nordentoft, M., Srihar, V. H., Guloksuz, S., Hui, C. L. M., Chen, E. Y. H., Valencia, M., Juarez, F., Robinson, D. G., Schooler, N. R., Brunette, M. F., Mueser, K. T., Rosenheck, R. A., ... Kane, J. M. (2019). Comparison of Early Intervention Services vs. Treatment as Usual for Early-Phase Psychosis: A Systematic Review, Meta-analysis, and Meta-regression. *JAMA Psychiatry*, 75(6), 555–565. <https://doi.org/10.1001/jamapsychiatry.2018.0623>
3. Salazar de Pablo, G., Guinart, D., Armendariz, A., Aymerich, C., Catalan, A., Alameda, L., Rogdaki, M., Martinez Baringo, E., Soler-Vidal, J., Oliver, D., Rubio, J. M., Arango, C., Kane, J. M., Fusar-Poli, P., & Correll, C. U. (2024). Duration of Untreated Psychosis and Outcomes in First-Episode Psychosis: Systematic Review and Meta-analysis of Early Detection and Intervention Strategies. *Schizophrenia Bulletin*, 50(4), 771–783.
4. Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., Salazar de Pablo, G., Il Shin, J., Kirkbride, J. B., Jones, P., Kim, J. H., Kim, J. Y., Carvalho, A. F., Sisman, M. Y., Correll, C. U., & Fusar-Poli, P. (2022). Age at onset of mental disorders worldwide: Large-scale meta-analysis of 192 epidemiological studies. *Molecular Psychiatry*, 27(1), 281–295. <https://doi.org/10.1038/s41380-021-01161-7>
5. Lutgens, D., Garipey, G., & Malla, A. (2017). Psychological and psychosocial interventions for negative symptoms in psychosis: Systematic review and meta-analysis. *The British Journal of Psychiatry*, 210(5), 324–332. <https://doi.org/10.1192/bjp.bp.116.197103>
6. Plahouras, J. E., Mehta, S., Buchman, D. Z., Foussias, G., Daskalakis, Z. J., & Blumberger, D. M. (2020). Experiences with legally mandated treatment in patients with schizophrenia: A systematic review of qualitative studies. *European Psychiatry*, 63(1), e39. <https://doi.org/10.1192/j.eurpsy.2020.37>

Interested in the Healthy Minds Study?

Data is publicly available!

Principal Investigator: S. Lipson, PhD, EdM

Email: sklipson@bu.edu

