



1. MBBS, FCPS
Assistant Professor Psychiatry
Dr. Ruth K. M Pfau, Civil Hospital,
Dow University of Health Sciences,
Karachi, Pakistan.
2. MBBS, FCPS
Assistant Professor Psychiatry
Dr. Ruth K. M Pfau, Civil Hospital,
Dow University of Health Sciences,
Karachi, Pakistan.
3. MBBS, FCPS
Assistant Professor Psychiatry
Dr. Ruth K. M Pfau, Civil Hospital,
Dow University of Health Sciences,
Karachi, Pakistan.
4. MBBS, FCPS
Assistant Professor Psychiatry
Dr. Ruth K. M Pfau, Civil Hospital
Dow University of Health Sciences,
Karachi, Pakistan.
5. MBBS, FCPS
Assistant Professor Psychiatry
Dr. Ruth K. M Pfau, Civil Hospital,
Dow University of Health Sciences,
Karachi, Pakistan.

Correspondence Address:

Dr. Muhammad Ilyas Jat
Department of Psychiatry
Dr. Ruth K. M Pfau, Civil Hospital,
Dow University of Health Sciences,
Karachi, Pakistan.
muhhammad.ilyas@duhs.edu.com

Article received on:

10/05/2019

Accepted for publication:

03/10/2020

INTRODUCTION

Treatment for substance use disorders has been accounted for to be related with improved patient outcomes.¹ Inpatient treatment of patients with substance related issue is regularly viewed as when the individual has been effectively taking substances and requires a protected situation for detoxification.² Different circumstances, for example, the nearness of comorbid therapeutic diseases requirement for serious mental intercessions, individual emergencies, and patient and specialist inclinations may likewise impact the choice to treat an individual with substance use disorder in an inpatient setting. Culmination of the underlying inpatient treatment empowers the arranging and discourses about the upkeep period of treatment and gives an open door for building up an affinity between the patient and the treatment group. It has been recommended that patients with substance use issues have higher rates of non-completion of inpatient

Frequency of drug detoxification treatment completers and non-completers.

Kheenpal Das¹, Muhammad Ilyas Jat², Saima Qureshi³, Tarique Arain⁴, Anum Haider⁵

ABSTRACT... Objective: To determine the frequency of drug detoxification treatment completers and non-completers admitted at a tertiary care public hospital at Karachi. **Study Design:** Descriptive Cross Sectional study. **Setting:** Department of Psychiatry, Civil Hospital, Karachi. **Period:** 15th January 2018 to 15th June 2018. **Material & Methods:** Totals 124 cases of substance users of any type who fulfilled the inclusion criteria were included in the study. History and thorough examinations carried out at ward. **Results:** Predominant age group was 26-35 years with majority of unemployed and brought for admission by family. Majority were using cannabinoids followed by opioids through smoking and snuffing form. Majority of them were admitted for first time and were taking substance for 1-5 years and every day. Out of 124 males 58.9% completed treatment while 41.1% did not complete treatment and left ward. Statistically age group, employment status, no of admissions, duration of use and frequency of use were significant. **Conclusion:** The study showed that there is a quite high and alarming ratio of patients who do not succeed to quite substance use.

Key words: Completers, Detoxification, Non-completers, Substance Use Disorder.

Article Citation: Das K, Jat MI, Qureshi S, Arain T, Haider A. Frequency of drug detoxification treatment completers and non-completers. Professional Med J 2021; 28(4):533-538. <https://doi.org/10.29309/TPMJ/2021.28.04.3700>

treatment than patients without substance use disorders.^{3,4} The explanations behind such treatment non-completion might be changed, and may incorporate individual and auxiliary administration conveyance factors.⁵ Besides, the inpatient treatment of a portion of the patients with substance use disorder might be rashly ended because of the disciplinary issues faced.⁶ Such untimely suspension of treatment may open the patient to the danger of backslide to substance taking practices and unfavorable wellbeing consequences.⁷ Subsequently, assessing the extent of people who are not ready to finish the inpatient treatment, and understanding the reasons thereof, may help in tending to issues that lead to such bothersome results. Our human services conveyance is very not quite the same as that of Western industrialized countries in a few viewpoints.

The financing for medical health-care related

services is typically provided through out-of-pocket payments rather than insurance coverage. Government services provide an important source of health-care for patients, especially those from the weaker sections of the society. Evidences on non-completion of inpatient treatment among patients with substance use disorders from Pakistan are quite scarce.⁸ Hence, this study attempted to find the frequency and characteristics of patients who are not able to complete the inpatient treatment at a public hospital in Karachi, Pakistan.

MATERIAL & METHODS

This descriptive cross-sectional study was conducted at the Psychiatric Department Dr. Ruth KM Pfau, Civil Hospital, Karachi, from 15th January 2018 to 15th June 2018. The sample size of 124 was taken with non-probability (convenient) type sampling. The Department of Psychiatry, Civil Hospital has a separate unit for drug detoxification treatment in which only substance use disorder patients are admitted for detoxification. In this unit, substance use disorder patients are brought by their family or with their own will. They were interviewed and examined by consultant / trainee psychiatrists and managed accordingly.

Inclusion Criteria

Those patients who were taking different psychoactive substances and were brought by family or came with their own will for detoxification treatment enrolled.

Only male patients were enrolled because during study period no female patients admitted for detoxification.

Exclusion Criteria

Those patients who were in psychotic state due to substance use confirmed through history and mental state examination.

Patients diagnosed as having learning disability and patients having history of organic brain disorder such as dementia or delirium.

An informed consent was obtained from patients after informing them in simple and understandable

language about the purpose of study, assuring them of confidentiality and recognizing their right to withdraw the consent at any time even without mentioning any reason for that. A semi-structured Proforma was used to record demographic details of patients. Treatment completed or not was defined as patient became symptoms free and was discharged from ward and enrolled in day care rehabilitation and those who did not and left ward due to any reason were said to be non-completers. Data analyzed on SPSS-22. Frequency of treatment completers and non-completers was obtained and stratification with different variables carried out.

RESULTS

In this study 124 cases of mental and behavioral disorders due to psychoactive substance use currently admitted for drug detoxification were included. All the patients were male gender with predominant age group of 26-35 years (46%) followed by 19-to 25 years (36.3%) and 13 to 18 years group was (9.7%) and 36-45 were 4% and more than 45 were also 4% as shown in Table-III. Among total patients 46 (37.10%) were married, 74 (59.70%) were single and 4 (3.20%) were separated. Most of clients were admitted by family 56.5% while 43.5% were admitted by own will. Majority of clients were jobless 53.2% and 46.8% were related with some occupation. Majority 53.2% were admitted for first time while 21.8% admitted third time and 16.1% were second time and 4.8% were admitted fourth time, 2.4% came for fifth time while 1.6% were admitted six times. Among all 41.9% were the cases of cannabinoids and 30.6% were of opioids while 18.5% were mixed and 8.9% were using crystals.

Majority were using for 1-5 years 42.7% while 29.8% were using for 5-10 years and 8.1% were using for more than six months and 6.5% of one year while 12.9% were using for more than 10 years. Majority of admitted patients were using drugs everyday 86.3% followed by 6.5% 2-4 times a week and 4.8% one a week and 2.4% once in two weeks. Majority were taking drugs through smoking form 45.2% while 19.4% were using through injections and 16.9% through oral route while 11.3% used through snuffing and

7.3% through multiple routes, all the variables are shown in Table-II. Among all who were admitted for detoxification, 58.9% completed treatment while 41.1% did not complete their course of stay in ward and left against advice, shown in Table-I. Stratification of drug detoxification completers and non-completers with all variables were done and age group of substance users, employment status, no of admissions, duration of drug use, frequency of use and mode of admission were significantly related having p-value of less than 0.05.

Completes Treatment	Frequency	Percent%
Yes	73	58.9%
No	51	41.1%
Total	124	100%

Table-I. Frequency of drug use treatment completers and non-completers

Variable	Frequency	Percent%
Age Group	N 124	100%
13-18	12	9.7
19-25	45	36.3
26-35	57	46.0
35-45	5	4.0
More than 45	5	4.0
Marital Status	N 124	100%
Married	46	37.1%
Separated	4	3.2%
Single	74	59.7%
Mode of Admission	N 124	100%
Family	70	56.5%
Self	54	43.5%
Employment	N 124	100%
Yes	58	46.8%
No	66	53.2%
No of Admissions	N 124	100%
1	66	53.2%
2	20	16.1%
3	27	21.8%
4	6	4.8%
5	3	2.4%
6	2	1.6%
Duration of Use	N 124	100%
< 6 months	10	8.1%
1-5 years	53	42.7%
5-10 years	37	29.8%
6 months -1 years	8	6.5%
More than 10 year	16	12.9%
Type of Drugs	N 124	100%
Crystal	11	8.9%
Cannabis	52	41.9%
Mixed	23	18.5%
Opioid	38	30.6%
Frequency of use	N 124	100%
2-4 times a week	8	6.5%
Everyday	107	86.3%
Once in 2 weeks	3	2.4%
Once in a week	6	4.8%
Route of use of drugs	N 124	100%
Multiple routes	9	7.3%
Injectable IM IV	24	19.4%
Oral	21	16.9%
Smoking	56	45.2%
Snuffing	14	11.3%

Table-II. Variables statistics

DISCUSSION

In this study demographically, all the patients were males. This is reflective of the usual treatment seeking pattern of patients with substance disorders encountered in de-addiction services in Pakistan.⁹ Though a few numbers of female substance users are also admitted in our set up for detoxification but during this study time no female patients admitted and it is also evidenced from literature that females are less admitted for de-addiction.¹⁰ The majority of patients admitted for detoxification were in age group of 26-35. A very small proportion of patients were adolescents and those who were elderly.

In spite of the fact that the commonness of substance use issue is low in the boundaries of age, periodic youthful, and old substance use issue do require inpatient treatment administrations. The treatment administrations group, conveyance qualities, and force of medicinal consideration may require proper alteration while managing patients in boundaries of age. In this study 41.1% patients were treatment non-completers. This figure is practically comparable with the examination led in India, which found that more than 66% of the patients with heroin reliance left treatment rashly.¹¹ The difference is that they sought about heroin users while in current study we enrolled all the patients, taking variety of substances and admitted for detoxification but could not complete the treatment. Similar higher rates of treatment non-completion of substance users have been reported in other studies as well.¹² In any case, other review ponders have uncovered generously lower rates of releases as against therapeutic exhortation and treatment non-fruitation among patients conceded in inpatient de-dependence administrations.¹³ In this study the mode of non-completion of treatment was leaving against medical advice and being discharged on request but some were also discharged on administrative grounds. An investigation led in West Indies proposed that about 22.8% people conceded for an inpatient substance misuse treatment program did not finish the treatment, with the significant reasons of non-consummation being release against medicinal counsel, stealing away, and battling in the ward.

Age Group (years)	Completes treatment		Total	P-Value
	No	Yes		
13-18	7 (58.3%)	5 (41.7%)	12 (100%)	0.005
19-25	21 (46.7%)	24 (53.3%)	45 (100%)	
26-35	15 (26.3%)	42 (73.7%)	57 (100%)	
36-45	3 (60.0%)	2 (40%)	5 (100%)	
More than 45	5 (100%)	0 (0%)	5 (100%)	
Total	51 (41.1%)	73 (58.9%)	124 (100%)	
Employment				
No	29 (50.0%)	29 (50.0%)	58 (100%)	0.045
Yes	22 (33.3%)	44 (66.7%)	66 (100%)	
Total	51 (41.1%)	73 (58.9%)	124 (100%)	
No of Admissions				
1	8 (12.1%)	58 (87.9%)	66 (100.0%)	0.000
2	7 (35.0%)	13 (65.0%)	20 (100.0%)	
3	26 (96.3%)	1 (3.7%)	27 (100.0%)	
4	6 (100.0%)	0 (0.0%)	6 (100.0%)	
5	2 (66.7%)	1 (33.3%)	3 (100.0%)	
6	2 (100.0%)	0 (0.0%)	2 (100.0%)	
Total	51 (41.1%)	73 (58.9%)	124 (100.0%)	
Duration of drug use				
< 6 months	1 (10.0%)	9 (90.0%)	10 (100.0%)	0.000
6 months -1 year	1 (12.5%)	7 (87.5%)	8 (100.0%)	
1-5 years	14 (26.4%)	39 (73.6%)	53 (100.0%)	
5-10 year	20 (54.1%)	17 (45.9%)	37 (100.0%)	
More than 10 year	15 (93.8%)	1 (6.3%)	16 (100.0%)	
Total	51 (41.1%)	73 (58.9%)	124 (100.0%)	
Route of drug use				
Multiple routes	5 (55.6%)	4 (44.4%)	9 (100.0%)	0.171
Injectable IM IV	13 (54.2%)	11 (45.8%)	24 (100.0%)	
Oral	11 (52.4%)	10 (47.6%)	21 (100.0%)	
Smoking	17 (30.4%)	39 (69.6%)	56 (100.0%)	
Snuffing	5 (35.7%)	9 (64.3%)	14 (100.0%)	
Total	51 (41.1%)	73 (58.9%)	124 (100.0%)	
Frequency of drug use				
2-4 times a week	1 (12.5%)	7 (87.5%)	8 (100.0%)	0.016
Everyday	50 (46.7%)	57 (53.3%)	107 (100.0%)	
Once in 2 weeks	0 (0.0%)	3 (100.0%)	3 (100.0%)	
Once in a week	0 (0.0%)	6 (100.0%)	6 (100.0%)	
Total	51 (41.1%)	73 (58.9%)	124 (100.0%)	
Marital Status				
Married	23 (50.0%)	23 (50.0%)	46 (100.0%)	0.256
Separated	2 (50.0%)	2 (50.0%)	4 (100.0%)	
Single	26 (35.1%)	48 (64.9%)	74 (100.0%)	
Total	51 (41.1%)	73 (58.9%)	124 (100.0%)	
Mode of Admission				
Family	50 (71.4%)	20 (28.6%)	70 (100.0%)	0.000
Self	1 (1.9%)	53 (98.1%)	54 (100.0%)	
Total	51 (41.1%)	73 (58.9%)	124 (100.0%)	
Type of drugs used				
Crystal	8 (72.7%)	3 (27.3%)	11 (100.0%)	0.417
Cannabis	21 (40.4%)	31 (59.6%)	52 (100.0%)	
Mixed	9 (39.1%)	14 (60.9%)	23 (100.0%)	
Opioids	13 (34.2%)	25 (65.8%)	38 (100.0%)	
Total	51 (41.1%)	73 (58.9%)	124 (100.0%)	

Table-III. Stratification of treatment completers and non-completers with variables

While in current study the rate of non-completers are quite high 41.1% and reasons could be of many type including methodology and cultural variations but the reasons of non-completions are almost same being leaving against medical advice, absconding from ward, fighting in ward and creating other administrative issues so could be discharged on administrative grounds. Comparative figures have been accounted for of patients admitted to a substance misuse program in Barcelona over a time of 10 years.¹⁴ A few elements including sort of treatment offered, attributes of the customer base, financing modalities, and approaches of the treatment office may impact the real rates of release against therapeutic guidance and treatment non-consummation in various settings. Our study finds that greater age or age group of less than 25 years was among the non-completers while 26-35 years were among treatment completers. Some different investigations have additionally discovered that more youthful age bunch was related with expanded rates of release against therapeutic exhortation or treatment non-completion.¹⁵ In any case, some different examinations have not discovered any relationship with age with the rates of treatment non-completion, however this investigation has measurably critical connection with age group. It may impact the real rates of release against medicinal counsel and treatment non-culmination in various settings. In current study those who completed treatment were bought by family, admitted for first time, were taking substance for 1-5 years with less frequency of use and most common substance taken was cannabis followed by opioids and common route of taking substance was smoking. In a study the major drop out of treatment non-completers were related with opioids¹⁶ but in our study the rate of drop out is mixed. In current study those who were chronic and daily users, using through injections for longer periods of time were more likely to non-complete the treatment and in the literature it is also evident that predictors of inpatient treatment non-completion are many.¹⁷

The patients who are in danger of non-finishing of treatment might be distinguished by concentrates like the present one, and reasonable

consideration might be paid to their requirements. In view of the input from the patients, treatment office approaches might be streamlined, and correspondence between the treatment suppliers and the patient might be upgraded for conceivably improving patient results.¹⁸

CONCLUSION

The study showed that there is a quite high and alarming ratio of patients who do not succeed to quite substance use.

Copyright© 03 Oct, 2020.

REFERENCES

1. Pasareanu AR, Opsal A, Vederhus JK, Kristensen Q, Clausen T. **Quality of life improved following inpatient substance use disorder treatment.** Health Qual Life Outcomes. 2015; 13:35.
2. Haber PS, Day CA. **Overview of substance use and treatment from Australia.** SubstAbus. 2014; 35:304–8.
3. Alfandre DJ. **“I’m going home”: Discharges against medical advice.** Mayo Clin Proc. 2009; 84:255–60.
4. SeabornMoyse H, Osmun WE. **Discharges against medical advice: A community hospital’s experience.** Can J Rural Med. 2004; 9:148–53.
5. Ti L, Ti L. **Leaving the hospital against medical advice among people who use illicit drugs: A systematic review.** Am J Public Health. 2015; 105:e53–9.
6. Barnaby L, Gibson RC. **Factors affecting completion of a 28-day inpatient substance abuse treatment programme at the University Hospital of the West Indies.** West Indian Med J. 2008; 57:364–8.
7. Hwang SW, Li J, Gupta R, Chien V, Martin RE. **What happens to patients who leave hospital against medical advice?** CMAJ. 2003; 168:417–20.
8. Samantaray PK, Ray R, Chandiramani K. **Predictors of inpatient treatment completion of subjects with heroin dependence.** Indian J Psychiatry. 1997; 39:282–7.
9. Basu D, Sarkar S, Mattoo SK. **Psychiatric comorbidity in patients with substance use disorders attending an addiction treatment center in India over 11 years: Case for a specialized “Dual Diagnosis Clinic”** J Dual Diagn. 2013; 9:23–9.
10. Lal R, Deb KS, Kedia S. **Substance use in women: Current status and future directions.** Indian J Psychiatry. 2015; 57(2):S275–85.

11. Samantaray PK, Ray R, Chandiramani K. **Predictors of inpatient treatment completion of subjects with heroin dependence.** Indian J Psychiatry. 1997; 39:282–7.
12. Callaghan RC. **Risk factors associated with dropout and readmission among First Nations individuals admitted to an inpatient alcohol and drug detoxification program.** CMAJ. 2003; 169:23–7.
13. McKellar J, Kelly J, Harris A, Moos R. **Pretreatment and during treatment risk factors for dropout among patients with substance use disorders.** Addict Behav. 2006; 31:450–60.
14. Gilchrist G, Langohr K, Fonseca F, Muga R, Torrens M. **Factors associated with discharge against medical advice from an alcohol and drug inpatient detoxification unit in Barcelona between 1993 and 2006.** Heroin Addict RelatClinProbl. 2012; 14:35–44.
15. Kenne DR, Boros AP, Fischbein RL. **Characteristics of opiate users leaving detoxification treatment against medical advice.** J Addict Dis. 2010; 29:383–94.
16. Callaghan RC, Cunningham JA. **Gender differences in detoxification: Predictors of completion and re-admission.** J Subst Abuse Treat. 2002; 23:399–407.
17. Brook M, Hilty DM, Liu W, Hu R, Frye MA. **Discharge against medical advice from inpatient psychiatric treatment: A literature review.** Psychiatr Serv. 2006; 57:1192–8.
18. Onukwughu E, Saunders E, Mullins CD, Pradel FG, Zuckerman M, Weir MR. **Reasons for discharges against medical advice: A qualitative study.** QualSaf Health Care. 2010; 19:420–4.

AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author(s) Full Name	Contribution to the paper	Author(s) Signature
1	Kheenpal Das	Concept, Design, Statistical analysis.	
2	Muhammad Ilyas Jat	Statistical analysis and manuscript writing.	
3	Saima Qureshi	Data collection and manuscript writing.	
4	Tarique Arain	Disucssion writing and review of manuscript.	
5	Anum Haider	Editing and final approval of manuscript.	