



9-2023

Factors Associated with Dropout from Outpatient Tertiary Mental Health Services

Nasir Mahmood

Karwan-e-Hayat Institute for Mental Health Care, Karachi

Uroosa Talib

Karwan-e-Hayat Institute for Mental Health Care, Karachi

Follow this and additional works at: <https://ecommons.aku.edu/pjns>



Part of the [Neurology Commons](#)

Recommended Citation

Mahmood, Nasir and Talib, Uroosa (2023) "Factors Associated with Dropout from Outpatient Tertiary Mental Health Services," *Pakistan Journal of Neurological Sciences (PJNS)*: Vol. 18: Iss. 3, Article 5. Available at: <https://ecommons.aku.edu/pjns/vol18/iss3/5>



FACTORS ASSOCIATED WITH DROPOUT FROM OUTPATIENT TERTIARY MENTAL HEALTH SERVICES

Nasir Mahmood¹, Uroosa Talib¹

¹Karwan-e-Hayat Institute for Mental Health Care, Karachi

Correspondence author: Nasir Mahmood Karwan-e-Hayat Institute for Mental Health Care, Karachi **Email:** nasir.mehmood@keh.org.pk

Date of submission: September 1, 2023 **Date of revision:** September 25, 2023 **Date of acceptance:** September 30, 2023

ABSTRACT

Background and objective:

There is a paucity of mental health hospital-based studies from Pakistan that have observed the contributing factors of dropout. This study aims to understand contributing factors to dropouts from mental health services.

Method:

This telephonic survey was conducted as a cross-sectional study from dropout outpatients of Karwan-e-Hayat Institute for Mental Health Care, a tertiary mental care hospital in Karachi, Pakistan. Using a simple questionnaire to assess socio-demographic variables, psychosocial assessment, and patient perspectives on treatment termination. A total of 158 participants out of 200 patients provided insight into their dropout experiences.

Result:

Results revealed that younger adults, particularly those aged 18-40, demonstrated a greater tendency to discontinue treatment. Level of education was also associated with dropout rates, with uneducated and less educated individuals showing greater tendencies to drop out of treatment than their educated counterparts. Schizophrenia emerged as a leading psychiatric diagnosis associated with high dropout rates. Lack of insight into psychotherapy, patient dissatisfaction, and geographic distance from treatment centers were identified as key contributors to dropout.

Conclusion:

Factors such as age, educational status, diagnosis, insight into the disease, dissatisfaction with the treatment and distance from the treatment center were related to the dropout rate. Insights gained from this investigation advocate for tailored interventions focusing on education, patient satisfaction, and proximity to treatment facilities.

Key words: Dropout factors, psychiatric care, outpatients, tertiary mental health services

INTRODUCTION

Dropouts can be defined as the termination of contact with services when there is no clinical resolution.¹ Dropouts are generally those patients who either (a) refuse to return to the therapist after an initial or specific number of visits, (b) or refuse to return for any reason excluded from treatment, or (c) those who wish to return if there is a waiting list, but as a result fail to visit.² Treatment drop-out is one of the main issues arising for mental health professionals, both inpatients and outpatients show some risk of treatment dropout before completion.³ Drop out of mental health services can be a major problem for people with mental illness, which can have devastating consequences such as

increased psychological symptoms, frequent hospitalizations, homelessness, violence against others and suicide.^{4,5}

Previous research suggests that socioeconomic factors such as age, marital status and living conditions may be important to anticipate a dropout.⁶⁻⁸ Other predictors of dropout include clinical setting, patient satisfaction, and severity of clinical condition, which have been described previously.^{6,7,9}

It has also been observed that patients discontinue their treatment after receiving symptomatic relief, although they have not fully recovered from a

therapist's point of view.² Rosenthal and Frank reported that 32.5% of patients did not attend more than five OPD follow-ups when they were discharged after Hospital.¹⁰

Several studies from developed countries report the correlates of dropping out from psychiatric care.¹¹⁻¹⁴ World Mental Health Survey carried out by the World Health Organization comparing the dropout between high-income and lower-income countries found that the dropout rate was higher in the low income countries.¹⁵ Although dropout from mental health care is common in Pakistan, there is a paucity of mental health hospital based studies from Pakistan that have observed the contributing factors of dropout. This study aims to contribute toward reducing this gap.

METHODS

This telephonic survey was conducted as a cross-sectional study from dropout outpatients of Karwan-e-Hayat Institute for Mental Health Care, a tertiary mental care hospital in Karachi, Pakistan. Ethical approval was obtained from the institutional ethics committee. Study period was three months (from January to March 2022). All participants aged ≥ 18 years were recruited after obtaining telephonic informed consent.

To be included in the study, the participants were required to be aged ≥ 18 years and diagnosed with one of the mental disorders. Patients with an exclusive diagnosis of substance abuse or dependence, intellectual disability, significant cognitive impairment due to organic brain syndromes, not diagnosed with any psychiatric disorder, who did not complete all assessments, those who had no access to a phone, and who had registered but were not seen a

psychiatrist at least once were excluded. A convenient sampling method was used.

Dropouts included patients who registered with psychiatric services as "regular attendants" and attended psychiatric services at least one to three times for treatment, but after six months of the last visit to the clinic, did not come back. The hospital records (walk-in performa/work-up file/in-patient file) of these patients were reviewed to draw such a conclusion. Apart from this, data was extracted from the registration counter to cross-check the data. Patients considered to be 'dropouts' were contacted telephonically and informed about the study. They were invited to participate in a telephonic survey to participate in the study. Those who consented were again briefed about the study and verbal informed consent was obtained prior to recruitment. A total of 200 patients were approached, of whom 158(79.5%) agreed to participate.

The socio-demographic variables considered in the study were: age, sex, marital status, living arrangements (alone, with family or children, with biological family, with other relatives, in sheltered accommodation), level of education (no education, primary studies, secondary studies, and university studies), and occupation, occupational status (active, unemployed, pensioner, student, and domestic tasks). The dropout reason was evaluated using an open-ended question, in which the patients were asked to give one or more reason(s) for dropping out from treatment. Descriptive analysis was carried out using mean and standard deviation with range for continuous variables. Frequency and percentages were calculated for discontinuous variables.

RESULTS

Table 1 shows the demographic data of dropout patients.

Table 1: Demographic features of the patient

Socio-demographic Factor

Age	Age Group	No. of Cases(%)
	18-30	49(31%)
	31-40	52(32.9%)
	41-50	34(21.5%)
	51-60	20(12.7%)
	61-Above	3(1.9%)
Gender	Gender	No. of Cases(%)
	Female	49(31%)
	Male	109(69%)
Marital Status	Status	No. of Cases(%)
	Single	78(49.4%)
	Married	66(41.8%)
	Divorced	8(5.1%)
	Widow	4(2.5%)
	Separated	2(1.3%)
Education	Status	No. of Cases(%)
	Uneducated	52(32.9%)
	Primary	19(12%)
	Secondary	51(32.3%)
	Intermediate	21(13.3%)
	Bachelor & Master	15(9.5%)

The most common psychiatric diagnosis leading to dropout was schizophrenia (65.2%) followed by bipolar affective disorder (20.9%), depression (17%) and anxiety (3.2%). Figure 1 demonstrates the factors

associated with dropout. The most common reason of psychiatric patients dropout was "Patients was unwilling to come /aggression" (26.6%).

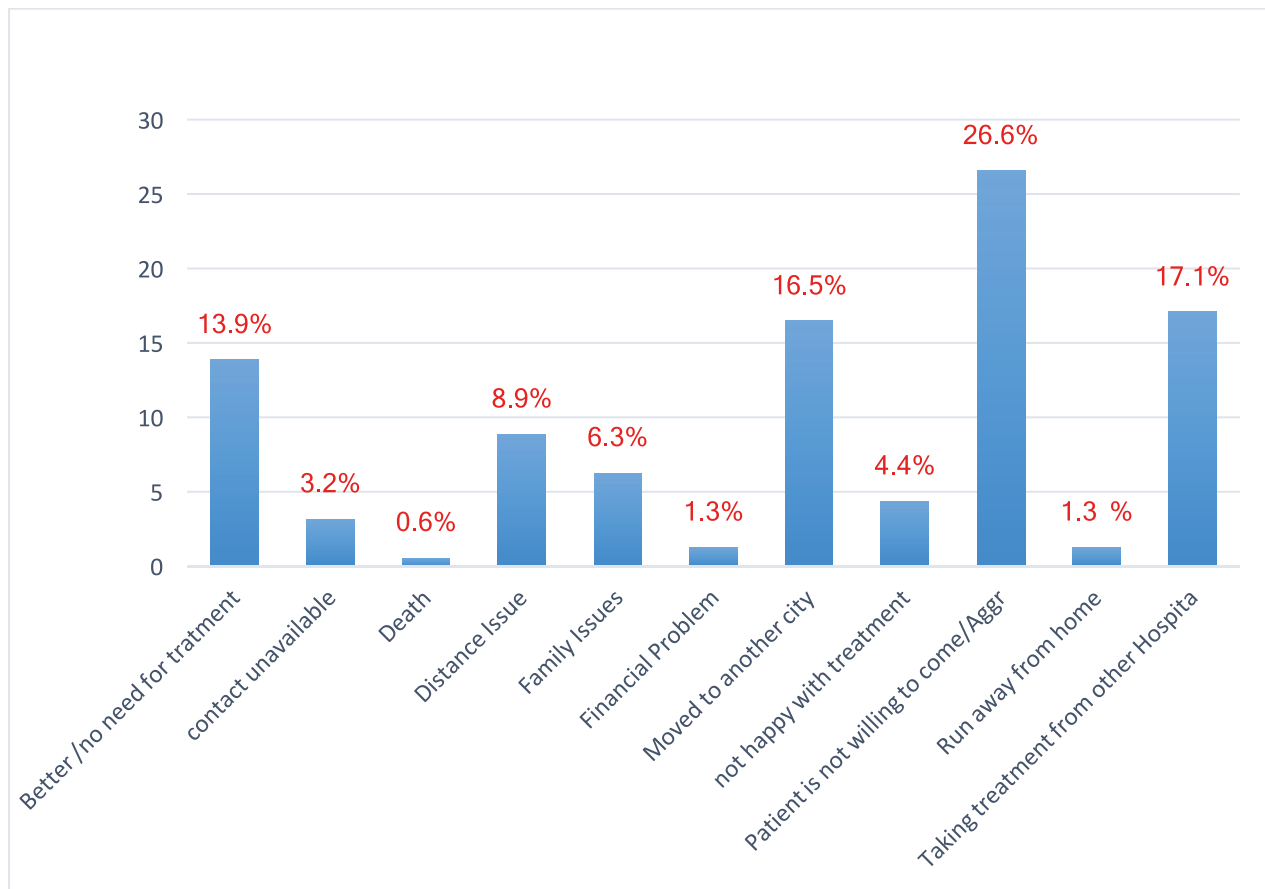


Figure 1: Factors associated with dropout

DISCUSSION

Socio-demographic analysis found that younger adults were more likely to drop out of treatment than older adults. Results showed that 63.9% of youth dropped out of treatment. This has been observed before and is partly explained by the fact that youth often have to rely on others around them to seek treatment.¹⁶⁻¹⁹ Adolescents' greater likelihood of dropping out of treatment may account for greater morbidity, dysfunction, and a worse longitudinal course than has been observed in patients with early-life onset.^{20,21} Similarly, another study has reported young patients under 40 years have a low compliance rate. Younger patients were found to have more level of noncompliance; this implies that younger patients may have a more negative perception of medicine, perceiving them to be more harmful and viewing themselves as possessing greater personal control over how to best manage their condition.^{22,23}

The Study showed that the uneducated and low-educated people dropout rates were higher than

those educated people. Similar factors were observed in medicine compliance before.²⁴ This is consistent with earlier studies, showing that education had a positive relationship with compliance. Better compliance in psychiatric population is pertinent considering higher education obviously promotes insight into the illness and a better account for the need for the treatment.²⁵

In our study, the psychiatric diagnosis of schizophrenia was the high drop-out rates as compared to other psychiatric diagnoses. Correspondingly, a study carried out in the US reported that schizophrenia patients had higher drop-out rates than those with other illnesses.²⁶ However, four European studies reported that patients with a diagnosis of schizophrenia and other psychoses were more likely to continue their treatment than patients with neurotic and personality disorders.²⁷⁻³⁰ A diagnosis of schizophrenia was found to greatly increase the chance of continuing treatment in the study by Rossi et al.²⁹

The results of the present study clearly show that those

who drop out of treatment do not have much insight into psychiatric treatment. Most of the reasons are that the patient is unwilling to come or aggressive and the patient is better or the patient does not need treatment. Studies from the west have also shown that poor insight was a consistent predictor of missed appointments/dropout from treatment.^{31,32} These findings suggest that while evaluating new patients, clinicians should give due importance to the evaluation of insight and those with poor insight, should receive proper psycho-education to reduce the chances of dropout from treatment.³³ These findings suggest that clinicians should spend additional time and effort to educate their patients concerning the effectiveness of mental health treatments. In a recent study of mental health advocacy group members, it was observed that receiving education from care providers was critically important in facilitating patients' acceptance of their treatments.³³

Another important reason for dropout in this study was patient dissatisfaction with treatment. Similarly, the results of the previous study showed that patients in the "dropout" group had lower levels of satisfaction with various aspects of the treatment process. Studies in the west show that missed appointments and dropouts are more often associated with non-collaborative decision-making.³⁴ Previous studies from India also suggest that long waiting times, fewer attending physicians and staff attitude further determine compliance with appointment.^{35,36} Accordingly, the satisfaction levels of patients and caregivers need to be

improved. Distance was another factor in dropout that was highlighted in the present study. Previous studies have also shown higher dropout rates to be associated with greater distance of residence from the treatment facility.³⁷

Study Limitations

- I. Limited resources and the specific nature of the outpatient setting limited the sample size.
- II. Due to complete reliance on telephonic surveys, individuals without access to a telephone could not participate in this study.
- III. Due to limited resources and difficulties in community services, telephonic consent was obtained, which cannot fully replicate the comprehensive nature of traditional written consent.

CONCLUSION

Dropout from psychiatric care negatively affects the outcomes of mental disorders. In the present study, it was found that some factors such as age, educational status, diagnosis, insight into the disease, dissatisfaction with the treatment and distance from the treatment center were related to the dropout rate. Insights gained from this investigation advocate for tailored interventions focusing on education, patient satisfaction, and proximity to treatment facilities. Replication of this study in diverse settings could facilitate formulating comprehensive strategies to mitigate dropout rates, thereby optimizing mental health care delivery.

REFERENCES

1. Rossi A, Amadeo F, Bisoffi G, Ruggeri M, Thornicroft G, Tansella M, et al. Dropping out of care: Inappropriate terminations of contact with community-based psychiatric services. *Br J Psychiatry*. 2002;181(4):331–338.
2. Gill HP, Singh G, Sharma KC. Study of dropouts from a psychiatric clinic of a general hospital. *Indian J Psychiatry*. 1990;32(2):152–158.
3. Baekeland F, Lundwall L. Dropping out of treatment: A critical review. *Psychol Bull*. 1975;82(5):738–783.
4. Dixon L, Goldberg R, Iannone V, Lucksted A, Brown C, Kreyenbuhl J, et al. Use of a critical time intervention to promote continuity of care after psychiatric inpatient hospitalization. *Psychiatr Serv*. 2009;60:451–458.
5. Fischer EP, McCarthy JF, Ignacio RV, Blow FC, Barry KL, Hudson TJ, et al. Longitudinal patterns of health system retention among veterans with schizophrenia or bipolar disorder. *Community Ment Health J*. 2008;44:321–330.
6. Trepka C. Attrition from an outpatient psychology clinic. *Br J Med Psychol*. 1986;59:181–186.
7. Tehrani E, Krussel J, Borg L, Munk-Jørgensen P. Dropping out of psychiatric treatment: a prospective study of a first-admission cohort. *Acta Psychiatr Scand*. 1996;94(4):266–71.
8. Young AS, Grusky O, Jordan D, Belin TR. Routine outcome monitoring in a public mental health system: the impact of patients who leave care. *Psychiatr Serv*. 2000;51(1):85–91.
9. Pekarik G. Improvement in clients who given different reasons for dropping out of treatment. *J Clin Psychol*. 1983;39:909–913.
10. Rosenthal D, Frank JI. The fate of psychiatric clinic outpatients assigned to psychotherapy. *J Neurol Mental Dis*. 1938;127:30–37.
11. Glyngdal P, Sørensen P, Kistrup K. Non-compliance in community psychiatry: Failed appointments in the referral system to psychiatric outpatient treatment. *Nord J Psychiatry*.

- 2002;56:151–156.
12. Percudani M, Belloni G, Contini A, Barbui C. Monitoring community psychiatric services in Italy: Differences between patients who leave care and those who stay in treatment. *Br J Psychiatry*. 2002;180:254–259.
 13. Lasalvia A, Bonetto C, Cristofalo D, Tansella M, Ruggeri M. Predicting clinical and social outcome of patients attending 'real world' mental health services: A 6-year multi-wave follow-up study. *Acta Psychiatr Scand Suppl*. 2007;116:16–30.
 14. Wang J. Mental health treatment dropout and its correlates in a general population sample. *Med Care*. 2007;45(2):224–229.
 15. Wells JE, Browne MO, Aguilar-Gaxiola S, Al-Hamza wi A, Alonso J, Angermeyer MC, et al. Drop out from out-patient mental healthcare in the World Health Organization's World Mental Health Survey initiative. *Br J Psychiatry*. 2013;202(1):42–49.
 16. Jellinek M. Referrals from a psychiatric emergency room: relationship of compliance to demographic and interview variables. *Am J Psychiatry*. 1978;135:209–213.
 17. Stickney SK, Hall RC, Gardner ER. The effect of referral procedures on aftercare compliance. *Hosp Community Psychiatry*. 1980;31:567–569.
 18. Greenspan M, Kulish NM. Factors in premature termination in long-term psychotherapy. *Psychotherapy*. 1985;22:75–82.
 19. Baruch G, Gerber A, Fearon P. Adolescents who drop out of psychotherapy at a community-based psychotherapy center. *Br J Med Psychol*. 1998;71:233–245.
 20. Giaconia RM, Renherz HZ, Silverman AB, Pakiz B, Frost AK, Cohen E. Ages of onset of psychiatric disorders in a community population of older adolescents. *J Am Acad Child Adolesc Psychiatry*. 1994;33:706–717.
 21. Hoehn-Saric R, Hazlett RL, McLeod DR. Generalized anxiety disorder with early and late onset of anxiety symptoms. *Compr Psychiatry*. 1993;34:291–298.
 22. Leggat JE, Jr., Orzol SM, Hulbert-Shearon TE, Golper TA, Jones CA, Held PJ, et al. Noncompliance in hemodialysis: predictors and survival analysis. *Am J Kidney Dis*. 1998;32(1):139–45.
 23. Loong TW. Primary noncompliance in a Singapore polyclinic. *Singapore Med J*. 1999;40:691–693.
 24. Gohar Y, Talib U, Mehmood N. Factors affecting treatment compliance in psychiatric setting. *Pak J Neurol Sci*. 2020;15(4):5.
 25. Nose M, Barbui C. Clinical interventions for treatment non-adherence in psychosis: Meta-analysis. *Br J Psychiatry*. 2003;183:197–206.
 26. Young AS, Grusky O, Jordan D. Routine outcome monitoring in the public mental health system: The impact of patients who live care. *Psychiatr Serv*. 2000;51:85–91.

27. Berghofer G, Schmidl F, Rudas S. Predictors of treatment discontinuity in outpatient mental health care. *Soc Psychiatry Psychiatr Epidemiol.* 2002;37:276-282.
28. Percudani M, Belloni G, Contini A. Monitoring community psychiatric services in Italy: Differences between patients who leave care and those who stay in treatment. *Br J Psychiatry.* 2002;180(3):254-259.
29. Rossi A, Amaddeo F, Bisoffi G. Dropping out of care: Inappropriate terminations of contact with community-based psychiatric services. *Br J Psychiatry.* 2002;181(4):331-338.
30. Berghofer G, Schmidl F, Rudas S. Utilization of psychiatric treatment: Who drops out, who comes back, and who stays? *Psychiatr Prax.* 2000;27:372-377.
31. Sajatovic M, Ignacio IV, West JA, Cassidy KA, Safavi R, Kilbourne AM, et al. Predictors of non-adherence among individuals with bipolar disorder receiving treatment in a community mental health clinic. *Compr Psychiatry.* 2009;50:100-107.
32. Gudjonsson G, Hannesdottir K, Agustsson T. Personality predictors of the failure of alcoholics to come for follow-up assessment. *Personal Individ Differ.* 2004;37:805-813. doi:10.1016/j.paid.2003.09.017.
33. Grover S, Mallnaik S, Chakrabarti S, Mehra A. Factors associated with dropout from treatment: An exploratory study. *Indian J Psychiatry.* 2021;63:10.4103/psychiatry.IndianJPsychiatry_87_19.
34. Mitchell AJ, Selmes T. Why don't patients attend their appointments: Maintaining engagement with psychiatric services? *Adv Psychiatr Treat.* 2007;13:423-434. <https://doi.org/10.1192/apt.bp.106.002599>.
35. Gill HP, Singh G, Sharma KC. Study of dropouts from a psychiatric clinic of a general hospital. *Indian J Psychiatry.* 1990;32:152-158. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2966363/>.
36. Ray R, Beig MA, Gopinath PS. Walk-in clinic drop-outs. *Int J Soc Psychiatry.* 1982;28(3):179-184.AA
37. Young AS, Grusky O, Jordan D. Routine outcome monitoring in the public mental health system: The impact of patients who live care. *Psychiatr Serv.* 2000;51(1):85-91. doi: <https://doi.org/10.1176/appi.ps.51.1.85>.

Conflict of interest: Authors declare no conflict of interest.

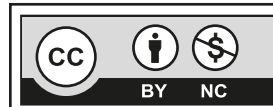
Funding disclosure: Nil

Authors' contributions:

Nasir Mahmood; Concept, data analysis, manuscript writing, manuscript revision

Uroosa Talib; data collection, data analysis, manuscript writing,

All the authors have approved the final version of the article and agree to be accountable for all aspects of the work.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non Commercial 2.0 Generic License.