



Prevalence and factors associated with signing against medical advice among psychiatric inpatients at Usmanu Danfodiyo University Teaching Hospital, Sokoto

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Abstract

Background: Leaving against medical advice (LAMA) is common and poses significant challenges among psychiatric inpatients, reflecting patients' legal rights while remaining linked to severe noncompliance, higher morbidity and mortality, increased readmissions, substantial costs, and distress for psychiatrists.

Aim: To determine the prevalence and factors associated with signing against medical advice (SAMA) among psychiatric inpatients at Usmanu Danfodiyo University Teaching Hospital (UDUTH), Sokoto, Nigeria.

Materials and methods: A retrospective study was conducted over an eight-year period on 435 patients admitted to the psychiatric ward at Usmanu Danfodiyo University Teaching Hospital. Socio-demographic and clinical data were analyzed using SPSS software. The statistical significance of the findings was assessed using Chi-squared and Fisher's exact tests, with a 5% significance level.

Results: The prevalence of signing against medical advice among psychiatric inpatients was 10.2%. There was a statistically significant association between signing against medical advice and gender ($P = 0.012$), but no significant association was found with diagnosis ($P = 0.337$) or length of stay ($P = 0.074$).

Conclusion: The high prevalence of signing against medical advice among psychiatric inpatients is associated with factors such as female gender. However, there is a significant lack of research on this issue in Nigeria, highlighting the need for further studies with rigorous methodologies. Standardized definitions, reporting, and targeted interventions are crucial to address this problem and its complications.

Keywords: Signed against medical advice, Complied with medical advice, psychiatric inpatients

Introduction

The phenomenon of leaving against medical advice (LAMA) has been extensively documented in the literature over the past three decades and continues to pose a significant challenge for both patients and healthcare providers.^{1,2} Over the past 50 years, the definition of discharge against medical advice has changed significantly due to clinical, social, and legal developments in the mental health field.³ Initially

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referring to patients escaping from hospitals, the term now encompasses patients' legal rights to leave against medical advice, shaped by legislative changes and the introduction of early psychotropic medications. This behavior is regarded as the most severe form of noncompliance with a prescribed treatment regimen, indicating a total refusal of the

physician's recommendations,¹ and the patient departs despite the treating psychiatrist's explicit recommendation to remain under care.³ Discharging against medical advice (AMA) is linked to negative outcomes.^{3,4} It has been associated with higher patient morbidity and mortality, an increased risk of hospital readmission, substantial economic costs,^{1,5-7} and is a source of distress for the psychiatrists caring for the mentally ill.³

Factors contributing to irregular discharges have been extensively examined across diverse healthcare settings, including psychiatric units.¹ Despite the variability in findings regarding predictors of AMA discharges, certain variables have been consistently associated with AMA across most treatment environments. These variables include younger age, male sex, Medicaid coverage or lack of insurance, mental illness diagnoses (particularly among individuals with alcohol and intravenous drug abuse), receipt of social assistance, and inadequate social support.^{1,8} In the Middle East, some of the most common causes of discharge against medical advice include family pressure, patients' desire for early discharge, dissatisfaction with medical staff, hospitalization costs, and family-related issues.⁴

Several studies have been conducted in Nigeria on leaving against medical advice.^{4,7} However, there is a paucity of research specifically addressing this issue among inpatients in psychiatric settings. Therefore, this research will shed light on the prevalence of discharge against medical advice in the field of mental health and will serve as a precursor for further studies with improved designs in Nigeria.

The specific criteria for labeling patients as discharged against medical advice varied significantly across the studies.³ Different hospitals use various terms for leaving against a managing physician's direction. Some adopt "leaving against medical advice (LAMA)," while others use "discharge against medical advice (DAMA)." At our institution, we use "signing against medical advice (SAMA)" and this refers to leaving against the psychiatrist's advice before achieving substantial symptom remission, either by formally signing a document or by vacating the bed space without notifying medical staff. These terms are closely related, with subtle differences, and can be

used interchangeably to refer to the decision to discontinue physician care after the establishment of a therapeutic relationship.

Method

This study is part of an eight-year retrospective analysis involving 437 patients, of which data from 435 patients were included. Admission and discharge records from the hospital's inpatient psychiatric ward, spanning February 2015 to January 2023, were retrieved from the nurses' admission and discharge registers. Socio-demographic and clinical information were collected and analyzed using the Statistical Product and Service Solutions (SPSS) software for Windows, version 25. Associations were tested using Chi-squared and Fisher's exact tests, with statistical significance defined as $p < 0.05$.

Result

Out of 435 psychiatric inpatient admissions from February 2015 to January 2023, 45 patients (10.2%) signed against medical advice while 390 (89.8%) of participants complied with medical advice (Figure 1).

Table 1 presents a comparison of the socio-demographic and clinical factors of patients in relation to signing against medical advice during admission. The data indicate that female patients were significantly more likely to sign against medical advice ($P = 0.012$). Furthermore, patients diagnosed with substance use disorder had higher rates of signing against medical advice, although this association was not statistically significant.

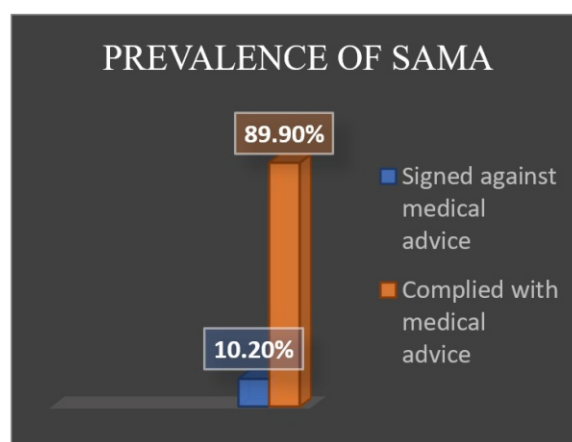


Figure 1: Prevalence of Signing against medical advice

Table 1: Association of socio-demographic and clinical variables with SAMA and CWMD

Variable	SAMA(%)	CWMA(%)	X ²	Df	P-Value
Age (years)			*		0.792
<20	46(10.6%)	389(89.4%)			
20-40	61(14.1%)	374(85.9%)			
41-60	75(17.2%)	360(82.8%)			
>60	0(0.0%)	435(100.0%)			
Gender			6.440	1	0.012
Male	63(14.5%)	372(85.5%)			
Female	27(6.2%)	408(93.8%)			
Occupation			1.007	3	0.820
Employed	44(10.0%)	391(90.0%)			
Unemployed	38(8.7%)	397(91.3%)			
Business	62(14.3%)	373(85.7%)			
Student	47(10.7%)	388(89.3%)			
Religion			*		0.786
Islam	44(10.0%)	391(90.0%)			
Christianity	50(11.6%)	385(88.4%)			
Tribe			*		1.000
Hausa	60(13.7%)	375(86.3%)			
Yoruba	51(11.8%)	384(88.2%)			
Igbo	0(0.0%)	435(100.0%)			
Others	36(8.3%)	399(91.7%)			
Nationality			*		1.000
Nigeria	44(10.2%)	391(80.80)			
Niger	0(0.00%)	435(100.0%)			
Diagnosis			*		0.337
Schizophrenia	32(7.4%)	403(92.6%)			
Affective disorder	36(8.3%)	399(91.7%)			
Substance use disorder	77(17.6%)	358(82.4%)			
Psychosis (unclassified)	54(12.5%)	381(87.5%)			
Organic brain disorder	40(9.1%)	395(90.9%)			
Others	30(7.0%)	405(93.9%)			
Duration of Hospitalization			5.058	2	0.074
< 2 weeks	59(13.3%)	376(86.7%)			
2-4 weeks	31(7.1%)	404(92.9%)			
> 4 weeks	13(2.9%)	422(97.1%)			

p<0.05. *Fisher's Exact, SAMA=Signed against medical advice, CWMD=Complied with medical advice

Discussion

Signing against medical advice is a prevalent and complex issue that significantly impacts both patients and their psychiatrists.⁹ The prevalence of SAMA in this study aligns with the findings of a review that analyzed sixty-one articles from 1955 to 2005, reporting discharge against medical advice rates ranging from 0.7% to 51%.³ However, the prevalence observed in this study is lower than the rates reported in two separate Iranian studies, with Setareh finding a prevalence of 13.5% and Sheikhmoonesi reporting a significantly higher prevalence of 34.5%.^{4,9} Both Iranian studies employed direct patient interactions to inquire about leaving against medical advice. Setareh utilized telepsychiatry through phone calls, whereas Sheikhmoonesi adopted a prospective approach to collect information from his clients. In contrast, our

study relied on retrospective data from admission and discharge records maintained by nurses, which were not specifically intended for research purposes. Consequently, some instances of patients leaving against medical advice may have been underreported. These methodological differences could account for the higher prevalence.

The literature on factors associated with SAMA discharges has often shown inconsistent results.¹ For instance, in our study, we found an association between female gender and SAMA, which was similar to what was reported by Brush,⁽¹⁰⁾ Tuckman,¹¹ but this contrasts with the findings of many other researchers.^{6-8,12} In our environment (Northern Nigeria), females are typically under the care of others throughout various stages of their lives—under their parents and brothers before marriage, under their husband after marriage, and under their children or other siblings in cases of divorce, separation, or the demise of their husband. In contrast, males generally have greater autonomy over their affairs. Consequently, the decision for females to leave against medical advice may involve multiple contributors, whereas for males, it is less influenced by others. This may explain why females more frequently leave against medical advice.

Conclusion

The prevalence of leaving against medical advice among psychiatric inpatients is high, with certain sociodemographic factors, such as female gender, being implicated. However, in Nigeria, there is a notable paucity of research in this area, underscoring the necessity for further studies employing rigorous methodologies. Additionally, there is a critical need for standardized definitions and reporting of leaving against medical advice, as well as the development of targeted interventions to mitigate this occurrence and its associated complications.

Limitation

This retrospective study had limited information and did not address several critical factors related to why patients signed against medical advice. Specifically, it lacked data on environmental influences, physician and paramedic interactions, and the broader consequences of leaving against

medical advice, such as readmission rates, mortality, morbidity, and the frustration experienced by the managing medical staff. These gaps highlight the need for further research, especially in Nigeria, where there is a significant lack of studies on psychiatric inpatients leaving against medical advice. Addressing these areas could provide valuable insights and lead to the development of interventions aimed at reducing the incidence and negative outcomes associated with leaving against medical advice.

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Conflict of interest

The authors did not declare any conflicts of interest.

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References

1. Tawk R, Freels S, Mullner R. Associations of mental, and medical illnesses with against medical advice discharges: the National Hospital Discharge Survey, 1988–2006. *Administration and Policy in Mental Health and Mental Health Services Research*. 2013;40:124-32.
2. Alfandre DJ, editor "I'm going home": discharges against medical advice. *Mayo Clinic Proceedings*; 2009: Elsevier.
3. Brook M, Hilty DM, Liu W, Hu R, Frye MA. Discharge against medical advice from inpatient psychiatric treatment: a literature review. *Psychiatric Services*. 2006;57(8):1192-8.
4. Setareh J, Allameh Y, Mohseni Moalemkolaei N, Bagheri M. Prevalence of discharge against medical advice in psychiatric patients and associated factors. *Journal of Mazandaran University of Medical Sciences*. 2018;28(166):226-30.
5. Fiscella K, Meldrum S, Barnett S. Hospital discharge against advice after myocardial infarction: deaths and readmissions. *The American Journal of Medicine*. 2007;120(12):1047-53.
6. Aliyu Z. Discharge against medical advice: sociodemographic, clinical and financial perspectives. *International Journal of Clinical Practice*. 2002;56(5):325-7.
7. Baptist AP, Warriar I, Arora R, Ager J, Massanari RM. Hospitalized patients with asthma who leave against medical advice: characteristics, reasons, and outcomes. *Journal of Allergy and Clinical Immunology*. 2007;119(4):924-9.
8. Ibrahim SA, Kwok CK, Krishnan E. Factors associated with patients who leave acute-care hospitals against medical advice. *American Journal of Public Health*. 2007;97(12):2204-8.
9. Sheikhmoonesi F, Khademloo M, Pazhuheshgar S. Patients discharged against medical advice from a psychiatric hospital in Iran: a prospective study. *Global Journal of Health Science*. 2014;6(3):213.
10. Brush RW, Kaelbling R. Discharge of psychiatric patients against medical advice. *The Journal of Nervous and Mental Disease*. 1963;136(3):288-92.
11. Tuckman J, Lavell M. Psychiatric patients discharged with or against medical advice. *Journal of Clinical Psychology*. 1962;18(2).
12. Saitz R, Ghali WA, Moskowitz MA. Characteristics of patients with pneumonia who are discharged from hospitals against medical advice. *The American Journal of Medicine* 1999;107(5):507-9.